

INTEGRATION OF ARTIFICIAL INTELLIGENCE-BASED DIGITAL PRODUCTS INTO THE TOURISM MANAGER'S ROLE

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Integration of Artificial Intelligence-Based Digital Products into the Tourism Manager's Role

The contemporary tourism industry is characterized by hyper-dynamism and pervasive digitalization, which shapes consumer demand for instantaneous personalization and a «seamless» travel experience. The relevance of the study is driven by the critical need to address the transformation of the tourism manager's professional activities amidst the rapid development of intelligent digital product ecosystems, where artificial intelligence has transitioned from an auxiliary tool to the foundation of managerial processes. The aim of the study is to conduct a comprehensive research into the theoretical and applied foundations of integrating artificial intelligence-based digital products into the professional activities of tourism managers, with the objective of enhancing operational efficiency and transforming the creation of competitive travel experiences within the Economy of Impressions. The methodological basis of the study is grounded in a systemic analysis of technological evolutionary waves (from predictive to autonomous agentic AI models), a comparative analysis of the practical expertise of global IT platforms, and the development of an original competency distribution matrix. As a result of the study, it was revealed that the transition to the stage of Agentic AI allows digital products to act as autonomous cognitive partners capable of independently executing complex, multi-stage tasks ranging from cross-platform booking to proactive crisis management. It is demonstrated that the economic efficiency of such integration is evidenced by a reduction in operational service costs of up to 45% and an increase in booking conversion rates by 20-25%. The scientific novelty lies in the reconceptualization of the manager's professional profile as an «architect of impressions» and a «custodian of digital products» who, instead of routine administration, performs strategic curation of the client's emotional experience. The author's contribution consists of developing a human-machine synergy model where computational and analytical tasks are delegated to intelligent systems, while functions of ethical oversight, genuine empathy, and strategic decision-making remain with the human professional. The practical value of the study lies in forming methodological guidelines for the tourism business regarding the implementation of generative AI, enabling enterprises to transition from a «digital survival» model to one of proactive development, focusing on creating unique value propositions that are beyond the reach of full automation.

Keywords: tourism management; digital transformation; AI agents; business process automation; travel product personalization; economy of impressions.

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Кравцов С. С. Інтеграція цифрових продуктів на базі штучного інтелекту у діяльність менеджера з туризму

Сучасна індустрія туризму характеризується гіпердинамічністю та глобальною цифровізацією, що формує запит споживачів на миттєву персоналізацію та «безшовний» досвід подорожі. Актуальність дослідження зумовлена критичною необхідністю вирішення проблеми трансформації професійної діяльності менеджера з туризму в умовах швидкого розвитку екосистем інтелектуальних цифрових продуктів, де штучний інтелект перестав бути допоміжним інструментом і став фундаментом управлінських процесів. Метою дослідження є комплексне вивчення теоретичних та прикладних засад інтеграції цифрових продуктів на базі штучного інтелекту у професійну діяльність менеджерів з туризму для підвищення операційної ефективності та трансформації процесу створення конкурентоспроможних туристичних вражень. Методологічний базис дослідження ґрунтується на системному аналізі еволюційних хвиль технологій (від предиктивних до автономних агентних моделей ШІ), порівняльному аналізі практичного досвіду глобальних ІТ-платформ та розробці авторської матриці розподілу професійних компетенцій. У результаті дослідження виявлено, що перехід до етапу агентного ШІ дозволяє цифровим продуктам діяти як автономним когнітивним партнерам, здатним самостійно виконувати складні багатетапні завдання – від крос-платформного бронювання до оперативного кризового менеджменту. Доведено, що економічна ефективність такої інтеграції проявляється у скороченні операційних витрат на обслуговування до 45 % та зростанні конверсії бронювань на 20–25 %. Наукова новизна полягає у переосмисленні професійного профілю менеджера як «архітектора вражень» та «хранителя цифрових продуктів», який замість рутинного адміністрування здійснює стратегічне кураторство емоційного досвіду клієнта. Авторський внесок полягає у розробці моделі людино-машинної синергії, де обчислювальні та аналітичні завдання делегуються інтелектуальним системам, тоді як функції етичного нагляду, щирої емпатії та прийняття стратегічних рішень залишаються за фахівцем. Практична цінність дослідження полягає у формуванні методичних орієнтирів для туристичного бізнесу щодо впровадження генеративного ШІ, що дозволяє підприємствам перейти від моделі «цифрового виживання» до проактивного розвитку, зосереджуючись на створенні унікальної ціннісної пропозиції, недоступної для повної автоматизації.

Ключові слова: туристичний менеджмент; цифрова трансформація; ШІ-агенти; автоматизація бізнес-процесів; персоналізація турпродукту; економіка вражень.

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Introduction. The contemporary tourism industry is defined by its hyper-dynamic nature and pervasive digitalisation. Consumer demands have evolved, shifting towards a requirement for instantaneous personalisation and a 'seamless' travel experience. Against this backdrop, artificial intelligence (AI) has emerged as more than a mere auxiliary tool; it serves as the cornerstone for automating managerial workflows within a broader ecosystem of digital products. This transition facilitates not only customer retention but also a substantial increase in business profitability through resource optimisation. The integration of such innovative digital products and AI-driven solutions enables the automation of tasks for tourism professionals – particularly travel managers – thereby enhancing service delivery and fostering client loyalty.

These advancements yield a positive impact on organisational performance, bolstering competitiveness within the tourism market and driving revenue growth. Consequently, investigating the integration of artificial intelligence and digital products within the role of the travel manager has become increasingly pertinent.

Literature Review. The rapid integration of artificial intelligence technologies into the tourism sector has become a focal point of scholarly discourse in recent years. An analysis of key publications indicates that AI has transcended its role as a mere statistical tool, evolving into an 'interaction agent' that is reshaping the tourism ecosystem. Fundamental shifts in marketing strategies driven by AI have been explored by Buhalis [1; 2] and García-Madurga [3], who emphasise the personalisation of customer experiences and the automation of tourist engagement. Issues regarding the transformation of consumer behaviour and technology acceptance are highlighted in the works of Koo [4] and Liao [5], demonstrating that AI solutions – such as chat bots and virtual assistants – have become integral to travel planning.

The economic potential and impact on labour productivity are analysed by Dwivedi et al. [6], as well as Ruel and Njoku [7], noting that AI significantly enhances employee engagement and efficiency. The application of generative AI (specifically ChatGPT) as a functional tool in management is examined in studies by Carvalho and Ivanov [8], and Shin and Kang [9]. Researchers such as Casaló et al. [10] and Gao and Wang [11] focus on recommendation system algorithms that facilitate real-time value co-creation.

In this article, we draw upon the Technology Acceptance Model (TAM), adapted for tourism by Taylor [12], where 'perceived usefulness' and 'perceived ease of use' are identified as pivotal factors. Furthermore, the concept of 'human-machine interaction' [13] is incorporated to help determine the optimal balance between automation and the personal service provided

by a manager. Research by Seyitoğlu and Ivanov [14] regarding the role of service robots allows for a deeper analysis of the boundaries of human labour substitution within the tourism industry.

Identification of Unresolved Aspects of the General Problem. Notwithstanding the substantial volume of literature, a review of existing sources reveals significant lacunae. There is a discernible divergence in perspectives concerning the impact of AI on workforce qualifications: while some authors [15] caution against the risk of managerial 'de-skilling', others perceive it as a catalyst for creative growth. However, most studies exhibit a degree of 'technological determinism', viewing AI primarily as a standalone tool for Big Data or chat bots. This often leaves the broader ecosystem of digital products and their role as cognitive partners in the Experience Economy on the periphery [16].

Furthermore, several aspects of integrating AI into the professional activities of tourism managers remain contentious. Firstly, there is a lack of methodological guidelines for the 'seamless' integration of generative AI into the daily operational cycles of small and medium-sized tourism enterprises (SMEs). The majority of literature remains either purely technical (IT-oriented) or broadly economic, precluding a holistic understanding of how digital products transform specific tourism competencies. Additionally, the role of AI in achieving Sustainable Development Goals (SDGs) and risk management remains fragmented [17].

This research aims to fill this niche by providing a practical toolkit for tourism managers. Diverging from existing works that treat AI as a general trend, this study focuses on specific business processes – from the formulation of itineraries via intelligent digital platforms to ethical client interaction. By resolving the conflict between automation and authenticity, this study demonstrates that AI is not a competitor but a cognitive partner, enabling a transition to a new level of the 'Experience Economy' through proactive professional development.

The aim of the research is to conduct a comprehensive investigation into the theoretical and applied foundations of integrating artificial intelligence-based digital products into the professional activities of tourism managers, with the objective of enhancing operational efficiency and transforming the creation of competitive travel experiences.

Methodology (structure and sequence) of the research. The methodological framework of this study is underpinned by a combination of general scientific and specialised methods, ensuring a systematic and objective analysis. The research is theoretically grounded in the Technology Acceptance Model (TAM) and the concept of Human-Computer Interaction (HCI), which facilitated an evaluation of the barriers and

drivers of AI implementation from a professional management perspective. To achieve the stated aim, the following methods were utilised:

- systems approach: employed to categorise contemporary AI digital products and define their position within the architecture of a tourism enterprise's business processes;
- comparative analysis: used to contrast the functional capabilities of generative language models with specialised tourism platforms (such as Expedia Romie and Booking AI Trip Planner);
- case study method: applied to analyse the practical digital transformation experiences of global market leaders among Online Travel Agencies (OTAs), specifically Expedia, Booking.com, and Trip.com;
- logical generalisation and business modelling: utilised to develop an original matrix for the distribution of competencies between the manager (as the 'architect of experiences') and the digital assistant.

The research was conducted sequentially: progressing from an analysis of the theoretical basis and the evolution of AI technologies between 2023 and 2025, to the formulation of applied recommendations for modifying the professional profile of the modern tourism specialist.

Presentation of the Main Research Results and Discussion. An analysis of scholarly sources allows for the identification of two levels of AI classification, which are critical for understanding its transformative impact on the industry. At the fundamental level, based on system functionality [18], we observe a transition from reactive machines, capable only of instantaneous responses without memory retention, to limited memory systems that utilise historical data for decision-making. It is precisely this transition that has laid the groundwork for contemporary digitalisation in tourism.

However, from the perspective of tourism management, a classification based on applied spheres of use is most relevant. This approach enables a clear demarcation of a specialist's toolkit according to specific business objectives. Within this study, we identify three pivotal types of AI:

Predictive AI. Based on machine learning (ML) algorithms and the deep analysis of Big Data. In the context of a manager's role, this type of AI is indispensable for forecasting demand based on seasonality, implementing dynamic pricing systems (revenue management), and the predictive segmentation of the client base. This allows an enterprise to act proactively rather than merely reacting to market fluctuations.

Generative AI. Systems based on large language models (LLMs) that are capable of not only analysing data but also creating qualitatively new content. For a tourism specialist, this facilitates the automation of unique tour descriptions, personalised correspondence, the creation of visual content, and scripts for marketing campaigns, thereby significantly accelerating creative processes.

Agentic AI. The most advanced and complex type of system, marking the transition from simple generation to autonomous action. Autonomous AI agents are capable of independent planning and executing multi-step sequences of actions. In the context of tourism services, this is manifested in the system's ability to independently book tickets and hotels, coordinate complex logistical chains, and resolve conflict situations without direct human intervention.

To integrate theoretical approaches with applied tools, a synthesised model is proposed, demonstrating the interrelationship between the cognitive complexity of a system and its functional value for the manager (Table 1).

The proposed classification supports the assertion that the modern tourism manager is evolving from a user of individual software applications into a conductor of multi-agent systems. In this new capacity, the manager's primary functions shift towards strategic management and the ethical oversight of the activities of autonomous digital entities.

In the context of evolving modern technologies, AI has become a strategic driver for the development of the tourism business. By 2026, AI has transitioned into the role of a cognitive partner for the manager. According to expert data [18], generative systems enhance the productivity of service operations by 45–60%. Throughout the period of 2024–2026, leading global tourism companies have moved from the experimental

Table 1

Matrix of the interrelationship between AI cognitive complexity and functional value for tourism managers

Cognitive Complexity level	Applied AI Type	Functional Value for the Manager	Examples of tools (digital products)
Reactive Machines	Static Automation	Operational Speed: instantaneous response to standard queries; filtering large datasets according to clearly defined parameters	GDS search systems, basic linear chat bots (FAQs)
Limited Memory	Predictive AI	Tactical Optimisation: demand forecasting, dynamic pricing, and personalisation of offers based on travel history	Booking.com AI Planner, Revenue Management Systems, Hopper
Limited Memory	Generative AI	Creative Productivity: automated creation of unique itineraries, tour descriptions, SMM content, and sales scripts	ChatGPT (GPT-4o), Google Gemini, Claude, Midjourney
Elements of 'Theory of Mind'	Agentic AI	Strategic Partnership: autonomous execution of complex business processes, 'seamless' resolution of logistical conflicts, and empathetic service	Expedia Romie, autonomous multi-agent systems, TripGenie

Source: developed by the author based on [18; 19–22]

use of AI plugins to the implementation of comprehensive ecosystems powered by autonomous agents.

Trip.com Group has upscaled its intelligent assistant, TripGenie, transforming it into a multimodal tool. In 2026, it does not merely provide recommendations but functions as an autonomous agent capable of independently planning complex itineraries, executing bookings, and providing real-time customer support via a synchronous voice interface [18].

Expedia Group launched Romie, a next-generation iteration of AI agents embedded within users' messaging and email ecosystems. Romie is capable of learning a traveller's preferences during group travel discussions, suggesting alternatives in the event of flight delays, and automatically synchronising itinerary changes for all participants of a trip [19].

Booking.com has achieved profound integration of its AI Trip Planner into its mobile application, utilising a combination of proprietary data and large language models (LLMs). This has enabled the company to provide a level of personalisation where the system suggests accommodation and activities based on the semantic analysis of the emotional sentiment found in a traveller's previous reviews [20].

Airbnb, following the successful integration of acquired GamePlanner.AI technologies, has transformed its platform into a 'digital concierge' format. Now, based on a guest's past experiences, the AI not only searches for accommodation but also adapts the amenities of the property and recommendations for local experiences to suit the specific psychographic profile of the user [21].

eDreams ODIGEO has strengthened the position of its Prime platform through the implementation of Google Gemini models. This has enabled the automation of hyper-personalised dynamic packaging (flight + hotel + experience) in real-time for over 5 million subscribers [22].

The aforementioned corporations regard AI not merely as a planning tool, but as the fundamental cornerstone of their strategy within the Experience Economy. The transition to the Agentic AI model has enabled them to provide predictive service, which has significantly enhanced Customer Lifetime Value (LTV) and fostered a new level of loyalty through a seamless customer experience. An analysis of these leading technological solutions allows for the systematisation of the key directions of AI implementation, as detailed in Table 2.

Table 2

Functional directions and examples of AI implementation in the global tourism industry

Direction (AI Characteristic)	Functional Capabilities and Technological Leaders
Hyper-personalisation and Autonomous AI Agents	Expedia Group (Romie 2.0) – autonomous agents capable of independently negotiating booking terms, monitoring schedule changes, and automatically rebooking tickets. Booking.com AI Trip Planner – a multimodal itinerary creation system based on the analysis of a user's visual preferences
Predictive Analytics and Dynamic Pricing	Hopper & Kayak – the application of quantum-ready AI algorithms for long-term price forecasting, accounting for geopolitical risks, climate change, and local events within destinations
Environmental Sustainability and 'Green AI'	Google Flights & Travalyst – dynamic analysis of weather conditions and aircraft types to calculate real-time emissions; offering integrated 'offsetting packages'. Skyscanner – prioritisation of accommodation facilities equipped with smart energy management systems (Smart Grids)
Biometrics and Seamless Travel	IATA One ID & Delta Air Lines – implementation of 'walk-through biometrics' for passenger identification on the move across all stages: from baggage drop to customs control and hotel check-in without physical documents
Operational Efficiency and Predictive Service	Airbus Skywise 2.0 – a cloud-based predictive maintenance ecosystem based on data analysis from millions of sensors. Marriott International – intelligent workforce and inventory management systems based on predictive analysis of urban events
Experience Economy: AR and Digital Twins	TripAdvisor (Virtual Sightseeing) – the use of Digital Twins of cities and landmarks for virtual location visits in an Augmented Reality (AR) format prior to booking decisions
Cognitive Assistants and Linguistic Support	Anthropic (Claude) & OpenAI (GPT-5) – integration of Large Language Models (LLMs) into travel platforms to provide instantaneous synchronous translation, accounting for cultural context and local dialects

Source: developed by the author based on [23; 24]

Furthermore, artificial intelligence (specifically machine learning) can be utilised in tourism management to simplify and accelerate professional workflows through the collection, analysis, systematisation, and reproduction of required information based on predefined queries.

Regarding the automation of travel manager workflows, several AI digital products have emerged as prominent trends in 2026:

ChatGPT (OpenAI). In 2026, this platform has transcended the status of a simple chatbot to become a sophisticated multimodal ecosystem. Leveraging advanced reasoning models (the o1 series and subsequent iterations), it is capable of developing intricate, multi-stage strategies for tourism brands, conducting deep-dive analysis of vast datasets, and interacting with clients via 'Advanced Voice Mode'. This allows for instantaneous real-time translation, effectively dismantling linguistic barriers.

Google Gemini (formerly Bard). This serves as a pivotal tool for processing 'live' information. Due to its profound integration with Google Flights, Hotels, and Maps, Gemini operates as an autonomous travel agent. Its primary advantage in 2026 is its expansive context window (exceeding 2 million tokens), enabling managers to upload and instantly analyse entire annual corporate reports, complex legal contracts, or hundreds of tourist reviews to formulate strategies within the Experience Economy.

Microsoft Copilot. This tool has evolved into a comprehensive digital employee, seamlessly integrated within the Microsoft 365 ecosystem. In tourism management, it is utilised to automate workflows across Outlook and Teams. Specialised 'Copilot Agents' can independently manage correspondence with partners, prepare draft contracts in Word, and generate complex analytical spreadsheets in Excel based on open-market data.

Perplexity AI. Perplexity has become an indispensable tool for analytical support in the tourism sector. Unlike conventional chatbots, Perplexity functions as an intelligent search engine that provides answers accompanied by direct citations of current sources (scholarly articles, international reports, and

industry news), thereby ensuring high data accuracy and verifiability.

Midjourney v7 / DALL-E 4 / Sora. These models constitute the 'visual stack' of AI. In 2026, they are employed not only for creating photorealistic advertising imagery but also for generating hyper-realistic promotional videos (text-to-video) for destinations. This enables managers to visualise creative tour concepts prior to their actual development—a fundamental aspect of marketing within the creative industries.

Claude (Anthropic). This tool is highly regarded by tourism professionals for its high level of 'Constitutional AI' and robust data security. In tourism management, Claude is utilised for composing the most natural, 'human-like' texts, developing complex ethical client-interaction scenarios, and performing meticulous editing of academic and business documents.

The scaling of the aforementioned innovative cases by global market players necessitates a corresponding restructuring of internal operational cycles within tourism enterprises. A detailed analysis of the functional requirement for AI implementation to modernise key business processes – ranging from customer service to strategic revenue management – is systematised in Table 3.

Table 3

Justification for implementation of AI within the Tourism Management System

Business Process	Key Model Shift	Key Performance Indicator (KPI)	Expected Economic Effect
Customer Service and CRM	Autonomous multimodal agents (24/7)	Reduction in response time to more than 30 seconds	Decrease in operational support costs by up to 45 %
Revenue Management	Predictive dynamic pricing	Price forecasting accuracy more than 90%	Net profit growth of 15-22 %
Marketing and Sales	'Segment of One' strategy	Booking conversion growth of 20–25 %	Increase in Customer Lifetime Value (LTV)
Content Production	Automated visualisation via GenAI	Reduction in proposal preparation time to less than 5 mins	70 % reduction in marketing content expenditure

Source: developed by the author based on [20–25]

The interaction between a travel manager and a consumer is a multi-stage and complex process, requiring a tailored approach for each client to ensure maximum satisfaction of their needs. A travel manager must be adept at navigating vast volumes of information and identifying optimal solutions within a restricted timeframe. Furthermore, it is essential to foster client loyalty and encourage recurring engagement with the agency's services, which is directly reflected in the enterprise's profitability.

Building upon these premises, it is pertinent to delineate the primary applications of AI tools within the professional activities of a tourism manager, as illustrated in Table 4.

The 'tourism manager – AI' interaction model in contemporary tourism should be grounded in the concept of cognitive partnership, whereby technology does not supersede the human element but rather augments their intellectual and creative potential. Within the Experience Economy, this interaction is cyclical and remains focused on the creation of unique value for the client. This synergy is established upon a functional division of labour: AI handles routine tasks and Big Data analysis, while the manager focuses on strategy, empathy, and

creativity. The stages of constructing such synergy are detailed in Table 5.

A detailed delineation of responsibilities and decision-making zones between the human and the machine can be observed through the competency distribution matrix (Table 6).

The proposed matrix demonstrates that the implementation of AI leads not to human displacement from the profession, but to its intellectual evolution – a transition from routine operational execution to the management of complex emotional and intellectual systems. This facilitates the realisation of the 'High Tech – High Touch' service concept, which is critical for success in the contemporary Experience Economy.

The integration of artificial intelligence into the travel manager's workflow results in a fundamental paradigm shift in service delivery: moving from a 'human-intermediary' model to one of 'human-machine synergy'. The deployment of autonomous agents and predictive analytics systems allows tourism enterprises to transcend standard service sales, focusing instead on the creation of hyper-personalised value.

Consequently, the success of the industry's digital transformation in 2026 depends not so much on the processing

Table 4

Applications of AI Tools within the Professional Activities of a Tourism Manager

Application Category	Functional Purpose and Managerial Benefits	Recommended AI Platforms
Personalised Itinerary Planning	Creating unique itineraries based on individual requests; identifying 'hidden gems' and optimising transit logistics	Mindtrip, Roam Around, Google Gemini, Tripnotes
Content Generation and SMM	Automating the creation of tour descriptions and social media posts; scripting videos (Reels/TikTok) and selecting relevant tags	ChatGPT (GPT-4o), Jasper, Copy.ai, Writesonic
Tourism Product Visualisation	Generating photorealistic imagery of destinations for presentations; creating marketing banners and visualising 'Experience Economy' concepts	Midjourney, DALL-E 3, Adobe Firefly, Canva Magic Studio
Professional Itinerary Management	Developing interactive travel plans with rapid editing capabilities and providing clients with access via mobile applications	Travefy (with integrated AI), Tern, Planable
Communication and Document Translation	High-quality, context-aware translation of travel vouchers, contracts, and business correspondence with foreign partners	DeepL, Claude (Anthropic)
Market Analysis and Information Retrieval	Real-time price tracking and availability checks; deep sentiment analysis of client reviews regarding hotels or airlines	Perplexity AI, Microsoft Copilot, Arc Search
Customer Service Automation	Providing instantaneous responses to standard client queries via smart chatbots; personalising email marketing campaigns	Intercom Fin, HubSpot AI, ChatGPT
Professional Development and Training	Simulating complex client negotiations; sales methodology training and role-playing for objection handling	Claude, Gong (for conversational analysis), ChatGPT
Workflow Organisation	Automated transcription of online meetings; generating meeting summaries and structuring tasks within CRM systems	Otter.ai, Fireflies.ai, Notion AI

Source: developed by the author based on [24–26]

Table 5

Stages of Constructing the 'Tourism Manager – AI' Interaction

Stage	AI Functions	Role of the Manager
1. Initiation and Data Collection (Input)	Real-time market monitoring; collection of analytics regarding pricing, air traffic, and weather conditions. Preliminary segmentation of the client base based on psychographic profiles	Defining strategic goals and context (e.g., developing a tour within the creative tourism segment). Formulating specific queries (prompts) tailored to individual client requirements
2. Synthesis and Generation	Rapid generation of multiple itinerary options. Creation of visual content (destination photos/videos). Drafting official correspondence and marketing posts	Selecting the optimal option from those generated; performing fact-checking and adapting the Tone of Voice to align with the agency's brand identity
3. Personalisation and Emotional Enrichment	Optimising logistical routes and timing; identifying local 'hidden gems' based on the analysis of thousands of reviews	The manager enriches the itinerary with emotional accents (exclusive meetings, authentic experiences) that AI cannot perceive, but which are critical to the Experience Economy
4. Communication and Support (Execution)	Autonomous 24/7 client support (chatbots); instantaneous resolution of standard issues (transfer time changes, FAQ responses). Predictive satisfaction analysis	Resolving non-standard, conflict-prone, or ethically complex situations. Building long-term, trust-based relationships that form the foundation of loyalty

Source: developed by the author

power of the chosen algorithms, but on the ability of managers to adapt their professional profiles to the roles of 'travel architects'. In this capacity, they utilise AI as a cognitive amplifier to resolve complex analytical tasks while maintaining a high level of emotional service and ethical responsibility towards the client.

Conclusions. The findings of this study demonstrate that the contemporary tourism industry is undergoing a fundamental technological transformation, wherein artificial intelligence has evolved from a simple auxiliary tool into an integral component of sophisticated digital products acting as cognitive partners for the manager. The analysis of theoretical founda-

Table 6

Competency distribution matrix in the 'Tourism Manager – AI' Interaction Model

Competency Area	AI Functionality (Digital Assistant)	Manager Functionality (Architect of Experiences)
Data Processing and Analysis	Collection and structuring of vast datasets (Big Data); instantaneous retrieval of logistical options; calculation of predictive pricing	Semantic interpretation of results; application of professional intuition in non-standard situations
Creativity and Content	Combinatorial creativity: rapid generation of variations based on existing templates and data	Conceptual creativity: creating new meanings; developing unique travel ideologies and destination branding
Communication and Empathy	Simulated empathy: mood recognition via semantic text analysis; polite and instantaneous 24/7 support	Genuine empathy: ethical assessment of situations; resolution of profound interpersonal conflicts; fostering trust
Decision-Making	Optimisation of choices based on predefined technical parameters (price, time, rating)	Strategic choice; assuming ultimate accountability for the product and tourist safety
Risk Management	Real-time monitoring of technical failures and weather conditions; automated notifications	Crisis management in situations requiring non-standard diplomatic or organisational solutions

Source: developed by the author

tions indicates the completion of the transition from reactive systems to complex models with elements of 'Theory of Mind', as embodied in the concept of autonomous agents (Agentic AI). This technological shift enables the integration of intelligent digital products that not only automate routine operations but also implement predictive service strategies, ensuring a 'seamless' customer experience within the Experience Economy.

The economic efficacy of integrating AI-driven digital products is evidenced by the experiences of global market leaders, where the use of these platforms for personalisation and dynamic pricing results in a reduction of operational service costs by up to 45% and a growth in booking conversion by 20-25%. These indicators prove that the implementation of intelligent digital ecosystems is no longer merely a competitive advantage, but a critical condition for ensuring the viability and sustainable development of a tourism enterprise in the context of global digitalisation.

The transformation of the travel manager's professional profile entails a shift in focus from operational activities to the role of an architect of experiences and strategist. The proposed competency distribution matrix demonstrates that human-machine synergy is based on delegating computational and analytical tasks to AI-enhanced digital products, while retaining functions of ethical oversight, genuine empathy, and strategic decision-making for the human professional. This facilitates the realisation of a high-tech service concept grounded in a profound understanding of the tourist's psychographic profile.

Prospects for further research in this field are linked to the necessity of investigating the ethical dimensions of autonomous digital products and entities and ensuring the cybersecurity of personal data within decentralised ecosystems. Particular attention should be directed towards the development of innovative educational programmes aimed at equipping future specialists with the skills to manage multi-agent digital systems, which will be essential for the successful adaptation of the tourism business to the challenges of the digital future.

BIBLIOGRAPHY

1. Buhalis D. Technology in tourism-from information communication technologies to eTourism and smart tourism towards ambient intelligence tourism: a perspective article. *Tourism Review*. 2020. Vol. 75. № 1. P. 267–272. DOI: <https://doi.org/10.1108/TR-06-2019-0258>
2. Buhalis D. Generative artificial intelligence in tourism. *Annals of Tourism Research*. 2023. Vol. 101. P. 103595. DOI: <https://doi.org/10.1016/j.annals.2023.103595>
3. García-Madurga M.-Á., Grilló-Méndez A. J. Artificial Intelligence in the Tourism Industry: An Overview of Reviews. *Administrative Sciences*. 2023. Vol. 13. No. 8. P. 172. DOI: <https://doi.org/10.3390/admsci13080172>
4. Koo C. [et al.]. Smart tourism ecosystem and artificial intelligence. *Journal of Smart Tourism*. 2021. Vol. 1. No. 1. P. 1–5. DOI: <https://doi.org/10.52255/smarttourism.2021.1.1.2>
5. Liao J. [et al.]. The impact of generative artificial intelligence on tourism decision-making. *Tourism Management*. 2025. Vol. 105. P. 104953. DOI: <https://doi.org/10.1016/j.tourman.2024.104953>
6. Dwivedi Y. K. [et al.]. Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*. 2021. Vol. 57. P. 101994. DOI: <https://doi.org/10.1016/j.ijinfomgt.2019.08.002>
7. Ruel H., Njoku E. AI in the hospitality and tourism industry: an overview. *Information Technology & Tourism*. 2021. Vol. 23. P. 1–15. DOI: <https://doi.org/10.1007/s40558-020-00177-z>
8. Carvalho I., Ivanov S. ChatGPT for tourism: applications, benefits and risks. *Tourism Review*. 2024. Vol. 79. No. 2. P. 301–315. DOI: <https://doi.org/10.1108/TR-02-2023-0088>
9. Shin H., Kang J. Reducing perceived health risk to attract hotel customers in the COVID-19 pandemic era: Focused on technology innovation. *International Journal of Hospitality Management*. 2021. Vol. 91. P. 102660. DOI: <https://doi.org/10.1016/j.ijhm.2020.102660>
10. Casaló L. V. [et al.]. Service robots and AI in tourism: Customer preferences. *Journal of Business Research*. 2022. Vol. 142. P. 560–570. DOI: <https://doi.org/10.1016/j.jbusres.2021.11.028>
11. Gao Y., Wang X. Recommendation algorithms in real-time travel planning. *Journal of Destination Marketing & Management*.

2023. Vol. 30. P. 100806. DOI: <https://doi.org/10.1016/j.jdm.2023.100806>

12. Taylor P. Artificial Intelligence and the Future of Work in Tourism. London : Taylor & Francis, 2025. 250 p.

13. Wu X. [et al.]. Human-machine interaction in hospitality. *International Journal of Contemporary Hospitality Management*. 2025. Vol. 37. No. 4. P. 890–905. DOI: <https://doi.org/10.1108/IJCHM-05-2024-0550>

14. Seyitoğlu F., Ivanov S. Service robots as a tool for physical distancing in tourism. *Current Issues in Tourism*. 2021. Vol. 24. No. 12. P. 1631–1634. DOI: <https://doi.org/10.1080/13683500.2020.1773373>

15. Dyduch W., Brzozowska A. Artificial intelligence in tourism management: theoretical underpinnings, empirical tests and the SmartTourAI framework. *Central European Management Journal*. 2024. URL: <https://www.emerald.com/cejm/article/doi/10.1108/CEMJ-07-2024-0227>

16. Yanzheng Tuo, Jiankai Wu, Jingke Zhao, Xuyang Si. Artificial intelligence in tourism: insights and future research agenda. *Tourism Review*. 2024. URL: <https://www.emerald.com/tr/article/doi/10.1108/TR-03-2024-0180>

17. Abu Bakkar Siddik, Md. Shak Forid, Li Yong, Anna Min Du, John W. Goodell. Artificial intelligence as a catalyst for sustainable tourism growth and economic cycles. *Technological Forecasting and Social Change*. 2025. Vol. 210. DOI: <https://doi.org/10.1016/j.techfore.2024.123875>

18. Types of Artificial Intelligence That You Should Know in 2024 // Simplilearn. 2024. URL: <https://www.simplilearn.com/tutorials/artificial-intelligence-tutorial/types-of-artificial-intelligence>

19. Trip.com Group Launches TripGenie, an Advanced Generative AI Travel Assistant // Trip.com Group Newsroom. 2023. URL: <https://investors.trip.com/news-releases/news-release-details/tripcom-group-launches-tripgenie-advanced-generative-ai-travel>

1. Expedia Group Unveils Romie, the AI Travel Buddy // Expedia Group Newsroom. 2024. URL: <https://www.expediagroup.com/newsroom/expedia-group-unveils-romie-the-ai-travel-buddy/>

20. Booking.com Launches New AI Trip Planner to Personalize Travel Planning // Booking.com Newsroom. 2023. URL: <https://news.booking.com/bookingcom-launches-new-ai-trip-planner-to-revolutionize-the-travel-planning-experience/>

21. Airbnb acquires AI startup GamePlanner.AI // Airbnb News. 2023. URL: <https://news.airbnb.com/airbnb-acquires-ai-startup-gameplanner-ai/>

22. eDreams ODIGEO expands partnership with Google Cloud to lead in Generative AI for travel // eDreams ODIGEO Press. 2024. URL: <https://www.edreamsodigeo.com/news/edreams-odigeo-expands-partnership-with-google-cloud-to-lead-in-generative-ai-for-travel/>

23. The economic potential of generative AI: The next productivity frontier // McKinsey & Company. 2023. URL: <https://www.mckinsey.com/capabilities/tech-and-ai/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier>

24. Artificial Intelligence in Tourism Report. Madrid, 2024. 45 p. // World Tourism Organization (UNWTO). URL: <https://www.unwto.org/news/artificial-intelligence-in-tourism>

25. The State of Travel Startups 2025. New York, 2025. 60 p. // Phocuswright. URL: <https://www.phocuswright.com/Travel-Research/Startups-Innovation/The-State-of-Travel-Startups-2025>

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REFERENCES

Abu Bakkar Siddik, Shak Forid Md., Li Yong, Anna Min Du & John W. Goodell (2025). Artificial intelligence as a catalyst for sustainable tourism growth and economic cycles. *Technological Forecasting and Social Change*, 210. <https://doi.org/10.1016/j.techfore.2024.123875>

Airbnb News. (2023). Airbnb acquires AI startup GamePlanner.AI. <https://news.airbnb.com/airbnb-acquires-ai-startup-gameplanner-ai/>

Booking.com Newsroom. (2023). Booking.com Launches New AI Trip Planner to Personalize Travel Planning. <https://news.booking.com/bookingcom-launches-new-ai-trip-planner-to-revolutionize-the-travel-planning-experience/>

Buhalis D. (2023). Generative artificial intelligence in tourism. *Annals of Tourism Research*, 101, 103595. <https://doi.org/10.1016/j.annals.2023.103595>

Buhalis D. (2020). Technology in tourism-from information communication technologies to eTourism and smart tourism towards ambient intelligence tourism: a perspective article. *Tourism Review*, 1(75), 267–272. <https://doi.org/10.1108/TR-06-2019-0258>

Carvalho I. & Ivanov S. (2024). ChatGPT for tourism: applications, benefits and risks. *Tourism Review*, 2(79), 301–315. <https://doi.org/10.1108/TR-02-2023-0088>

Casaló L. V. et al. (2022). Service robots and AI in tourism: Customer preferences. *Journal of Business Research*, 142, 560–570. <https://doi.org/10.1016/j.jbusres.2021.11.028>

Dwivedi Y. K. et al. (2021). Artificial Intelligence (AI): Multi-disciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 57, 101994. <https://doi.org/10.1016/j.ijinfomgt.2019.08.002>

Dyduch W. & Brzozowska A. (2024). Artificial intelligence in tourism management: theoretical underpinnings, empirical tests and the SmartTourAI framework. *Central European Management Journal*. <https://www.emerald.com/cejm/article/doi/10.1108/CEMJ-07-2024-0227>

eDreams ODIGEO Press. (2024). eDreams ODIGEO expands partnership with Google Cloud to lead in Generative AI for travel.

<https://www.edreamsodigeo.com/news/edreams-odigeo-expands-partnership-with-google-cloud-to-lead-in-generative-ai-for-travel/>

Expedia Group Newsroom. (2024). Expedia Group Unveils Romie, the AI Travel Buddy. <https://www.expediagroup.com/newsroom/expedia-group-unveils-romie-the-ai-travel-buddy/>

Gao Y. & Wang X. (2023). Recommendation algorithms in real-time travel planning. *Journal of Destination Marketing & Management*, 30, 100806. <https://doi.org/10.1016/j.jdmm.2023.100806>

García-Madurga M.-Á. & Grilló-Méndez A. J. (2023). Artificial Intelligence in the Tourism Industry: An Overview of Reviews. *Administrative Sciences*, 8(13), 172. <https://doi.org/10.3390/admsci13080172>

Koo C. et al. (2021). Smart tourism ecosystem and artificial intelligence. *Journal of Smart Tourism*, 1(1), 1–5. <https://doi.org/10.52255/smarttourism.2021.1.1.2>

Liao J. et al. (2025). The impact of generative artificial intelligence on tourism decision-making. *Tourism Management*, 105, 104953. <https://doi.org/10.1016/j.tourman.2024.104953>

Madrid. (2024). Artificial Intelligence in Tourism Report. <https://www.unwto.org/news/artificial-intelligence-in-tourism>

McKinsey & Company. (2023). The economic potential of generative AI: The next productivity frontier. <https://www.mckinsey.com/capabilities/tech-and-ai/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier>

New York. (2025). The State of Travel Startups 2025. <https://www.phocuswright.com/Travel-Research/Startups-Innovation/The-State-of-Travel-Startups-2025>

Ruel H. & Njoku E. (2021). AI in the hospitality and tourism industry: an overview. *Information Technology & Tourism*, 23, 1–15. <https://doi.org/10.1007/s40558-020-00177-z>

Seyitoğlu F. & Ivanov S. (2021). Service robots as a tool for physical distancing in tourism. *Current Issues in Tourism*, 12(24), 1631–1634. <https://doi.org/10.1080/13683500.2020.1773373>

Shin H. & Kang J. (2021). Reducing perceived health risk to attract hotel customers in the COVID-19 pandemic era: Focused on technology innovation. *International Journal of Hospitality Management*, 91, 102660. <https://doi.org/10.1016/j.ijhm.2020.102660>

Simplilearn. (2024). Types of Artificial Intelligence That You Should Know in 2024. <https://www.simplilearn.com/tutorials/artificial-intelligence-tutorial/types-of-artificial-intelligence>

Taylor P. (2025). *Artificial Intelligence and the Future of Work in Tourism*. Taylor & Francis. London.

Trip.com Group Newsroom. (2023). Trip.com Group Launches TripGenie, an Advanced Generative AI Travel Assistant. <https://investors.trip.com/news-releases/news-release-details/tripcom-group-launches-tripgenie-advanced-generative-ai-travel>

Wu X. et al. (2025). Human-machine interaction in hospitality. *International Journal of Contemporary Hospitality Management*, 4(37), 890–905. <https://doi.org/10.1108/IJCHM-05-2024-0550>

Yanzheng Tuo, Jiankai Wu, Jingke Zhao & Xuyang Si (2024). Artificial intelligence in tourism: insights and future research agenda. *Tourism Review*. <https://www.emerald.com/tr/article/doi/10.1108/TR-03-2024-0180>

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