

# IMPACT OF DIGITAL MARKETING (DM) ON UZBEKISTAN TOURISM MANAGEMENT SYSTEM AND USING ARTIFICIAL INTELLIGENCE (AI) IN UZBEKISTAN TOURISM SECTORS

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## Annotation

This article explores the impact of digital marketing (DM) on the tourism management system of Uzbekistan and the utilization of artificial intelligence (AI) in the tourism sectors of the country. In the modern era, digital marketing technologies play a crucial role in promoting tourism services and attracting tourists, proving to be an effective tool in the tourism industry. Artificial intelligence, on the other hand, is being used to automate tourism services, analyze data, and enhance the tourist experience. The article highlights the role of digital marketing strategies in tourism management, the potential of artificial intelligence, and prospects for their implementation. It also analyzes the advantages and challenges of using digital marketing and artificial intelligence in Uzbekistan's tourism sector.

## Keywords

Digital marketing, artificial intelligence, tourism management, Uzbekistan tourism sector, digitalization, technological implementation, marketing strategies, tourism services, automation, tourist experience

I plan to situate my project within the well-established research field that explores high technologies and e-tools impact on Uzbekistan tourism industry. My project focuses on how digital marketing tool will impact on tourism marketing process and increasing high usage of artificial intelligence in tourism sectors in daily life. The research will focus on Uzbekistan; because of it, rich tourism destinations, service and products. Also same time tourism industry is contributing big part of profit on local economy of Uzbekistan. Uzbekistan has many historical places where we can meet 4000 years history, many ancient buildings, traditional

foods and many interesting things where tourists cannot find such things around the world.

I plan to explore three key sub questions within this region

1. What is the main impact of digital marketing tools on tourism product and services?
2. How will effect if Uzbekistan government increase number of Artificial intelligence technologies in tourism sectors?
3. What kind of new mobile apps or Ai tools Uzbekistan can produce under its own national brand to make tourism services famous worldwide?
  - To improve digital marketing tools usage with high technologies in Uzbekistan tourism industry
  - To make easy the process of booking tourism products of Uzbekistan and implementing artificial intelligence on tourism sectors
  - To bring a new innovation to Uzbekistan tourism sectors

Located in the heart of Central Asia, Uzbekistan with its rich cultural and historical heritage, friendly people, delicious cuisine, and beautiful nature is ready to expand its travel and tourism industry. The government views the tourism sector as having high growth potential. Uzbekistan was closed to foreigners for many years, and the government has initiated reforms to open access to its rich cultural and historical heritage to facilitate tourism development. Tourism is one of the fastest developing industries in Uzbekistan. Last decade years Uzbekistan is leading in tourism industry in Central Asian (CA) countries. In current situation for sustaining tourism business in Uzbekistan government tourism organizations need to use very strong digital marketing tool to promote Uzbekistan tourism products worldwide.

Digital marketing today has become the one of the key focus areas for businesses all over the world. Today digital marketing plays a critical role in the success of each business which exists in the tourism industry (G.Kaur 2017). Before the launch of digital marketing, the role of people who rendered these services was indispensable to the success of the business. The tourism industry, in particular, has been disrupted as a whole with the rapid development of the internet. Users purchase services related to tourism online at the click of a button while comparing amongst businesses from all over the world. A web app is an application located on a web server that users can access through a browser.

In the realm of travel and tourism, digital marketing employs diverse strategies like social media, SEO, emails, and content to connect with people, enabling businesses to attract new customers, enhance brand visibility, and increase bookings, all while having the unique ability to engage precisely with

individuals based on their preferences and online behavior through tools like data analytics and digital ads notably, a survey revealed that over a third of travelers (35%) seek travel ideas from social media, with younger individuals, specifically half of those under 40 (50%), relying heavily on social platforms for trip inspiration. (World Tourism Organization 2023)

In the dynamic landscape of travel, artificial intelligence (AI) stands as a beacon of transformation, reshaping our journey from the moment we decide to explore the world. In building an AI ecosystem for travellers, we have doubled conversion rates, shaped user loyalty and fostered global communities. Beyond streamlined planning, AI innovation redefines the very essence of travel, promising a future marked by efficiency, personalization and global enrichment. AI helps tourists plan trips in Uzbekistan, get customized recommendations, and book flights. The AI-powered advanced tools help airlines, travel agencies, and hotels update their service costs in real-time. The AI-powered tools offer enough data for businesses to foster the traveling experience significantly.

Relevance of the study is effectiveness of artificial intelligence in developing progress of tourism sectors and impact of digital marketing tools in tourism industry of Uzbekistan. Uzbekistan is lacking in modern technologies when international tourist arrives. From getting information about tourism products to going back home country in each process we can see digital marketing and artificial intelligence technologies which fully not matching customer demand.

There is an increasing focus on AI education in Uzbekistan, reflected by the rise in educational courses, public conferences, and community activities centered on AI technology. Main idea to develop tourism industry widely by using digital marketing tools to make people easy to access Uzbekistan tourism products worldwide. In the same time in tourism sector of Uzbekistan there should be well developed artificial intelligence technologies where tourist easily can get information or to reach Uzbekistan tourism products in optional way also make tourism services in high tech standards in touristic places for saving visitors energy and pocket money. Unfortunately in Uzbekistan all entertainments do not cover well artificial intelligence program and services due to lack modern apps and AI technologies. Further studies will effect to provide all possible hi-tech AI technologies in tourism sectors

So that, this first approach raises the following/emerging questions:

- What is the most common impact of AI on the tourism sector?
- What are the AI benefits, challenges, methodologies, and functionalities for tourism?
- What kind of digital marketing tools most effect development on it?

- What are the main aspects of development tourism and how we can establish it in Uzbekistan considering current potentials?
- How is situation in Uzbekistan using digital marketing tools for development of Tourism? How we can adopt international practice for Uzbekistan?
- How to optimize digital marketing tools in Uzbekistan tourism management system and way of implementation on it?
- How Artificial Intelligence is transforming the travel and tourism industry?
- How can AI be used in the tourism industry?
- How can digital marketing are used in Uzbekistan tourism sectors?
- What are challenges of AI in the tourism industry?
- Does Uzbekistan create its own AI technologies and create digital marketing tools

As far as the aforementioned statements are concerned and with the aim of given answer to these questions, at this research thesis it is planned to study and diagnose the following issues:

- To study digital marketing and AI technologies in the field of tourism.
- To analyse artificial intelligence in Uzbekistan and to use it in tourism sectors widely
- Identifying and classify types of bookings and payments via AI
- Creation of responsible tourist features for each segment of visitors;
- To make observation like quiz in order to evaluate problems and advantages of Tourism sector.
- Studying and exploring methods of AI to promote tourism products worldwide
- Exploring and making suggestion for increasing tourist products of Uzbekistan by applying digital marketing tools
- To analyse the practical application of promotion technologies in the field of Tourism.

In this section the literature review of previous scholars is determined and summarized in order to critically study the core research concepts and arguments. The study is depicted to be the core element of the study. The chapter is helpful in estimating the core concepts of the research specifically with regard to the past literature and evidences. The literature being developed and assessed by previous scholars are determining the core concepts of the study. The past reviews and evidences are used for decisive the generalizing the research findings and results.

The industry of tourism was not considered as a significant factor contributing to the economic development of Uzbekistan. Nevertheless, considering the geographic position of the country and resources of tourism, it was seen that the



industry could be important contributing component towards economic development (Golisheva, 2012). Past studies on the Uzbekistan tourism are scarce however the review of most relevant studies is performed in the current section. Kayumovich (2020) explored the potential for facilitating the Uzbekistan tourism by increasing the adoption of digital transformation. Sabirov and Alimova (2019) assessed the potential for improving developmental efforts in Uzbekistan's tourist industry focusing on antecedents such as infrastructure, generating business opportunities, enhancing existing tourist services and diversifying tourist arrangements.

AI has developed over decades and is now present in various industries. In the early 1950s, John Von Neumann and Alan Turing transferred machines to binary logic, which built the scientific and technical foundation of AI (Turing, 2009). John McCarthy coined the term "artificial intelligence" at an academic conference in 1956 (McCorduck, 2004) initially defining it as the automation of intelligent behavior with a focus on math and logic problems (McCarthy, 2007).

AI or machine intelligence is an area of computer science whereby machines are programmed with the ability to perform intelligent tasks that are usually undertaken by humans ([Tsang et al., 2020](#)). Computers and machines use AI techniques to understand, analyze, and learn from data through specifically designed algorithms ([Sasubilli et al., 2020](#)). For example, with today's AI technologies, cameras can automatically recognize faces, computers can translate from one language to another, it is easy to search and find products in e-commerce, computers can assist doctors in making decisions and so on ([Sasubilli et al., 2020](#)).

Artificial intelligence systems have numerous purposes in tourism industry. From the customer's point of view, AI supports users to discover more efficient and more appropriate information, gives them superior flexibility, improves their decision-making, and, eventually, gives a better tourism experience (Gretzel, 2011; Tussyadiah & Miller, 2019). AI can be used in almost every aspect of administration (Buhalis et al., 2019), particularly in marketing, advertising and efficiency (Tussyadiah & Miller, 2019). Artificial intelligence is also supposed to promote more sustainable travel (Tussyadiah & Miller, 2019), by motivating customers to have a more social and environmental viewpoint. In general, AI systems in the tourism industry can be separate systems or rooted in current applications and systems. These systems contain recommender systems, personalization systems and techniques, casual systems (chatbots and voice assistants), estimating tools, independent agents, language translation apps, and smart tourism destinations.

Marketing is the customer-oriented management operation that organizes and manipulates all those commercial activities involved, in evaluating and

converting consumers' purchasing power into effective demand, accomplishing in parallel customer-satisfaction. According to Kotler [5], marketing is defined as "A social process by which individuals and groups obtain what they need and want through creating, offering and freely exchanging products and services of value with others." According to Eun Young Kim [6], there are four dimensions of digital marketing: Cost, Incentive Programs, Site Design and Interactive

1955: John McCarthy held a workshop at Dartmouth on "artificial intelligence" which is the first use of the word, and how it came into popular usage.(5) McCarthy coined the term "AI" in 1955 in connection with a proposed summer workshop at Dartmouth College, which many of the world's leading thinkers in computing attended. As part of refining his ideas about AI, he also invented the programming language lisp in 1958.

Uzbekistan, like the United States and China, is closely monitoring the development of AI. In recent years, there has been a significant surge in interest in AI, resulting in various communities, educational courses, and conferences to raise public awareness and interest in this area. The state is actively supporting AI development by introducing the MyID biometric identification system, which remotely identifies customers of various companies.

Artificial intelligence (AI) performs a progressively imperative role in management sciences and operational research. Intelligence is generally described as having the cognitive capacity to absorb information and use it to unravel complex dilemmas. According to researchers, intelligent machines will soon overtake human competencies. Intelligent machines and software that can think, assimilate, accumulate information, interact, control, and discern objects are known as artificial intelligence. In 1956, John McCarthy came up with the term to define a new computer science field that aims to make machines act like human beings.

This research will depend on qualitative and quantitative research method; the researcher will gather secondary data from Uzbekistan tourism development organizations, artificial intelligence centers in India and Spain, Tourism development committee of Uzbekistan, Digital marketing tools and knowledge through researches, books, and articles. As well as the researcher will collect primary data by conducting personal interviews with tourists, tourism experts, operators, scholars, associations, researchers, conferences, workshop, and distribute questionnaire to foreign tourist. The researcher will use SPSS and other statistical programs in data analysis.

In conclusion, digital marketing plays a crucial role in boosting the travel and tourism industry. With the right marketing strategy, businesses can not only reach

a wider audience but also stand out from competitors. Whether it's about promoting the business or delivering a better experience to customers, AI has changed the industry in multiple ways.

AI helps tour operators with tasks like writing responses to customer queries & creating content to foster search engine ranking. AI makes the business smarter & capable of serving the clients by fulfilling their expectations.

Further studies will show results of research. Uzbekistan tourism industry should follow with modern artificial intelligence technologies and programs to attract more tourists towards to Uzbekistan. There is main role of digital marketing; it should be used by local businesses and government tourism organization to create high potential tourism sectors and tourism products in Uzbekistan.

Table-1

**Time scale**

Y	Months	Goals	Activities
1	1-2	Writing the introduction and structure (this will change as the research develops) approx. 8000 words.	Reading each week and analyzing structure of project Write first chapter ( introduction) Continue learning about Artificial intelligence's theories and news Prepare visa and visit Spain
	3-4	Literature review and reading analyzing writing around as much literature as possible on the topic ( approx.. 12.000 words) Drafting ethics forms and planning interviews (identifying gaps in the literature/ data)	- Doing research related to main of project - Reading each week - Begin second chapter (literature w)
	5-6	Methodology and research questions on (approx.. 10-12,000words)	Reading each week and check once progress Learning news related topic Finish third chapter (methodology)
	7-8	Spending time in Uzbekistan for collecting based on topic	Apply documents for NEI and visit Creating questionnaire for survey
	9-10	Writing data analyzing section (approx.15000)	Starting analyzing research data results -Conduct interviews and surveys as appropriate by working local NGOs, meeting sm international offices
	11-12	Writing section one of the results	Write third chapter (section one of the ts and discussion) - Increased usage of digital

			<p>eting tools by customers</p> <ul style="list-style-type: none"> <li>- implementing artificial intelligence on tourism sectors</li> <li>- New innovation in Tourism industry of Uzbekistan by applying AI and</li> </ul>
2	1-2	Writing section two of results and discussion (main body of the thesis) (approx..12,500)	Write fifth chapter (section two of results and discussion)
	3-4	Writing section three of results and discussion ( main body of the thesis) (approx.. 10 words)	Write fifth chapter (section three of results and discussion)
	5-6	Conclusion (approx.. 10.000 words)	Write sixth chapter (conclusion)
	7-8	<ul style="list-style-type: none"> <li>-Proofreading</li> <li>- Final discussion with supervisor</li> <li>- Estimated total word account 75-80,000 words</li> <li>- Giving a design on project</li> <li>- Preparing for final presentation</li> </ul>	<ul style="list-style-type: none"> <li>-Revise and fill gaps</li> <li>- Follow with interviews</li> <li>-Ensure the thesis is up to date with all current literature and data</li> <li>-Rewriting the introduction with updated findings if needed</li> </ul>

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