



Policy Paper

Artificial Intelligence in the Tourism Sector in Israel



May 2026

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Minister's Foreword

Mr. Haim Katz Minister of Tourism



The tourism sector is a strategic asset for the State of Israel. It contributes to the economy through revenues from inbound and domestic tourism, generates employment, and strengthens small and medium-sized businesses throughout the country. It also serves as a positive window through which Israel connects with the world. Beyond its economic contribution, tourism also carries national and social value: it promotes intercultural exchange, strengthens the connection of diverse audiences with the Holy Land, and highlights Israel's unique historical, cultural, and natural richness.

The tourism sector is currently undergoing a technological revolution, accelerated by artificial intelligence, which is redefining the way people plan travel and receive services. AI creates opportunities to enhance the visitor experience through personalization, multilingual services, and efficient management of demand and congestion. It also enables businesses to improve efficiency and reallocate resources. Israel can, and must, lead this trend for the benefit of tourists, the industry, and the economy as a whole, particularly in the post-war period, as Israeli tourism enters a phase of recovery and renewal.

At the same time, the widespread use of artificial intelligence necessitates rigorous protection of user privacy, responsible data management, the preservation of public trust and transparency, and the prevention of bias. In addition, an "adoption gap" exists between large players with significant capabilities and resources and small and medium-sized businesses, which form the backbone of Israel's tourism industry. Our responsibility is to ensure that technology does not widen gaps, but instead helps reduce them and strengthen the market as a whole.

This is where the role of the state becomes essential. Its role is not to replace the actors operating in the sector, but to enable them to grow and strengthen through infrastructure, adaptive regulation, partnerships, and professional capacity-building that support meaningful progress.

This document is intended to serve as a foundation for leading such change. It examines the impact of artificial intelligence on the tourism sector in Israel and worldwide, and it defines policy principles and directions that will serve as the basis for a multi-year action plan. The objective is to leverage artificial intelligence as a growth engine for the sector and to ensure a resilient, innovative, and competitive tourism industry.

I view the advancement of artificial intelligence in tourism as a national objective, one that connects Israeli innovation with Israel's strengths as a tourism destination. Through responsible government leadership, we will strengthen Israel's position on the global tourism map.

Respectfully,

Haim Katz
Minister of Tourism



Director General's Foreword

Mr. Michael Izhakov Director General



Artificial intelligence is not a future scenario; it is already a reality. It is transforming how industries operate, how decisions are made, and how services are delivered, and it constitutes one of the most significant growth engines of the coming decade. The tourism industry lies at the heart of this transformation. It is an industry built on real-time information, precise timing, complex coordination among multiple actors, and the ability to deliver personalized experiences and services to diverse audiences.

Artificial intelligence is reshaping the entire value chain, from the traveler's personal itinerary planning at home, through real-time management of the visitor experience on site, to informed decision-making in tourism investments and infrastructure development.

Alongside this significant potential, substantial challenges also exist. Realizing the opportunity requires responsible policy, adaptive regulation, and inclusive innovation, to ensure that technology serves all stakeholders in the industry and contributes to broad-based, sustainable growth.

From this perspective, and under the leadership of the Minister of Tourism, we view artificial intelligence not merely as an innovative tool, but as a strategic growth engine for advancing tourism and strengthening the local economy. I am determined to transform the Ministry of Tourism into an economically oriented ministry that clearly and measurably presents tourism's contribution to the economy and GDP. Achieving this objective requires close cooperation within government and with all industry stakeholders: businesses, local authorities, public bodies, entrepreneurs, technology companies, and academia.

Under my guidance, the Ministry of Tourism has placed this issue at the top of its priorities. We have begun integrating AI-based tools into the Ministry's work, advancing regulatory adjustments, and deepening collaboration with the industry, including preparatory work toward establishing a TravelTech innovation community. In parallel, we are promoting the augmented reality project "100 Stories" at historical tourism sites, and its initial outcomes are already evident on the ground.

This document presents the Ministry of Tourism's policy for advancing artificial intelligence in the tourism industry. It is intended to translate the vision into clear courses of action, based on a review of trends and developments in Israel and worldwide, and to define policy principles and focus areas that will serve as the foundation for the Ministry's work plans in the coming years. The emphasis is on initiatives that generate tangible value for tourists, industry stakeholders, and the economy as a whole. I invite all stakeholders to take part in this effort.

A strong Israeli tourism sector in the age of artificial intelligence will be built through partnership: the government will create the enabling conditions, and the industry will lead innovation on the ground. Especially in light of the challenges the industry has faced in recent years, including COVID-19 and a complex security reality, we view technology as an opportunity to transform crisis into a national growth engine and to strengthen Israel's position as a leading global destination.

I extend my thanks to the Ministry's management for its partnership, commitment, and involvement in advancing this important initiative.

Respectfully,

Michael Izhakov
Director General



Executive Summary

The global tourism industry is undergoing a technological revolution in which artificial intelligence is transforming decision-making processes, the tourism experience, and business operating models.

The global market for artificial intelligence solutions in tourism is experiencing accelerated growth, generating significant potential for both industry stakeholders and the State of Israel. For the industry, artificial intelligence creates opportunities to improve labor productivity, enhance operational efficiency, and increase revenues through personalized marketing and intelligent pricing. At the national level, AI represents a growth engine that can increase revenues from inbound and domestic tourism, improve service standards and the tourist experience, strengthen industry resilience during periods of uncertainty, and position Israel as a leading tourism destination. In addition, artificial intelligence can support the state in planning and developing infrastructure and in allocating public resources more effectively.

At the same time, the adoption of artificial intelligence in tourism also presents substantial challenges that require appropriate preparation and are common across all sectors using AI, including risks of algorithmic bias, privacy violations, and adoption gaps between large and small businesses.

Against this backdrop, leading countries worldwide are already working to integrate artificial intelligence into tourism through a range of measures, from adaptive regulation and improved access to technology for the industry, to direct action, including the development of tools for government or industry use.

The Ministry of Tourism is advancing the formulation of a national policy for artificial intelligence in tourism and laying the foundations that will enable the adoption of advanced technologies in a manner that strengthens the entire ecosystem and allows industry stakeholders to realize the potential inherent in this technology. This document constitutes a first milestone in a multi-year process and defines the Ministry's principles and areas of activity for the coming years.

It should be noted that all content in this document, including any information, tools, or recommendations, does not, at this stage, constitute binding guidance. Their adoption and implementation are subject to the sole discretion of the relevant stakeholders and will be carried out at their sole discretion.

Policy Principles

The Ministry's policy is based on five core principles:

- 1 | Strengthening Stakeholders**
The Ministry will encourage the use of artificial intelligence to improve efficiency, productivity, and competitiveness among stakeholders in the tourism sector, with particular emphasis on ensuring accessibility for small and medium-sized businesses
- 2 | Leadership and Coordination of the Ecosystem**
The Ministry will serve as a coordinating, guiding, and accelerating body for the implementation of artificial intelligence solutions across Israel's tourism ecosystem, as a tool to support the achievement of the Ministry's objectives.
- 3 | Addressing Core Challenges**
The Ministry will leverage artificial intelligence capabilities as a supporting tool for addressing fundamental Issues in Israel's tourism sector (including matching supply to demand, supporting efforts to improve Israel's international image, and other related key challenges).
- 4 | Strengthening the Ministry's Capabilities in Artificial Intelligence**
The Ministry will implement artificial intelligence tools to improve the effectiveness of its internal operations and will train managers and employees to use these tools effectively in the performance of their roles.
- 5 | Oversight and Balancing Processes**
The promotion of artificial intelligence use will be carried out while maintaining, among other considerations, a balance between innovation, responsibility, fairness, and public trust. This will be done in accordance with government policy and regulatory frameworks, including privacy protection and cybersecurity requirements, and through the integration of appropriate security controls.

The Ministry's Key Areas of Activity

- 1 | Shaping Artificial Intelligence Policy**
The Ministry will act to formulate the national policy on artificial intelligence in tourism, examine cross-cutting issues on an ongoing basis, and promote cross-governmental coordination.
- 2 | Removing Regulatory Barriers to Artificial Intelligence**
The Ministry will identify regulatory barriers that delay the adoption of artificial intelligence in tourism, work to remove them responsibly and in coordination with relevant bodies, and promote incentive and regulatory mechanisms that support the adoption of the technology.
- 3 | Producing Information and Knowledge**
The Ministry will promote the establishment of a national information and knowledge infrastructure, including the collection and aggregation of data on market trends, advanced data analysis for the generation of insights, and making this information accessible to stakeholders in the industry.
- 4 | Promoting Accessibility and Fostering the Use of Artificial Intelligence in the Industry**
The Ministry will promote access to artificial intelligence tools for businesses, authorities, and other actors, and will offer skills development, support, and guidance for implementation, according to stakeholders' choices and needs.
- 5 | Connecting Stakeholders to Promote Innovation in the Field**
The Ministry will establish a collaborative ecosystem in the field of artificial intelligence to connect the tourism industry, technology companies, academia, and additional actors, for the purpose of promoting collaboration and focused innovation initiatives in tourism.
- 6 | Improving Internal Ministry Processes through Artificial Intelligence**
The Ministry has begun integrating internal artificial intelligence tools and is promoting national initiatives such as the transition to cloud infrastructure. In parallel, it will promote the use of artificial intelligence tools for optimizing Ministry processes (such as demand forecasting, prioritization of projects in the field of investments and infrastructure development, and more).
- 7 | Strengthening Israel's Image through Artificial Intelligence**
The Ministry will promote the use of artificial intelligence for image monitoring, identification of trends and crises, and the creation of tailored marketing content to support the strengthening of Israel's image.
- 8 | Promoting Artificial Intelligence to Improve Infrastructure and the Tourist Experience**
The Ministry will examine the initiation of projects to upgrade information and service capabilities

at tourism sites and to provide personalized responses for tourists using artificial intelligence tools.

The Ministry's Initial Steps in the Short Term

1 | **Ensuring Accessibility for Industry Stakeholders**

In order to ensure that the Ministry's policy is translated into immediate change on the ground, the Ministry will focus on establishing a professional community that will enable, among other things, knowledge-sharing activities, improve access to existing tools for stakeholders in the tourism industry who are interested in doing so, and serve as a platform for initiating collaborations, projects, and targeted pilot initiatives.

2 | **Establishing a Data and Information Infrastructure**

The Ministry will focus on establishing a data infrastructure that will enable effective use of artificial intelligence for the Ministry itself and for various actors in the industry, including the collection, aggregation, and analysis of information on the characteristics and behavior of tourists and visitors, particularly in areas where such data are currently lacking. This will be carried out alongside steps the Ministry has already taken to develop responsible solutions that will enable the removal of regulatory barriers to data collection and the use of artificial intelligence tools.

3 | **Strengthening the Ministry's Capabilities in Artificial Intelligence**

The Ministry will continue its process of organizational and professional bolstering in the field of artificial intelligence, including the integration of tools and knowledge among Ministry employees, in a manner that will enable more advanced use of innovative and complex tools in the future.

Introduction

The Ministry of Tourism is responsible for the planning, development, and marketing policy of the tourism industry in Israel. It supports the establishment of tourism initiatives and assists organizations that promote tourism. The Ministry's primary objective is to increase the contribution of the tourism industry to the Israeli economy. This contribution is measured by indicators such as direct and indirect employment, contribution to GDP, contribution to the balance of payments, and the volume of investment in tourism infrastructure and initiatives.

Inbound tourism constitutes a significant service export sector with high added value. In recent years, from the COVID-19 crisis through the ongoing security-related crisis facing the State of Israel, the Ministry has played a central role in shaping policies to support, rehabilitate, and promote the growth of the sector.

At the same time, the artificial intelligence market is experiencing accelerated growth. AI technologies are influencing the entire value chain, from smart customer service and dynamic pricing to real-time translation of content and advanced personalization of offers and marketing messages. These applications lead to operational efficiency and a significant improvement in service quality. At the same time, there are ethical, regulatory, and technology adoption challenges, particularly for small businesses and in environments characterized by gaps in knowledge and infrastructure. Alongside this, Israel's tourism industry has already begun to adopt artificial intelligence technologies in a natural and gradual manner, as part of its alignment with global trends.

Against this backdrop, the Ministry seeks to promote artificial intelligence as a key catalyst for economic growth, for improving the tourist experience in Israel, and for strengthening the resilience of the tourism industry. The Ministry also aims to ensure system-wide preparedness for the artificial intelligence revolution in Israel's tourism sector.

The purpose of this document is to define the Ministry's policy in the field of artificial intelligence, including policy principles, areas of activity, and courses of action that will enable the Ministry to achieve its objectives in an optimal manner and to generate significant added value for the tourism industry in Israel.

The policy formulation process included an analysis of articles and studies examining global trends in the field and their expected impacts, a review of policies and initiatives undertaken by governments in leading countries in the field of artificial intelligence in tourism, and an assessment of the implications for Israel's

tourism industry in general and for the Ministry of Tourism in particular. Based on this work, guiding principles and success indicators were developed, and the Ministry's areas of activity for the coming years were defined, including the topics on which the Ministry will focus in the initial stage.

The Impact of Artificial Intelligence on the Tourism Industry

Trends in Artificial Intelligence in Tourism

Global Trends in the Adoption of Artificial Intelligence

The tourism industry is currently facing a new era of accelerated digital transformation, in which artificial intelligence in general, and generative artificial intelligence in particular, are beginning to reshape the tourist experience and the way companies in the industry operate. It is evident¹ that the adoption of artificial intelligence applications in the tourism sector has already moved beyond the pilot and experimentation stage. This is true both among consumers and among business actors across the value chain.

On the tourist side, it is evident that travelers are already using artificial intelligence tools. A global survey conducted by the Kantar research institute in November 2024 found that around 40% of travelers had already used AI tools at that point to plan a trip, and sometimes also during the trip itself. Of these, 49% stated that the main reason was building an itinerary tailored to personal interests, 41% cited receiving personalized destination recommendations, and 40% cited assistance in finding the best deals. Adoption levels differed significantly across markets: in China, particularly high usage rates were reported (about 79%), while in Germany and Australia the rate was much lower (about 22% in each).²

In addition, artificial intelligence is still used more as a supporting tool than as a central tool. A broad survey across European countries conducted by the European Travel Commission in March 2025 found that the share of respondents who defined AI platforms as their preferred travel-planning tool remains low (about 9%).³

On the business side, studies already indicate the penetration of artificial intelligence into core processes. In a survey conducted in 2024 by Amadeus and Mercury Analytics among senior technology leaders in the

¹ McKinsey & Company, & Skift Research (2023). The promise of travel in the age of AI

² Kantar, November 2024, 10,012 worldwide respondents 18 years and older - Statista, Artificial intelligence (AI) use in travel and tourism

³ European Travel Commission (March 2025), 4,313 European respondents 18 years and older - Statista, Artificial intelligence (AI) use in travel and tourism

industry, 53% reported using GenAI to provide digital assistance to travelers during the booking process.⁴ An assessment conducted by h2c in 2024 across 52 global hotel chains found that about one third had already used artificial intelligence for revenue management and content creation, and about one quarter had implemented chatbots in booking interfaces and/or on their websites.⁵

Forecasts and business reports regarding intentions to adopt artificial intelligence going forward point to a deepening and broadening of use, primarily in booking interfaces and customer interaction, as well as in operational applications.⁶

Key Technologies

In the tourism industry, two main categories of artificial intelligence technologies currently stand out: generative artificial intelligence (GenAI) and agentic artificial intelligence (Agentic AI).

Generative AI, which gained prominence with the launch of models such as ChatGPT in 2022, can generate textual content, images, and even video, and can serve as an intelligent advisor that provides information and recommendations based on large volumes of data. This technology has already entered the tourism sector in the form of intelligent chatbots capable of answering travelers' questions, planning itineraries, and generating marketing and informational content automatically. For example, major booking platforms have integrated generative chatbots into their applications to help users plan a trip tailored to their preferences, while presenting images, reviews, and relevant information.

By contrast, agentic AI is the emerging next generation of artificial intelligence. These are autonomous systems capable of making decisions and carrying out complex actions independently, with almost no human intervention. Whereas generative AI primarily functions as a reactive advisory tool, responding to questions and providing insights when asked, agentic AI can execute tasks and initiate multi-step actions. These include identifying problems, formulating solutions, and implementing them in real time. For example, an advanced tourism AI agent in the future may not only suggest an alternative flight when a traveler's flight is cancelled but also handle all onward arrangements independently and proactively: automatically booking a new flight, updating the hotel reservation, coordinating alternative ground services, and sending notifications.⁶

Market Scope and Potential

The global market for artificial intelligence solutions in the tourism sector is experiencing accelerated growth and is expected to increase from approximately \$1.5 billion USD in 2022 to about \$13.5 billion USD by 2030, at an average annual growth rate of about 28.7%.⁷

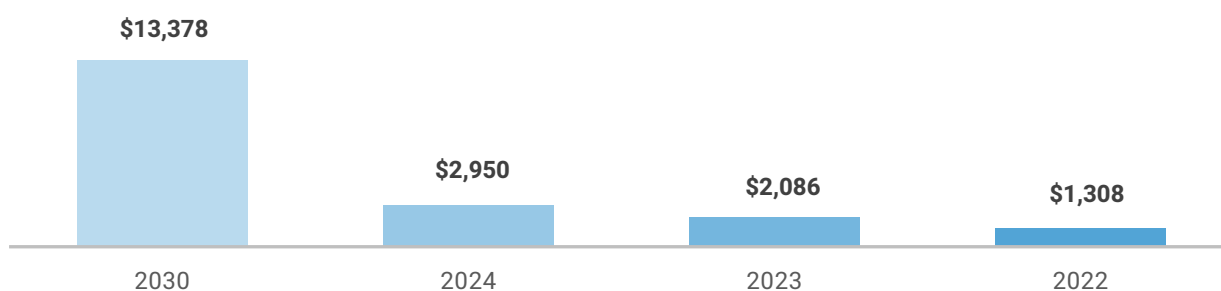
⁴ Amadeus and Mercury Analytics (2024), 306 worldwide respondents senior travel technology leaders מנתח Statista, Artificial intelligence (AI) use in travel and tourism

⁵ H2c, 2024, worldwide 52 hotel chains (2024). Artificial intelligence (AI) use in travel and tourism

⁶ McKinsey & Company, & Skift Research (2023). The promise of travel in the age of AI

⁷ MarketsandMarkets (2024). AI in tourism market: Global forecast to 2030

Figure 1 – Forecast for the Market Size of Artificial Intelligence in Tourism (millions, \$ USD)



Growth drivers are not only technological; they reflect business pain points that artificial intelligence addresses: operational efficiency, revenue improvement through price and inventory optimization, and meeting customer expectations for availability and personalization. A study by Markets and Markets links the growth, among other factors, to rising demand for personalized experiences and the use of artificial intelligence for data-driven decision-making, alongside expanded automation of service and operational processes. The economic implication is the potential to shift human labor time costs toward automation that reduces expenditures and, subsequently, may also lower service prices. In parallel, artificial intelligence is moving from being a targeted addition to processes toward becoming the foundation for end-to-end process transformation.⁸

Market Trends and Potential in Israel

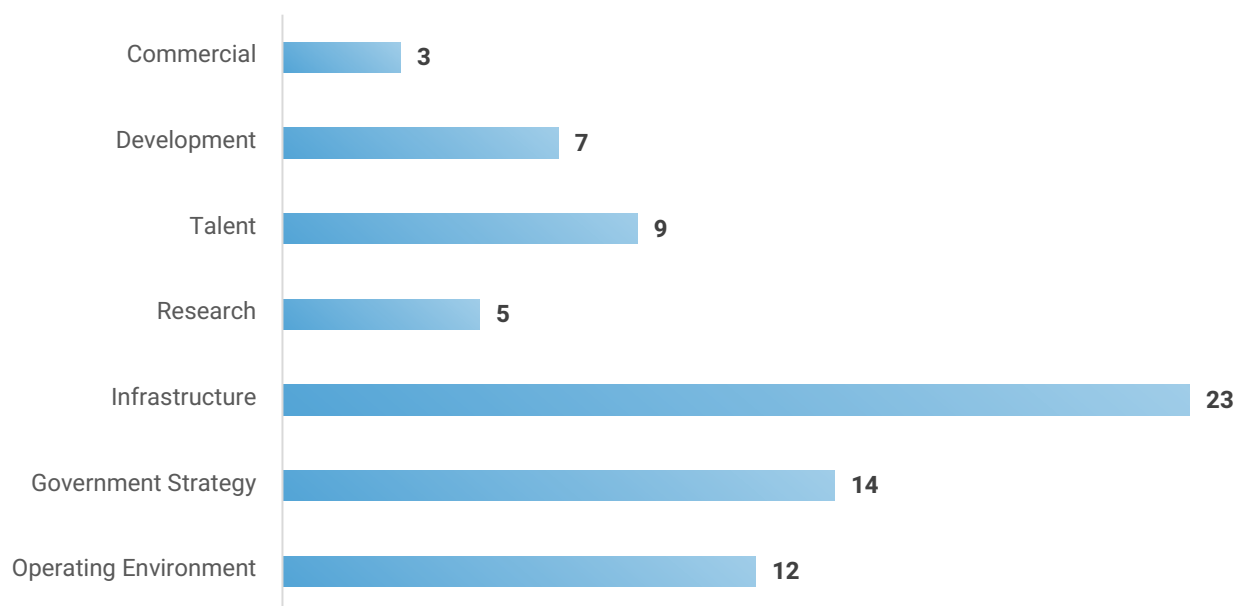
Israel ranks highly among the leading countries in the field of artificial intelligence: seventh out of 83 countries in the 2025 Global AI Index. Over the past year, Israel's ranking in the component relating to regulation and governance improved significantly (from 32nd to 14th), following the publication of a policy document on regulation and ethics in artificial intelligence in Israel.⁹ In addition, Israel is, in general, a major technological player in artificial intelligence initiatives, despite its limited population size and resources.¹⁰

⁸ MarketsandMarkets (2024). AI in tourism market: Global forecast to 2030

⁹ Global Artificial Intelligence Index, Tortoise Media

¹⁰ Statista (2024). Artificial intelligence (AI) in Israel

Figure 2 – Israel's ranking in the Global Artificial Intelligence Index (2025) according to various metrics



A Central Bureau of Statistics survey conducted in June 2025 among businesses in Israel with ten or more employees found that 28% use artificial intelligence in their operations, with 17% using paid AI services and 11% using free versions. In terms of usage, the most common activity among businesses already using artificial intelligence is marketing and sales (56%), followed by managerial processes such as strategic planning and recruitment (49%). In terms of technologies, generative AI is the most common type (77%), alongside the use of machine learning (26%) and artificial intelligence for autonomous machines (9%).¹¹

Israeli consumers have also already integrated artificial intelligence into daily life: 92% of Israelis use AI tools routinely, with an average usage time of an hour and a half per day. Beyond that, Israeli consumers consult artificial intelligence prior to making purchases and use it for recommendations: 42% would postpone a planned purchase if the AI recommended otherwise, and 18% would choose a product based on an AI recommendation.¹²

Although no specific data was found on the adoption and potential of artificial intelligence in tourism in Israel among industry businesses and Israeli travelers, the data above suggests significant potential for local development of the field and for attracting tourists worldwide through this technology. In the future, it will be necessary to develop a measurement and evaluation framework for awareness, adoption, and benefits of artificial intelligence in the tourism industry amongst its various actors.

Adoption of artificial intelligence is expected to profoundly change the structure of human capital in Israel. According to a Bank of Israel study, artificial intelligence may become a force for improving human capital in Israel and driving productivity growth in the Israeli economy. On the one hand, artificial intelligence is expected to reduce demand for occupations based on routine tasks and increase the need for new skills,

¹¹ Israeli Central Bureau of Statistics (2025). Adoption of Artificial Intelligence in Businesses

¹² Bezeq (2025). The Internet Report

including critical thinking, problem solving, creativity, and the ability to work with intelligent systems. On the other hand, it is expected to empower workers in complementary occupations and open opportunities for new roles. Those who adapt, acquire new skills, and improve their capabilities are expected to benefit from higher productivity, wages, and employability in the future.¹³

¹³ Bank of Israel Report 2024: The Anticipated Impact of Generative Artificial Intelligence on Workers and Its Implications for Labor Market Policy

Key Areas of Application of Artificial Intelligence in the Current Global Tourism Industry

Smart Customer Service and Information Provision

One of the most prominent applications of artificial intelligence in the tourism sector is improving customer service and the tourist experience. Chatbots and virtual assistants provide immediate responses to inquiries 24/7, improving service availability and tourist satisfaction. Natural language processing systems enable fast and accurate responses to frequently asked questions, assistance with bookings, and support for travelers during their trips. For example, hotels and airports implement facial recognition to enable fast check-in and smooth, contactless entry, which streamlines processes and shortens waiting times for travelers. In addition, real-time voice and text translation tools help overcome language barriers and make tourism information accessible to foreign travelers, contributing to a more convenient overall experience between customers and service providers.¹⁴

Marketing and Personalization of the Traveler Experience

Another key area is the use of artificial intelligence to improve marketing and sales in the tourism industry. AI tools analyze large volumes of data on consumer preferences and behavior, supporting precise segmentation of target audiences and tailoring of messages and relevant offers for each segment. These “hyper-personalization” capabilities enable delivery of personalized offers based on a traveler’s travel history, past feedback, and personal preference profile. For example, AI can generate a recommendation for a hotel room type based on feedback from prior visits, or recommend a new destination based on similarity to preferences expressed in the past.¹⁵

According to reports in the tourism industry, adoption of AI-driven CRM systems yields positive business outcomes. At the same time, research points to the need to adjust the level of personalization to context. For example, the same traveler may expect entirely different experiences when traveling for business compared with leisure travel, and advanced AI systems therefore take the travel context into account when generating recommendations.¹⁵ More broadly, AI-driven marketing aims not only to increase the number of customers, but also to provide travelers with a more tailored and seamless experience that feels “smart” and attentive to their needs in real time.¹⁶

Travel Planning and Digital Travel Agents

Artificial intelligence is also driving significant change in the way trips are planned and booked. Generative tools and large language models (LLMs) function as “virtual travel agents” that can assemble a complete, personalized travel plan within seconds. Currently, chatbots are already integrated into the websites and applications of online travel agencies, enabling users to describe their objectives and preferences and immediately receive a proposed itinerary, including flights, accommodations, attractions, and an estimated budget.¹⁷

¹⁴ Strategy& PwC (2024). The AI Revolution in Tourism

¹⁵ McKinsey & Company, & Skift Research (2023). The promise of travel in the age of AI

¹⁶ OECD (2022). Tourism Trends and Policies 2022

¹⁷ Strategy& PwC (2024). The AI Revolution in Tourism

Revenue Management and Dynamic Pricing

Another area where artificial intelligence is applied in tourism is price optimization and revenue management. Airlines, hotels, and online travel agencies use machine-learning algorithms to analyze booking patterns, real-time demand, and market trends to dynamically adjust prices and inventory. For example, online travel agencies use artificial intelligence to analyze search data, competitor pricing, and weather conditions in order to automatically change rates based on demand.¹⁸ This is done through dynamic pricing that raises or lowers prices in real time, or through the creation of customized packages (Dynamic Bundling) that include flights, hotels, and additional services based on customer preferences.¹⁹

Similarly, hotels can use artificial intelligence to statistically analyze cancellation and no-show patterns, supporting decisions such as how much overbooking to accept. Overall, integrating artificial intelligence into revenue management enables businesses to price offerings in a smarter and more proactive way, rather than relying solely on manual rules or past experience.²⁰

The result is the maximization of occupancy and revenue. It is estimated that at present, artificial intelligence solutions for pricing which perform automated demand forecasting can reduce the time spent on manual adjustments by about 15%–25%.²¹ In the near future, the integration of “active” AI agents is expected to enable not only recommendations but also execution of automated actions, such as lowering and raising prices in response to changes in demand, which could reduce analysis time by up to 40%–50%.

Operational Efficiency

At the operational level, artificial intelligence applications support automation of routine tasks and improve internal management of tourism organizations. Forecasting and planning systems analyze booking data and seasonal trends to schedule staff and resources optimally. For example, hotels can determine the number of front-desk staff needed based on occupancy forecasts, or tourism sites can adjust guide staffing according to expected visitor volumes.

In addition, artificial intelligence is used for logistics and supply chain management. Machine learning supports analysis of procurement and contracts, and computer-vision tools enable real-time tracking of equipment and luggage along the travel journey (for example, baggage at airports).²¹

Artificial intelligence technologies are also integrated into tourist transportation, from smart traffic lights and congestion management at crowded sites, through real-time navigation and guidance for travelers in large venues, to autonomous vehicles and smart shuttles integrated into internal transportation services at destinations.²¹

In parallel, predictive maintenance systems apply algorithms to identify expected failures in tourism facilities, such as hotel elevators or park infrastructure, enabling preventive maintenance before breakdowns occur. This improves service continuity and reduces downtime costs.

In Israel, there is no sector-specific data; however, 31% of small businesses report time savings and 26% report savings in expenses and costs from use of artificial intelligence.²²

Another aspect of artificial intelligence adoption relates to robots that already replace workers in routine tasks and perform roles such as guest reception, room service, and cleaning, thereby improving

¹⁸ McKinsey & Company, & Skift Research (2025). Remapping Travel with Agentic AI

¹⁹ McKinsey & Company, & Skift Research (2023). The promise of travel in the age of AI

²⁰ OECD & G7 (2024). Policy Paper on AI and Tourism, 2024

²¹ McKinsey & Company, & Skift Research (2025). Remapping Travel with Agentic AI

²² Bezeq – The 2025 Internet Report

operational efficiency, reducing workloads for employees, and enabling 24/7 service. Effective implementation of robotics in hotels can help balance chronic labor shortages and increase productivity. Moreover, this does not necessarily reduce headcount, particularly when robots free employees for value-added tasks and complex interactions with guests.²³

Risk Management

Another area where artificial intelligence contributes is operational and safety risk management. Data analytics tools monitor weather alerts, geopolitical conditions, and other risk factors and provide forecasts and early warnings to operators of tourism sites and services.²⁴ Stakeholders can then receive alerts regarding an approaching storm or unrest in a tourism area, take preventive actions (such as evacuation or route changes), and ensure traveler safety. Similarly, AI-enabled security systems at tourism sites can identify unusual behavior patterns or anomalies in facial recognition and improve public safety. In the future, autonomous AI agents may take initiative in managing disruptions. For example, in the event of a flight cancellation that disrupts an itinerary, an advanced AI agent could independently book an alternative flight, extend the hotel stay accordingly, update car pick-up arrangements, and do so with minimal human involvement.²¹

Smart Tourism and Sustainability

Finally, artificial intelligence provides tools to promote smarter and more sustainable tourism. Dynamic visitor-management systems use artificial intelligence to regulate tourist flows at sites and in cities based on congestion levels. Analysis of mobile-phone and camera data enables forecasting of crowding at popular tourism sites and supports alerts or entry restrictions during excessive congestion, protecting both the visitor experience and local resources.²⁵ In parallel, intelligent recommendation platforms can direct travelers to alternative, less crowded routes and destinations, or to different visiting times during the day, in order to distribute demand more evenly.²⁶

Another aspect is environmentally sustainable tourism. Flight and travel search engines that integrate AI allow consumers to consider environmental factors in their decisions. For example, Google Flights displays estimated carbon emissions for each flight based on analysis of aircraft type, route, and flight range, enabling travelers to choose a more environmentally friendly option. Similarly, AI-driven travel planning systems can recommend sustainable accommodation options and activities (such as eco-friendly hotels or attractions with community value), aligned with user preferences while supporting the destination's sustainable development goals.²⁷ These applications demonstrate how AI can balance tourism growth with protection of natural and community resources, for example, by optimizing travel routes to reduce carbon footprint, or by monitoring the environmental impacts of tourist flows in real time and issuing alerts regarding the need for restrictions to prevent damage.²⁸

²³ McKinsey & Company, (2023). The economic potential of generative AI: the next productivity frontier

²⁴ Frontiers in AI (2025). How AI Transforms the Tourism Value Chain

²⁵ World Travel & Tourism Council. (2024). Responsible AI

²⁶ OECD & G7 (2024). Policy Paper on AI and Tourism2024,

²⁷ Sustainability (2025). Artificial Intelligence in Tourism: A Systematic Literature Review and Future Research Agenda

²⁸ World Travel & Tourism Council (2024). Responsible AI

Human Capital Management and Workforce Training with Artificial Intelligence

Artificial intelligence applications are increasingly used for human capital management in the tourism industry, from recruitment and workforce planning through training and skills development. Global surveys indicate that “employee training and upskilling” are among the GenAI applications perceived as having the greatest impact in the tourism industry, alongside tools that help teams serve customers better and digital training solutions for teams in kitchens and dining rooms.²⁹

AI-driven training platforms are already in use and include simulations and virtual and augmented reality environments for training flight attendants, call-center representatives, and other service employees. These platforms tailor learning content to each employee’s pace and weaknesses and incorporate continuous feedback based on analysis of interactions with customers.³⁰

In parallel, the literature indicates that a lack of digital skills and resistance to change constitute a major barrier to the adoption of artificial intelligence in tourism. Therefore, alongside the implementation of intelligent tools, systematic training programs are required to develop artificial intelligence capabilities and digital skills among employees and managers.³¹

²⁹ Statista (2024). Artificial intelligence (AI) use in travel and tourism

³⁰ McKinsey & Company & Skift Research (2023). The promise of travel in the age of AI

³¹ Frontiers in AI (2025). How AI Transforms the Tourism Value Chain,
OECD (2022). Tourism Trends and Policies 2022

Opportunities Presented by Artificial Intelligence from the State's Perspective

Beyond the clear benefits for the tourism industry, artificial intelligence also offers significant opportunities at the national level and has the potential to serve as an enabling factor to advance the Ministry's strategic objectives. The following are the key opportunities:

Increasing Tourism Revenues and Strengthening the State's Economic Growth

Artificial intelligence has the potential to contribute to national economic growth by increasing revenues from inbound and domestic tourism, increasing demand to visit the country, and supporting the development of new tourism products that generate value for the national economy.

First, artificial intelligence enables the industry to conduct advanced analyses of trends, identify demand patterns, and adapt tourism products and packages to different target audiences. In this way, it allows businesses to focus their efforts where returns are expected to be higher and to increase revenue per tourist. Better alignment between supply and customer needs increases satisfaction, supports the purchase of complementary products (such as attractions, upgrades, and experiences), and strengthens customer loyalty.³²

The ability of artificial intelligence to help service providers in the industry improve their capabilities, both by enhancing the value proposition in ways that improve the tourist experience and by increasing efficiency and reducing costs, can raise service quality across the industry, expand the diversity of offerings, increase competition, and create new standards aligned with global benchmarks.

Second, artificial intelligence enables the development of marketing strategies at the national level, with the objective of increasing inbound tourism and strengthening the country's reputation as a leading tourism destination. Israel has experienced prolonged periods of negative international image, which weakens demand even when market conditions improve. The reality necessitates continuous marketing efforts and responses to crises of trust. In this context, there is substantial value in the ability to monitor public perception using advanced tools, tailor messages, and respond rapidly during crises, alongside delivering a positive visitor experience during the visit that turns tourists into ambassadors for Israel upon returning home.

Finally, encouraging technological innovation in tourism can strengthen the TravelTech sector, reinforce Israel's position as a global leader in tourism innovation, and create a competitive advantage in international markets.

Strengthening Industry Resilience

Industry resilience depends on the ability to cope with demand fluctuations and disruptions without significantly harming service continuity or revenues. The use of intelligent tools can help address unexpected volatility and crises that lead to declines in demand, through demand forecasting, rapid responses to events, real-time alternative planning, and mitigation of cascading impacts.³³

³² OECD & G7 (2024). Policy Paper on AI and tourism2024

³³ McKinsey & Company, & Skift Research (2023). The promise of travel in the age of AI

Integrating demand forecasts into pricing processes enables real-time price adjustments based on up-to-date indicators such as search trends and weather conditions. In an agentic scenario, autonomous responses to sudden changes in demand may further minimize revenue volatility, even as market conditions change rapidly.³⁴ In addition, artificial intelligence enables more personalized communication with customers and more efficient activation of recovery plans in cases of delays, itinerary changes, and cancellations. These capabilities reduce the burden on service centers and help decrease uncertainty for customers.³³

In Israel, where security-related uncertainty can quickly translate into changes in demand, the value of these resilience capabilities is especially significant. They enable the industry to respond more rapidly, stabilize the service experience, and reduce operational costs during periods of pressure and changes in the external environment.

Improving Labor Productivity

Artificial intelligence applications in the tourism sector have clear potential to improve labor productivity, primarily by saving time and workforce resources in information-intensive tasks and administrative and service processes, rather than through substantial reductions in physical labor.

In practice, the immediate value is derived from automation and acceleration of activities such as information collection and comparison, initial responses to inquiries, summarization and documentation of service interactions, optimization of pricing and revenue management, and identification of operational anomalies. These components reduce manual work and decrease errors. At the macro level, broad adoption of digital capabilities and artificial intelligence may support improvements of approximately 15%–25% in the operating margins of tourism enterprises, mainly through operational efficiency and productivity gains.

The impact on the labor market is expected to be expressed primarily through changes in skill composition: a relative decline in routine tasks (for example, manual handling of bookings and inquiries), alongside increased demand for roles that complement artificial intelligence, such as implementation, oversight, data management, product management, and AI operations. The ability to realize this value also depends on access to data infrastructure and tools, and on the capacity to bridge skills gaps, particularly among small and medium-sized businesses.³⁵

From a policy perspective, this is a point that requires careful attention. Without mechanisms for support and accessibility, returns on investment may concentrate among large players with advantages in data, capital, and skilled human resources.³⁵

More Efficient Allocation of State Resources

Artificial intelligence applications have the potential to enhance the state's ability to plan tourism infrastructure more intelligently, manage congestion, identify the most effective investments, and promote balanced growth across regions and value propositions. When data analysis is conducted in real time, decision-makers can better understand tourist behavior, demand flows, and areas requiring reinforcement, leading to improved decision-making across multiple domains. For example, artificial intelligence enables

³⁴ McKinsey & Company, & Skift Research (2025). Remapping Travel with Agentic AI

³⁵ OECD & G7 (2024). Policy Paper on AI and Tourism 2024

smart congestion management by directing tourists to alternative times or routes in cases of overcrowding.³⁵

In Israel, where approval and planning processes are lengthy and often constrain hotel development and tourism infrastructure, these capabilities are particularly important. Given the Ministry's substantial investments in local authorities, tourism infrastructure development, and hotel construction projects, effective use of data can help identify new areas with tourism potential, reduce risks for entrepreneurs, prioritize high-impact projects, and direct investments to locations that generate maximum benefit for tourists and the industry while supporting the desired level of diversity.

Key Challenges and Risks of Artificial Intelligence in Tourism

Artificial intelligence also creates challenges and risks for the state, the industry, and consumers:

Risk of Non-Adoption (Competitive Lag and Potential Harm to Tourism Volumes and Revenues)

Despite the well-recognized potential of artificial intelligence, the policy literature emphasizes that technology penetration occurs unevenly across actors and destinations. The OECD points to the emergence of an “adoption gap” in the tourism industry, in which a limited number of global and digitally native companies advance rapidly, while small and medium-sized businesses and destinations with lower digital readiness are left behind.³⁶

Countries that fail to keep pace with technological developments may offer a service experience that is less advanced and less aligned with the expectations of the digital consumer. In the medium term, this may be reflected in erosion of attractiveness, reduced tourism activity and spending, and a diversion of demand toward smarter and more technologically advanced destinations.

Deepening Employment Inequality Due to Skills Gaps, with Emphasis on Sales and Service Roles

OECD data indicate that the adoption of artificial intelligence is “reshaping” roles and skill demand in the tourism industry. As routine tasks, including tasks involving basic customer interactions, are increasingly automated, demand grows for more advanced human skills, such as managing complex situations and providing service in exceptional cases while working alongside artificial intelligence tools.

This transformation requires investment in training, reskilling, and upskilling. Given that much of the customer interface is concentrated in frontline roles, such as customer service representatives, reception staff, and sales or travel agents, there is a risk that the impact of the transition will be asymmetric: workers with lower skill levels or limited exposure to digital tools may struggle to adapt to the pace of change, while workers with digital literacy and technological skills may benefit from increased demand for their labor.³⁶

A shortage of data-related skills, ranging from basic data literacy to advanced capabilities (such as visualization, data management, statistics, and programming tools), constitutes a significant barrier to industry growth. Without implementing training programs for employees, the skills gap may translate into widening employment inequality. This may occur both through “displacement” from existing roles and through polarization between different career paths.

Risk to Small and Medium-Sized Businesses Due to Strengthening Economies of Scale and Increased Market Concentration

Although artificial intelligence has the potential to lower barriers to access resources such as data analysis and content creation, there is a risk that a small number of large, well-endowed firms will enjoy a high capacity for adoption, while many small businesses will struggle to secure key resources such as data, computing infrastructure, skilled talent, consulting services, and the ability to invest in innovation and R&D. Reducing this gap is therefore essential to enable small and medium-sized businesses to access the benefits of artificial intelligence.³⁶

Furthermore, the competitive risks associated with artificial intelligence may also materialize through

³⁶ OECD & G7 (2024). Policy Paper on AI and Tourism 2024

market distortions that disadvantage smaller players. A significant portion of the customer journey relies on digital intermediary platforms and recommendation engines. The adoption of artificial intelligence strengthens the optimization, marketing, and personalization capabilities of large players, while creating new fixed costs such as data collection and maintenance, cybersecurity, regulatory compliance, and governance requirements. In this environment, artificial intelligence may increase the relative market power of large firms and reduce the visibility and competitiveness of small or lesser-known businesses.

Risks of Algorithmic Bias Resulting in Unintended Discrimination and Misleading or Incorrect Content

According to the OECD, artificial intelligence may exacerbate imbalances in the tourism industry due to ethical and trust-related concerns, particularly in relation to algorithmic bias and data-quality challenges. If AI-based services are not properly managed, they may lead to a less inclusive tourism experience that does not adequately address the diverse needs of travelers.³⁶

The accuracy of artificial intelligence systems depends on the quality of the underlying data and on human oversight. Biases in data, as well as erroneous outputs (including cases in which artificial intelligence confidently produces incorrect information) may result in faulty forecasts or harmful actions that undermine service reliability and user trust. When recommendation or ranking mechanisms serve as the infrastructure for marketing and promotion, such biases may translate into unintended harm to certain population groups (for example, through unequal access to information and services), as well as to small businesses or those that lack sufficient digital capabilities to perform well in automated ranking systems.

The World Travel & Tourism Council (WTTC) emphasizes the importance of developing and implementing mechanisms for verifying content provenance and documentation, such as source labeling and additional techniques that enable users to identify content generated by artificial intelligence. These measures are intended to reduce the risks of deception and manipulation.³⁷

As the marketing domain increasingly adopts AI-based advertising tools, the risk may grow that rankings and exposure will be biased in favor of large businesses that benefit from extensive volumes of positive marketing content online.

Privacy and Regulatory Compliance Risks

The use of large volumes of data and the need for robust data management make data protection, transparency, and accountability foundational conditions for the adoption of artificial intelligence in tourism. The OECD notes that security breaches may expose sensitive personal or business information, and that there is a need to safeguard the integrity of data and systems against cyberattacks and human error.³⁸

The WTTC calls on entities that develop and implement artificial intelligence systems to advance privacy and risk-management policies, invest in strong security controls throughout the lifecycle of AI systems, and implement appropriate safeguards for personal data.³⁷

³⁷ World Travel & Tourism Council (2024). Responsible AI

³⁸ OECD & G7 (2024). Policy Paper on AI and Tourism 2024

Government Activity in the Field of Artificial Intelligence in Tourism

The penetration of artificial intelligence into the tourism industry places policymakers at a strategic crossroads that requires a governmental response. Government responses to this transformation are not uniform, but rather span a spectrum of involvement that varies across countries, ranging from planning and prevention measures, through support and assistance for the business sector, to direct involvement in the development and implementation of artificial intelligence technologies.

This analysis makes it possible to distinguish between tools aimed at reducing systemic risks and preserving public trust, and tools intended to accelerate adoption, bridge gaps, and strengthen the competitiveness of the state and the businesses operating within it.

Figure 3 - Government Actions to Manage and Advance Artificial Intelligence in Tourism



For international comparison, three reference countries were selected: Portugal, Singapore, and the United Arab Emirates. These countries were chosen due to their similarity to Israel along two key dimensions: comparable demographic scale and a high level of technological maturity. In addition, the countries differ in the contribution of tourism to GDP: Portugal is a tourism-oriented economy in Europe, with tourism accounting for approximately 8.9% of GDP in 2022; the United Arab Emirates is a global hub economy with tourism contributing about 6.2% of GDP in 2022; and Singapore's share stands at 2.6%, slightly higher than the Israeli figure.

Planning and Prevention

At the most basic level, the state functions as a regulator and gatekeeper. At this level, government efforts focus on formulating policy and creating rules of the game that define responsibility, transparency, safety, and privacy protection, as well as on the implementation and enforcement of fair-competition rules for new business models. The state's role is to create the conditions that enable innovation while proactively

preventing typical market failures, such as data concentration, technological entry barriers, or uses that undermine tourist trust and industry stability.

In all three countries examined, a common pattern emerges: none rely on legislation dedicated specifically to artificial intelligence in tourism. Instead, they rely on a foundational layer of privacy and data regulation and broad artificial-intelligence frameworks, alongside “soft tools” that guide the market, such as standards, voluntary frameworks, practical guidelines, and training programs. The main differences in approach are in the degree of direct government involvement and the instruments chosen.

In the United Arab Emirates, there is no tourism-specific artificial intelligence legislation; however, general regulatory frameworks in the fields of data and digital governance are applied. The Federal Data Protection Law³⁹ regulates the processing of personal data and, among other things, grants the right to appeal automated processing of personal data. The government has adopted six guiding principles for artificial intelligence systems: progress, cooperation, community (equality), ethics and transparency, sustainability, and transparency.⁴⁰ As part of efforts to build trust in technology, the Dubai government has launched the “AI Seal,” awarded to companies that meet high standards of safety and ethics, with the aim of strengthening legitimacy and confidence in the use of artificial intelligence applications, including in tourism.⁴¹ In the hospitality context, regulations have been established for short-term rentals and smart check-in, and in operational-security aspects there is a trend toward expanding the use of threshold requirements, standards, and enabling regulation in entry and stay interfaces, reflecting a view of the tourist experience as part of a broader ecosystem of trust and guest safety.⁴²

Singapore combines comprehensive privacy regulation under the Personal Data Protection Act with voluntary frameworks relating to artificial intelligence that establish standards and market norms. The Infocomm Media Development Authority (IMDA) published the Model AI Governance Framework to promote ethical use of artificial intelligence, with dedicated attention to generative models alongside guidance for risk assessment across different applications. In parallel, the government operates verification tools such as “AI Verify” to support measurement and algorithmic oversight.⁴³

Portugal, as a member of the European Union, is subject to EU regulations and the emerging European artificial-intelligence legal framework. At the national level, the “AI Portugal 2030” strategy and the ethical guide for artificial intelligence in the public sector outline a vision centered on progress, efficiency, and fairness.⁴⁴ There is no tourism-specific legislation, but within the government’s broader strategy, emphasis is placed on regulation governing the use of data and generative models to improve public services, including services relevant to tourists.

Support and Assistance

Beyond its regulatory role, many governments adopt a support-and-assistance approach, in which the state serves as a catalyst for the private sector. At this level, governments act to bridge gaps through funding and advisory support for innovation projects, often within controlled testing frameworks (regulatory and/or technological “sandboxes”) that allow pilots to be conducted in a supervised environment.

Another key pillar is investment in human capital, including digital training for small and medium-sized businesses in the sector (such as tour guides, attraction operators, and accommodation providers), alongside the provision of practical knowledge through guides, templates, and implementation processes

³⁹ United Arab Emirates (2021). Federal Decree-Law No. 45 of 2021 Concerning the Protection of Personal Data

⁴⁰ United Arab Emirates (2024). UAE’s International Stance on Artificial Intelligence Policy.

⁴¹ Dubai AI. (n.d.). AI Seal

⁴² Emirates News Agency (WAM). (2025, August 23). UAE: A global leader in employing AI in tourism, hospitality sector.

⁴³ Personal Data Protection Commission (2020). Model AI Governance Framework (second edition)

⁴⁴ Portugal Government / INCoDe.2030 (2019). Estratégia Inteligência Artificial 2030.

that translate technological capabilities into business value.

In parallel, governments promote shared infrastructure, such as data lakes or dedicated information platforms, which are made accessible to the industry and serve as a foundation for the development of advanced applications, measurement, and data-driven planning.

For example, the Ministry of Economy and Tourism in the United Arab Emirates organizes initiatives to promote technology adoption and provides incentives for artificial-intelligence projects in tourism. In terms of human capital, the emphasis is not only on training “technologists,” but also on equipping tourism managers and hoteliers with the skills needed to safely and effectively operate advanced systems, to translate innovation into service improvement and measurable outcomes.⁴⁵

The Singapore government operates the “Smart Nation” initiative and the national artificial-intelligence program to embed technological solutions across key sectors.⁴⁶ The Singapore Tourism Board (STB) leads significant initiatives, including a strategic partnership with OpenAI launched in 2025, which makes advanced artificial-intelligence tools available to the industry for translation, marketing content creation based on storytelling, and smart tourist-journey planning.⁴⁷

Singapore also allocates substantial resources through incentives: the Economic Development Board (EDB) launched a dedicated tourism support package of approximately SGD 300 million,⁴⁸ alongside grants such as “100 Experiments in AI” to support technology adoption by businesses.

Portugal likewise views tourism as a strategic sector for innovation. In preparation for the launch of the Tourism Strategy for 2035, expected to be published soon, the country is focusing on improving the visitor experience through technology. The innovation body NEST plays a central role in establishing an innovation hub that provides digital training programs for small and medium-sized businesses and grants access to advanced tools, including regulatory sandboxes, innovation incentives, startup funding in the tourism sector, and collaborations with universities.⁴⁹

Direct Government Action

At the highest level of involvement, governments act as technological players themselves. This approach includes initiating and establishing digital platforms that integrate artificial intelligence to directly improve the tourist experience by enhancing access to information. In parallel, governments implement decision-support tools and artificial-intelligence solutions within governmental systems for use by public-sector employees, alongside investment in their professional training.

For example, in the United Arab Emirates, the government positions itself as an ecosystem leader: not only setting rules, but also operating digital services as part of destination infrastructure. The Ministry of Economy and Tourism (MOET), and the Emirates Tourism Council work in collaboration with other government bodies and municipalities to advance initiatives. Among other activities, the state operates advanced artificial-intelligence systems for tourism management, such as sensor-based analytics to monitor visitor flows at ports and airports.⁵⁰ A notable example of a direct consumer-facing application is the launch of “Fatima,” an artificial-intelligence-based tour guide developed by the Government of Sharjah.⁵¹ This system provides personalized recommendations to tourists and is connected to international databases to enrich the visitor experience.

Singapore promotes the integration of artificial intelligence and data into visitor-experience management

⁴⁵ Ministry of Economy and Tourism, UAE. (2025, November 11). UAE welcomes ‘Riyadh Declaration on the Future of Tourism

⁴⁶ Smart Nation Singapore. (n.d.). Smart Nation Singapore

⁴⁷ Singapore Tourism Board. (2025, July 23). STB and OpenAI sign first-of-its-kind MOU to prepare tourism sector for an AI-driven future

⁴⁸ Singapore Economic Development Board. (2024). Singapore to pump S\$300 million into tourism as part of broader economic plan.

⁴⁹ NEST – Tourism Innovation Centre. (n.d.).

⁵⁰ World Aviation Festival. (n.d.). Abu Dhabi Airports and SITA develop AI airport management

⁵¹ Labiba.ai. (n.d.). Sharjah tourism AI initiative

and attraction operations as part of its sectoral digitalization policy.⁵² As part of this effort, it operates systems for managing visitor flows and queues, based on real-time data and, in some cases, artificial intelligence and advanced analytics, at major attractions.⁵³

The government also operates and provides access to STAN, a smart tourism data repository that serves both government and industry users.⁵⁴ In this context, the approach is not merely the “digitalization” of existing processes, but an enhancement of market capabilities through the provision of tools that reduce expertise barriers for businesses, increase the speed of development and deployment of applications, and enable adaptation to multilingual markets.

Portugal similarly emphasizes “public data infrastructure” as a foundation for tourism applications. The country collects and analyzes tourism data through the TravelBI system, operated by the national tourism authority. This system aggregates a wide range of data, including anonymized mobile tracking of tourist movements, entry and exit data, and spending patterns, to provide the industry with tools for demand forecasting and precise marketing planning. The information is made available to the industry to support congestion management, and academia and the business sector collaborate to develop additional solutions. The state does not necessarily develop end-user products, but rather creates an infrastructure layer that enables the market to develop products, measure effectiveness, and reduce information asymmetries between large and small players.

⁵² Singapore Tourism Board & Infocomm Media Development Authority. (n.d.). Tourism (Attractions) Industry Digital Plan

⁵³ cio.com. (n.d.). A journey through Resorts World Sentosa: tailoring every moment with technology.

⁵⁴ Stan | Home page. (n.d.)

The Ministry's Policy on Artificial Intelligence and Multi-Year Implementation Directions

Analysis of the trends and impacts of artificial intelligence on the tourism industry in Israel and worldwide, together with a review of global government activity to regulate and promote the field, underscores the need for the formulation of a sector-specific policy by the state.

In Israel, the importance of artificial intelligence in tourism is critical, particularly considering the complex period the country has experienced and the need to rehabilitate the industry under conditions of uncertainty and instability. In situations where sharp fluctuations in demand and in the country's image may quickly affect the entire value chain, artificial intelligence technologies can strengthen industry resilience through fast, data-driven decision-making, dynamic adaptation of services and messages to target audiences, efficient management of resources and service and operational processes, and improvement of the visitor experience. Thoughtful adoption of artificial intelligence is not merely a move toward innovation, but a central tool for recovery, increased competitiveness, and ensuring responsible continuity and growth of Israeli tourism.

Accordingly, this document details the comprehensive policy formulated by the Ministry regarding artificial intelligence in the tourism sector. The Ministry is working to promote the development of a national policy for artificial intelligence in tourism, and therefore this policy is directed toward advancing the Ministry's overall strategic objectives while strengthening the tourism ecosystem as a whole. The first part of this policy defines guiding principles and overarching outcome indicators that will guide its implementation. The policy then specifies the main courses of action in which the Ministry has the capacity for meaningful influence and in which it intends to act in the coming years.

The Ministry's Policy Principles in the Field of Artificial Intelligence

The Ministry's policy on artificial intelligence is based on five core principles:

- 1 | Strengthening Stakeholders**

The Ministry will encourage the use of artificial intelligence to improve efficiency, productivity, and competitiveness among stakeholders in the tourism sector, with particular emphasis on ensuring accessibility for small and medium-sized businesses.
- 2 | Leadership and Coordination of the Ecosystem**

The Ministry will serve as a coordinating, guiding, and accelerating body for the implementation of artificial intelligence solutions across Israel's tourism ecosystem, as a tool to support the achievement of the Ministry's objectives.
- 3 | Addressing Core Challenges**

The Ministry will leverage artificial intelligence capabilities as a supporting tool for addressing **fundamental** issues in Israel's tourism sector (including matching supply to demand, supporting efforts to improve Israel's international image, and other related challenges).
- 4 | Strengthening the Ministry's Capabilities in Artificial Intelligence**

The Ministry will implement artificial intelligence tools to improve the effectiveness of its internal operations and will train managers and employees to use these tools effectively in the performance of their roles.
- 5 | Oversight and Balancing Processes**

The use of artificial intelligence will be promoted while maintaining, among other considerations, a balance between innovation, responsibility, fairness, and public trust. This will be done in accordance with government policy and regulatory frameworks, including privacy protection and cybersecurity requirements, and through the integration of appropriate security controls.

Outcome Indicators for Assessing Long-Term Success

Dedicated Artificial Intelligence Metrics

- 1 | The share of businesses in the tourism industry that consider artificial intelligence a driver for improving business activity.
- 2 | The share of businesses in the tourism industry that implement artificial intelligence solutions as part of their ongoing operations.
- 3 | The share of businesses reporting barriers to the adoption and implementation of artificial intelligence technologies.
- 4 | The share of tourists (inbound and domestic) who used artificial intelligence tools before or during their visit to Israel, and their level of satisfaction with these tools.

Overarching Outcome Metrics Expected to be Influenced by Artificial Intelligence Adoption

- 1 | The contribution of the tourism sector to GDP.
- 2 | Average revenue per tourist.
- 3 | Average labor productivity per employee in the tourism industry.

The Ministry will conduct periodic surveys to collect and analyze data in order to track some of these indicators.

Key Areas of Ministry Activity in Artificial Intelligence in the Coming Years

As part of the formulation of the Ministry's artificial intelligence policy, the main courses of action in which the Ministry has the capacity for influence and unique contribution were defined. This definition enables the Ministry to focus efforts, direct resources, and act in a systematic and informed manner.

Within each of these areas, there is a wide range of possible directions — including initiatives, tools, incentives, and collaborations—which the Ministry will examine and advance in accordance with its strategic objectives, the needs of the industry, and its capacity for impact at any given time.

The text below presents the courses of action that will serve as the foundation for the Ministry's multi-year work plan and for implementation measures in the coming years.

1. Shaping Artificial Intelligence Policy

The Ministry of Tourism is working to advance the formulation of national policy for artificial intelligence in tourism, with the aim of promoting optimal adoption and implementation of artificial intelligence technologies by the industry, should it choose to do so. This document constitutes the first stage in this process.

Over the coming years, and as technology evolves and its adoption expands, the Ministry will continuously examine fundamental issues that arise and formulate a policy accordingly, including issues affecting the industry that stem from the activities of other government bodies. In addition, the Ministry will lead cross-governmental policy on cross-cutting issues that influence the tourism sector.

2. Removing Regulatory Barriers to Artificial Intelligence

In December 2023, the Ministry of Innovation, Science and Technology, in cooperation with the Ministry of Justice, published the document "Principles of Policy, Regulation, and Ethics in the Field of Artificial Intelligence 2023," which aims to frame how government and regulators will manage the development and use of artificial intelligence technologies. The document describes the key challenges associated with artificial intelligence and proposes ethical principles based, among other things, on OECD principles. However, the document does not provide a sector-specific response to the characteristics of the tourism industry, and suggests that, at this stage, to the extent that regulation intended to govern the development and use of artificial intelligence is advanced, this will be carried out at the level of the specific sector in which it is required, based on a concrete need and under the leadership of the relevant regulator.⁵⁵

Accordingly, the Ministry will strive to develop tailored regulatory solutions that enable broad and effective use of artificial intelligence in tourism, while reducing barriers and strengthening trust among all stakeholders.

As part of this effort, the Ministry will continuously examine regulatory barriers that hinder the tourism industry's ability to adopt artificial intelligence technologies and will aim to remove them in a responsible and measured manner, within its authority and in coordination with relevant government bodies.

The Ministry will also act to develop mechanisms that encourage adoption of artificial intelligence through

⁵⁵ Ministry of Innovation, Science and Technology, Ministry of Justice, Legal Counsel and Legislative Affairs, "Principles of Policy, Regulation, and Ethics in the Field of Artificial Intelligence," 2023.

incentives, conducive regulation, and additional support tools.

Finally, the Ministry will examine situations in which artificial intelligence can be leveraged as a solution to deal with regulatory restrictions on various issues related to the tourism sector, with the aim of streamlining processes, improving services, and strengthening stakeholders.

3. Producing Information and Knowledge

Artificial intelligence applications—ranging from forecasting models to personalized services—depend on high-quality data and information. At present, relevant data in Israel is dispersed among many entities, including various government ministries, local authorities, tourism sites, hotels, and others. In addition, many entities do not possess the data required for artificial intelligence use, and a significant portion of potentially valuable information is not yet collected in a systematic or consistent manner.

Therefore, the Ministry has begun leading the development of a data infrastructure designed to support the adoption and implementation of artificial intelligence technologies by stakeholders in the tourism industry who are interested in doing so. As part of this effort, the Ministry will promote the collection, consolidation, and analysis of data from multiple sources—including data on tourist and visitor behavior, demand trends, consumption patterns, and monitoring of Israel's image—using advanced artificial intelligence tools. This activity will also include examining the establishment of a unified data repository that will serve as a central infrastructure for industry stakeholders and enable advanced analytics and forecasting solutions, thereby improving the quality of decision-making.

In addition, the Ministry will work to make advanced business insights, based on analytical models and artificial intelligence, accessible to industry stakeholders, such as insights regarding areas with future demand potential, changing trends among target audiences, and characteristics affecting the tourist experience. In doing so, the Ministry will enable all stakeholders to operate on a data-driven basis, improve efficiency, and increase their contribution to the growth of the sector. This activity is expected to empower all stakeholders and create a competitive, transparent, and knowledge-based market.

4. Promoting Accessibility and Supporting the Use of Artificial Intelligence in the Industry

In order to enable broad and effective adoption of artificial intelligence technologies in the tourism industry, the Ministry will seek to make tools, knowledge, and skills accessible to all relevant stakeholders who wish to use them - including large, medium, and small businesses; national and private organizations operating tourism sites; local authorities; and other entities. The objective is to reduce skills gaps and make artificial intelligence accessible even to organizations with limited resources.

Within this framework, the Ministry will promote familiarity with and access to existing artificial intelligence tools, in order to enable all stakeholders to become acquainted with the available solutions and choose those suited to their needs from a diverse range.

In parallel, the Ministry will promote training and capacity-building for industry players through courses, workshops, and professional guidance that address both opportunities and risks, and that enable practical application of artificial intelligence tools in day-to-day operations.

Through these measures, the Ministry will create conditions in which small businesses and local authorities can also benefit from artificial intelligence and strengthen their competitive capabilities.

5. Connecting Stakeholders to Promote Innovation in the Field

In the tourism sector, there is often a gap between the deep knowledge and experience of tourism professionals and the language, pace, and capabilities of the technology and innovation world. Accordingly, only ongoing and structured dialogue between these two spheres can enable the development of artificial intelligence solutions tailored to the specific needs of the Israeli tourism ecosystem.

Accordingly, the Ministry will act to strengthen the innovation ecosystem in the tourism sector by promoting collaboration among academia, industry, technology companies, and other stakeholders.

As part of this effort, the Ministry has begun advancing the establishment of a dedicated community for knowledge sharing, mutual learning, and deepening a shared understanding of challenges and opportunities. This community will initiate joint projects and pilot programs designed to provide targeted solutions for stakeholders in the Israeli tourism industry.

6. Improving Internal Ministry Processes through Artificial Intelligence

The Ministry will work to integrate artificial intelligence into its internal core processes, with the aim of improving the quality of decision-making, optimizing resource allocation, and increasing the effectiveness of planning and infrastructure-development processes. The use of artificial intelligence tools will enable the analysis of large volumes of data, the identification of meaningful patterns and trends, and improved prioritization and forecasting.

The Ministry is already actively participating in national initiatives, including migration to cloud infrastructure and inter-ministerial digital transformation efforts. In addition, the Ministry is promoting the adoption of artificial intelligence-based work tools among all employees, alongside training and gradual integration into daily operations.

As part of expanding the use of artificial intelligence and leveraging its internal capabilities, the Ministry will examine options such as:

- Optimization of the Ministry's investments in local authorities for tourism infrastructure development through the use of models for forecasting future demand, impact assessment, and effective prioritization among projects.
- Optimization of the Ministry's investments in developers' activities for hotel construction through tools for feasibility analysis, risk assessment, and identification of areas with high growth potential.
- Support for decisions regarding land allocation, including the determination of optimal land uses and the adaptation of spatial planning to changing tourism needs.
- Measurement of the effectiveness of the Ministry's investments and support measures, and of their impact on the industry, through the use of analytical models that enable examination of the causal relationship between such investments and support measures and various outcome indicators.

The implementation of artificial intelligence tools in these processes will enable the Ministry to operate more efficiently and transparently, and improve the quality of decision-making processes.

7. Strengthening Israel's Image through Artificial Intelligence

Considering existing image-related challenges, the Ministry will promote the use of artificial intelligence

tools to improve the quality of tourism information presented globally and to strengthen Israel's image as a leading, safe, and high-quality tourism destination. In an era of social media and rapidly evolving discourse, tourists expect timely and personalized responses. Artificial intelligence enables faster, more accurate, and more relevant responses to emerging needs.

Accordingly, the Ministry will examine innovative applications that support the provision of high-quality, reliable, and relevant information to tourists worldwide. Among others, the Ministry will consider the following alternatives:

- Ongoing and comprehensive image monitoring to identify trends in the global discourse around Israel, monitoring sentiment in real time, and analyzing the external influences and effects of various campaigns on demand and image. Specifically, quickly detecting problematic situations online (such as fake news, crisis events, or negative narratives).
- Encouragement of the Israel Government Advertising Agency (IGAA/Lapam) and tourism marketing agencies to promote the production of messages, automatic writing of content, and smart content management. In addition, the production of customized marketing materials, in different languages and channels, according to the needs and characteristics of the target audiences.
- A multilingual tool for tourists that will provide useful and up-to-date information on services, answer questions in real time, and reduce the concerns of those who are undecided about coming to Israel and enable the efficient handling of tourist inquiries before arrival and during their visit.

By systematically integrating AI tools into marketing and content management for tourists, the Ministry will strengthen its ability to act and to deliver messages quickly and accurately.

8. Promoting Artificial Intelligence to Improve Infrastructure and the Tourist Experience

The Ministry will aim to promote, support, and initiate innovative services based on artificial intelligence that are designed to significantly improve tourists' experience in Israel and increase their satisfaction. These actions are intended to turn inbound tourists into ambassadors for Israel upon returning home, and to strengthen the positive connection of domestic tourists to the country, its communities, and its heritage.

Within this framework, the Ministry will examine the initiation of cross-cutting projects that integrate artificial intelligence tools into tourism infrastructure, aimed at improving services and responses provided to tourists. Examples include smart information services at tourism sites, congestion-management tools, and solutions that enhance local experiences, such as interactive experiences, personalized tours, or content generated in real time based on tourists' location and interests. In addition, the Ministry will examine the use of artificial intelligence tools for systematic analysis of tourist experience and satisfaction, to identify needs, trends, and challenges.

The Ministry's Initial Steps in the Short Term

The planning of the Ministry's activity in the field of artificial intelligence for the coming years is based on the gradual implementation of the policy directions, reflecting the need to establish the required infrastructure for advancing effective and advanced artificial-intelligence activity, alongside the need to promote immediate actions using tools that are already available at present. Accordingly, the Ministry's focus areas for the near term will be as follows:

1. Ensuring Accessibility for Industry Stakeholders

To ensure that the Ministry's policy is translated into immediate change on the ground, the Ministry will focus on establishing a professional community that will enable, among other things:

- Activities to enrich the knowledge of stakeholders in the tourism industry, with an emphasis on raising awareness of both the opportunities presented by artificial intelligence and the risks associated with it.
- Improving accessibility to existing tools for relevant actors, particularly small and medium-sized businesses, for whom familiarity with and access to such tools are more limited, as well as for government bodies and local authorities.
- Initiating collaborations aimed at narrowing gaps between the tourism industry and the TravelTech community, fostering shared dialogue, and promoting focused projects and pilot initiatives.

2. Establishing a Data and Information Infrastructure

The Ministry will focus on laying the foundations for a data infrastructure that will enable effective use of artificial intelligence both within the Ministry itself and among various actors in the tourism industry. This will include the collection, consolidation, and analysis of information, such as data that are currently lacking on the characteristics and behavior of tourists and visitors, for sectoral planning, service improvement, and the development of smart solutions at later stages.

This effort will be carried out alongside steps the Ministry has already begun to take to develop responsible solutions that will enable the removal of regulatory barriers that currently hinder data collection and the use of artificial-intelligence tools.

3. Strengthening the Ministry's Capabilities in Artificial Intelligence

The Ministry will continue its process of organizational preparedness and professional capacity-building in the field of artificial intelligence, including the integration of tools and knowledge among Ministry employees. This will enable more advanced and effective use of innovative tools in the future. At the same time, the Ministry will continue to establish the technological infrastructure required for the implementation of complex artificial-intelligence models that can support the performance of more advanced and sophisticated tasks.

The adoption of artificial intelligence in the tourism industry is not merely a technological step, but a strategic growth engine for the Israeli economy. Implementation of the principles set out in this document will enable the State of Israel to establish its position as a technological leader in the TravelTech domain, while significantly improving the tourist experience and increasing the efficiency of the business sector.

The Ministry of Tourism is committed to leading the implementation of this roadmap in full cooperation with the industry, with the objective of making innovation a central tool in strengthening national resilience and increasing the contribution of tourism to the national economy.