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VA INSON KAPITALI**  
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**ЭКОНОМИКА ТРУДА И ЧЕЛОВЕЧЕСКИЙ  
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**LABOR ECONOMICS AND HUMAN CAPITAL**

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## MEHNAT IQTISODIYOTI VA INSON KAPITALI

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### CHANGE OF PROFESSIONS AND SKILLS IN THE FIELD OF TOURISM UNDER THE INFLUENCE OF ARTIFICIAL INTELLIGENCE

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**Abstract.** Last few years, Uzbekistan has been paying great attention to the development of the tourism sector in the conditions of digital economy and AI. Because, today and in the near future, the effectiveness of the tourism sector will depend mainly on digital technologies and artificial intelligence. This study combines a set of approaches, including literature review, analysis of related data as well as comparison with others countries to show the impact of AI on the job market and required skills on tourism. The central point in this research paper is to look through how Artificial Intelligence is reshaping tourism in terms of the skill requirements, job hierarchy and the overall structure alongside with the current position of Uzbekistan in this sector. Standardization, Metrology, and Certification Agency of Uzbekistan (documented in the Ministry of Justice's decree, account number 15, on May 22, 2021) are changing on and off site work requirements and essential skills, reflecting these interventions done by AI. Moreover, this research combines necessary data on the employment of workforce as well as occupational distribution trends. Another significance in this paper is the availability of real-time observation of labor demands and the changing face of skill sets taken from the leading job platforms. This broad and in-depth approach can definitely help professionals who are working or about to work in this sphere a clear picture of how AI is affecting all the way from the bottom of the job hierarchy to the top.

**Keywords:** Occupations, Work requirements, impact of AI to qualifications, job platforms.

### KASB VA MALAKALARNING SUN'IY INTELLEKT TA'SIRIDA TURIZM SOHASIDA O'ZGARISHI

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**Annotatsiya.** So‘nggi yillarda O‘zbekistonda raqamli iqtisodiyot va sun‘iy intellekt sharoitida turizm sohasini rivojlantirishga katta e‘tibor qaratilmoqda. Chunki bugungi va yaqin kelajakda turizm sohasining samaradorligi asosan raqamli texnologiyalar va sun‘iy intellektga bog‘liq bo‘ladi. Ushbu tadqiqot turli yondashuvlarni, jumladan, ilmiy adabiyotlarni tahlil qilish, tegishli ma‘lumotlarni o‘rganish va boshqa mamlakatlar bilan taqqoslash orqali sun‘iy intellektning turizm sohasida ish bozori va zarur ko‘nikmalarga ko‘rsatayotgan ta‘sirini ko‘rsatib beradi. Mazkur tadqiqotning markaziy nuqtasi sun‘iy intellektning turizmni malaka talablariga, ish o‘rinlarining ierarxiyasi va umumiy tuzilishiga qanday o‘zgartirishlar kiritayotgani, shuningdek, O‘zbekistonning ushbu sohadagi hozirgi holatini tahlil qilishdir.

O‘zbekiston Standartlashtirish, metrologiya va sertifikatlashtirish agentligi (Adliya vazirligining 2021-yil 22-maydagi 15-son qarorida hujjatlashtirilgan) sun‘iy intellekt orqali ish joylarida va ish sharoitlarida zarur bo‘lgan malakalarni qayta shakllantirish jarayonlarini aks ettiradi. Tadqiqot ishchi kuchining bandligi va kasbiy taqsimot tendensiyalari bo‘yicha zarur ma‘lumotlarni o‘z ichiga oladi. Shuningdek, ushbu tadqiqotning yana bir ahamiyatli jihati — ishchi kuchiga bo‘lgan talablar va ko‘nikmalardagi o‘zgarishlarni yetakchi ishga qabul qilish platformalaridan olingan real vaqtdagi ma‘lumotlar asosida kuzatish imkoniyatidir. Ushbu keng va chuqur yondashuv ushbu sohada ishlayotgan yoki ishlashni rejalashtirayotgan mutaxassislariga sun‘iy intellektning ish o‘rinlarining quyi pog‘onasidan yuqori darajalarigacha bo‘lgan barcha jarayonlarga qanday ta‘sir ko‘rsatayotgani haqida aniq tasavvur berishi mumkin.

**Kalit so‘zlar:** Kasblar, ish talablari, sun‘iy intellektning malakalarga ta‘siri, ish platformalari.

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**ИЗМЕНЕНИЕ ПРОФЕССИЙ И НАВЫКОВ В СФЕРЕ ТУРИЗМА ПОД  
ВЛИЯНИЕМ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА**

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**Аннотация.** В последние несколько лет Узбекистан уделяет большое внимание развитию туристического сектора в условиях цифровой экономики и ИИ. Поскольку сегодня и в ближайшем будущем эффективность туристического сектора будет зависеть в основном от цифровых технологий и искусственного интеллекта. Это исследование объединяет ряд подходов, включая обзор литературы, анализ связанных данных, а также сравнение с другими странами, чтобы показать влияние ИИ на рынок труда и требуемые навыки в туризме. Центральным моментом в этой исследовательской работе является рассмотрение того, как искусственный интеллект меняет туризм с точки зрения требований к навыкам, иерархии должностей и общей структуры, а также текущее положение Узбекистана в этом секторе. Агентство по стандартизации, метрологии и сертификации Узбекистана (задокументировано в постановлении Министерства юстиции, счет № 15, от 22 мая 2021 года) меняет



требования к работе на рабочем месте и за его пределами, а также к основным навыкам, отражая эти вмешательства, осуществляемые ИИ. Более того, это исследование объединяет необходимые данные о занятости рабочей силы, а также тенденции распределения профессий. Еще одним важным моментом в этой статье является наличие наблюдения в режиме реального времени за требованиями к рабочей силе и меняющимся лицом наборов навыков, взятых с ведущих платформ вакансий. Этот широкий и глубокий подход определенно может помочь профессионалам, которые работают или собираются работать в этой сфере, получить четкую картину того, как ИИ влияет на все от нижней части иерархии должностей до самой вершины.

**Ключевые слова:** профессии, требования к работе, влияние ИИ на квалификации, платформы вакансий.

### **Introduction**

The last few years, artificial intelligence, digital economy and green economy have had a profound impact on economic development. From year to year, jobs, positions and qualification requirements for them are changing and being updated in the labor market. Especially in the field of tourism, the rapid use and introduction of digital technologies and artificial intelligence is leading to changes in professions and skills in this field. The contribution of the tourism sector to the economy of Uzbekistan is tremendous, and according to estimates, it will make up 8-10 percent of the country's gross domestic product (GDP) by 2025. This sector not only creates many jobs, but also increases the demand in the labor market. Tourism reforms also include the introduction of artificial intelligence and digital technologies that streamline operations by automating services and better identifying customer needs. As a result, there is a growing demand for digital literacy and AI technology skills among tourism workers. About 300,000 people are employed in the labor market of Uzbekistan, and this figure is increasing year by year. This requires changes to the national qualifications framework and occupational standards.

The state standard of the classification of main positions and occupations of employees (on the approval of the state standard of the Republic of Uzbekistan) database provides a variety of information related to the requirements of about 12 000 occupations. Positions in the labor market of Uzbekistan and their requirements have not been revised since 2020. Uzbekistan XALIKK-2020 (Classification of the main positions of servants and occupations of workers) and popular job search sites in the labor market are the object of research and due to the wide range of positions and fields, only positions and skills in the field of tourism are fully analyzed. Disadvantages of the study include the large number of sectors and positions, the lack of direct access to information on problems with industry experts and state bodies that regulate the labor market. Uzbekistan's tourism sector, alongside the qualifications required for each role in accordance with the National Qualifications Framework (NQF). Key columns in

the XALIKK-2020 include job titles, occupations, codes based on the MXSK-08 international classification, employee categories, NQF qualification levels, and the corresponding educational requirements. XALIKK-2020 serves as a valuable resource for monitoring the qualification requirements for various positions in the tourism sector. It offers potential workers and those seeking to enter the field a clear understanding of the educational and professional standards expected for each role. In addition, the table shows the adaptation of the tourism sector of Uzbekistan to international classification standards, ensuring consistency and compatibility in defining roles and qualifications in the global context.

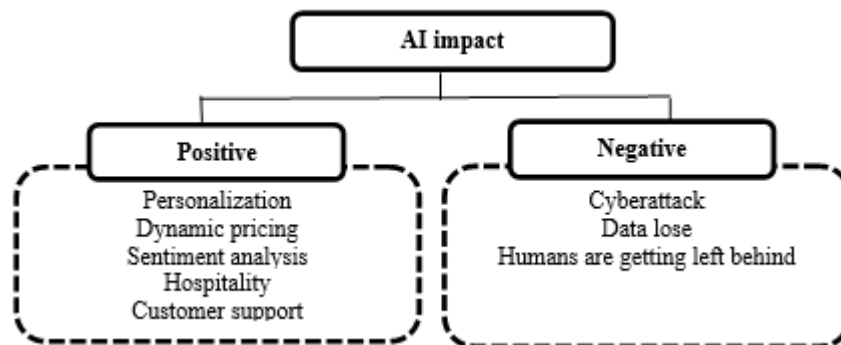
### **Data and Methodology**

The main points of focus on this research are data collection, analysis of statistical and literature data, comparative analysis, meta and cross-section analysis, evaluation of collected data along with the conclusion and recommendation. In order to get data regarding the impact of AI on the tourism sector, scientific research papers and articles have been deeply looked through and analyzed. The required data for this research have been collected by collaborating with the State Statistics Committee of the Republic of Uzbekistan and authentic organizations in the tourism sector. Cross-occupational skill requirements have been compared to fully understand the effects of AI. The main purpose of collecting this data and analyzing them with in depth understanding is to find out the impact of AI in tourism industry and draw conclusions and recommendations with scientific grounds.

### **Literature review**

It is an undeniable fact that the introduction of AI in tourism sector has turned out to have both regional and global significance. The AI power is reshaping, creating or developing many industries, and tourism is not an exception. The papers analyzed mainly focus on how AI is shaping the skills requirements differently by keeping Uzbekistan’s tourism sector in the center. On a global scale, improving efficiency, customer experience and decision making processes are the reasons why tourism industry has embraced AI. The research shows that nearly every travel company is now utilizing at least one AI-powered tool, and projections indicate that the industry could reach a market value of \$1.2 billion by 2026. However, the benefits and drawbacks of AI stem from its reliance on storing programs, platforms, devices, and data in public cloud environments, which presents both opportunities for innovation and concerns regarding data security and management.

Darya Efimova explained about this in the article "Artificial Intelligence in Tourism" of the web page <https://startups.epam.com/>. AI technologies, such as chatbots, personalized recommendations, and big data analytics, are enabling businesses to automate processes and enhance operational efficiency.



**Fig. 1. The pros and cons of AI impact on tourism sector**

In the given graph, the positive and negative aspects of AI in tourism, conducted by Darya Efimova, can be observed (see fig.1). Buhalis and Leung (2018) discuss specific impacts of AI in the personalization of guest experiences, looking through seasonal customer preferences and behavioral patterns. That's said, the concerns towards data storing, security and management have also significantly increased as majority of the data, platforms and programs in tourism sector are kept in cloud storages (Brynjolfsson & McAfee, 2014). Additionally, the need for workforce adaptation to different job positions in tourism is inevitable as the sector is reshaping due to AI integration (World Economic Forum, 2023). The labor market is experiencing a big jump towards redevelopment with the highlighted AI role. Tychieva (2022) emphasized the significance of acquiring digital skills to work in tourism sector, stating the fact that travel agents and tour guides have a reliance on AI technologies when it comes to automated booking systems, chatbots and virtual tour experiences. <sup>1</sup>Furthermore, Karimov (2023) said that we should overlook the importance of AI in Tourism Hospitality sector. <sup>2</sup>Hotels across many tourism focused cities of Uzbekistan are focusing on the automation of majority of the tasks using AI in meeting guests in the first place.

As a result, mid- and senior-level management positions now require technical expertise, creating a demand for upskilled employees, which correlates with wage increases for these roles. As AI technologies continue to be integrated into Uzbekistan's tourism sector, there is a clear shift in the skills demanded by employers. This is echoed in Ismoilova (2024), who noted that Uzbek tourism professionals now require a blend of customer service skills and AI-related technical knowledge, such as familiarity with data analysis and digital marketing platforms<sup>3</sup>. In the context of AI's role in automating customer interactions, Rahmanova (2023) highlighted that the workforce is being required to adapt,

<sup>1</sup> Tychieva, S. (2022). Digital Transformation in Uzbekistan's Tourism Sector. *Central Asia Tourism Review*, 3(2), 45–60.

<sup>2</sup> Karimov, O. (2023). AI and Its Impact on Hospitality Management in Uzbekistan. *Uzbek Tourism Journal*, 4(1), 35–49.

<sup>3</sup> Ismoilova, L. AI Proficiency in Uzbekistan's Tourism Workforce. *Economics of Emerging Markets*, 7(3), 150–165.

with growing emphasis on digital literacy, AI system management, and data interpretation. These changing skill requirements are linked to shifts in wage structures, where technical proficiency in AI-related tools correlates directly with wage increases.<sup>4</sup> Despite the benefits, the integration of AI into Uzbekistan's tourism sector presents several challenges. Tuychieva (2022) noted that the pace of digital transformation in Uzbekistan lags behind that of more developed nations, making it difficult for workers to acquire the necessary AI skills quickly. Additionally, Akbarov and Khakimova (2023) pointed out that the lack of widespread AI-related training programs in the country may result in a skills gap, where certain workers are left behind, leading to wage polarization within the industry. In conclusion the main problem in research is the lack of information about how to improve sectors such as tourism.

### Analysis and results

#### AI Impact on occupations.

The analysis conducted in this page aims to investigate the impact of artificial intelligence (AI) on skills, qualifications within the tourism sector.

**Table 1**

#### High AI Impact to the job occupations<sup>5</sup>

Occupation	Primary Responsibilities	Impact of AI
<b>Tourism Chief Inspector</b>	Oversight and monitoring of tourism activities and services.	AI optimizes monitoring systems, enabling better tracking of tourist flows and data analysis for regulatory purposes.
<b>Tour Operator</b>	Organizing and planning travel services, coordinating logistics.	AI enhances personalization of tour packages, predictive analysis of customer preferences, and data-driven decision-making.
<b>MICE Tourism Manager</b>	Planning and organizing MICE (Meetings, Incentives, Conferences, Exhibitions) events.	AI assists in logistical optimization, automation of event management processes, and participant tracking systems.
<b>Event Manager</b>	Planning, organizing, and managing events and meetings.	AI enables better management of participants, resource allocation, and forecasting for future events.
<b>Tourism Marketing Specialist</b>	Developing and implementing marketing strategies for tourism services.	AI tools analyze consumer behavior, predict market trends, and support data-driven advertising campaigns.
<b>Tourism Logistics Specialist</b>	Organizing and managing transportation and travel services.	AI supports route optimization, predictive analysis for transport logistics, and efficient management of tourist traffic.
<b>Tourism Linguistics Specialist</b>	Providing multilingual services for tourists and customers.	AI offers automatic translation services, reducing language barriers and enabling seamless communication across multiple languages.
<b>Passenger Train Control Officer</b>	Ensuring the safety and compliance of passenger trains.	AI automates safety control systems and improves passenger monitoring and compliance efficiency.

Using a combination of statistical data from Uzbekistan’s State Statistics Committee and professional organizations, as well as insights from existing

<sup>4</sup> Rahmanova, N. (2023). The Skills Gap in AI Integration within Uzbekistan’s Tourism. Uzbekistan Technology Review, 5(1), 98–115.

<sup>5</sup> Created by the author

research and reports, the study explores how AI technologies are transforming the sector’s workforce.

Professions related to the field of tourism were separated from XALIKK-2020. The classification highlights how AI technologies might influence job functions, decision-making processes, and overall job automation in the tourism industry. The impact of AI in occupations are given below, being separated in three degrees (*high, moderate, low*) (see table 1,2,3).

These roles are characterized by the high potential for automation and optimization through AI tools and technologies, particularly in the areas of logistics, event management, and customer service.

**Table 2**

**Moderate AI Impact to the job occupations<sup>6</sup>**

<b>Occupation</b>	<b>Primary Responsibilities</b>	<b>Impact of AI</b>
<b>Director of a Tourism Organization</b>	Managing a tourism organization, making financial and administrative decisions.	AI enhances data analytics for better decision-making, forecasting customer demand, and automating business processes.
<b>Sanatorium Director</b>	Managing sanatorium services and ensuring the quality of service.	AI can improve healthcare services through data analytics, customer needs analysis, and service automation.
<b>Eco-and Agrotourism Manager</b>	Planning and implementing eco-tourism and agro-tourism activities.	AI helps predict environmental risks and optimize eco-friendly tourist activities.
<b>Shipchandler</b>	Providing supply services to ships, organizing logistics.	AI improves automation in logistics and management of supply chains.
<b>Service Manager</b>	Organizing and managing customer service operations.	AI enables service personalization and helps analyze customer needs for tailored experiences.
<b>MICE Tourism Specialist</b>	Planning and organizing MICE events and managing participants.	AI assists in optimizing event logistics and resource allocation for efficient management.
<b>Tourism Industry Economics Specialist</b>	Analyzing the economic impact of tourism and developing growth strategies.	AI provides advanced tools for analyzing economic trends, improving competitiveness in the tourism market.

These roles experience moderate AI integration, primarily in decision-making, resource optimization, and analytics. AI complements, rather than replaces, human expertise.

These occupations rely heavily on human interaction, communication, and the personal touch in customer service. AI is used primarily to enhance operational efficiency, but full automation is unlikely.

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<sup>6</sup> Created by the author



**Table 3**

**Low AI Impact to the job occupations<sup>7</sup>**

<b>Occupation</b>	<b>Primary Responsibilities</b>	<b>Impact of AI</b>
<b>Travel Agent</b>	Offering travel services and making bookings for customers.	AI can assist with automating online services, but personal client interactions remain key.
<b>Information Service Officer</b>	Providing information and assistance to tourists about services and destinations.	AI enables automated customer support systems, but human presence remains important for complex inquiries.
<b>Tour Guide</b>	Leading tourists and providing cultural and historical information.	AI technologies such as audio guides and interactive maps support, but human-guided tours continue to dominate.
<b>Hotel Management Specialist</b>	Managing and organizing hotel services.	AI automates hotel management systems, enhancing service delivery and efficiency.
<b>Passenger Receptionist</b>	Welcoming and assisting passengers with accommodation and registration.	AI improves registration processes and information delivery, though human hospitality remains critical.
<b>Diplomatic Corps Service Officer</b>	Managing services for diplomats, including protocol and hospitality.	AI optimizes protocol and security services, but human oversight remains crucial in diplomatic relations.

**AI impact on job platforms in Uzbekistan**

AI is increasingly impacting job platforms in Uzbekistan’s tourism sector, creating shifts in job types, skill requirements, and recruitment methods. Key ways AI is influencing tourism job platforms in Uzbekistan are enhanced job matching algorithms, rise in demand for AI-related skills, shift toward automation in recruitment, personalized career recommendations and data-driven market insights for job seekers. AI integration on Uzbekistan’s job platforms is reshaping job searching, skill demand, and recruitment efficiency. In the study of the topic, AI technologies will simplify some professions or create new ones by automating service processes, as a result of which it is necessary to take into account the need for skill requirements. The most popular job search websites in Uzbekistan are hh.uz (HeadHunter Uzbekistan), Rabota.uz, E'lon.uz, Jobs.uz, Zarplata.uz.

Analysis of statistical data has revealed changes in AI-related skills, job vacancies, salaries, and qualification requirements. Over recent years, the number of job vacancies requiring AI-related skills has grown substantially. By 2023, vacancies demanding knowledge in AI, machine learning, programming, and big data technologies accounted for approximately 15-20% of the overall job market. Many vacancies in sectors such as tourism, IT, and marketing have started requiring skills related to AI technologies. In the tourism sector, new skills are necessary to automate services and more accurately identify customer needs through AI. The demand for employees with AI skills is high, and their salaries are generally higher than those of other professionals. It has been found that monthly salaries in AI-related vacancies can be 30-40% higher in tourism.

<sup>7</sup> Created by the author

That’s why most people who want to work in tourism are trying to enrich their skill sets by addressing AI. The job platforms observed an increase in AI and automation-related job opportunities between 2022 and 2023. For instance, in the tourism and service sectors, the number of positions focused on optimizing work processes with AI technologies has been steadily increasing. In Uzbekistan, AI technologies are significantly altering job opportunities and skill requirements. In Tashkent, IT-related vacancies have been actively growing. The implementation of AI technologies has led to increased demand for technical specialists and has driven up salaries in this field. For example, in recent months, the average salary for certain professions has exceeded 5 million UZS based on study results conducted by research team. These changes are due to the shortage of skilled workers, with technical knowledge and skills in high demand.

According to recent analyses of the Uzbek job market, especially from platforms like hh.uz, the most in-demand skills include a mix of technical, social, and cognitive competencies. Here's a table summarizing the most in-demand skills based on job vacancies data from job platforms in Uzbekistan:

**Table 4**

**The Most In-Demand Skills Based on Job Vacancies in Job Platforms in Uzbekistan (2023-2024)**

Skill Category	Percentage of Vacancies	Description
<b>Interpersonal Skills</b>	27%	Encompasses teamwork, effective communication, conflict resolution, negotiation, and public speaking.
<b>Independent Leadership</b>	18.3%	Reflects roles emphasizing decision-making, project management, and often requiring English proficiency.
<b>Cognitive Skills</b>	28.2%	Covers skills such as problem-solving, critical thinking, creativity, innovation, and leadership traits.
<b>Digital Skills</b>	26.5%	Ranges from basic digital literacy to advanced IT skills, including data analytics, coding, and software proficiency.

This breakdown emphasizes the need for soft skills, adaptability, and technical expertise across various roles in Uzbekistan's evolving job market.

This table reflects the current trends in the Uzbek job market, particularly in the professional and administrative sectors. The data highlights the growing importance of soft skills alongside technical abilities, especially in a globally competitive job environment. Here's an expanded version of the table summarizing the AI impact and analysis on job portals based on recruitment trends, skill demands, and AI-related job categories. This breakdown demonstrates how AI technologies are transforming the recruitment landscape across different job platforms:



**Table 5**

**How AI technologies are transforming the recruitment landscape across different job platforms**

Job Portal	AI Impact	Key Findings	AI-Related Trends
<b>hh.uz</b>	Increased demand for automation and data analysis roles	AI is driving the need for skills in data analytics, machine learning, and automation in multiple sectors.	High demand for AI-related jobs, particularly in tourism, finance, IT, and marketing sectors.
<b>Rabota.uz</b>	AI influencing global and local recruitment trends	Advanced recruitment algorithms match job requirements with candidates' skills, improving search efficiency.	Emphasis on roles in AI, robotics, and data science, with tech industry job postings on the rise.
<b>E'lon.uz</b>	Emerging demand for tech-related skills	Classified listings are gradually incorporating AI-related job roles, especially in service sectors.	Growing use of AI for enhanced searchability and filtering for customer-focused roles in tourism and retail.
<b>Job.uz</b>	Shift towards digital skills in demand	AI-driven tools for skills matching aid in connecting skilled professionals with niche markets.	Rising demand for roles requiring AI knowledge in professional sectors like consulting and management.
<b>Zarplata.uz</b>	Increased focus on wage transparency for AI-related jobs	Salaries for AI-related roles are highlighted, showing a trend in competitive wages.	Emphasis on data and AI in wage transparency for jobs in sectors like IT, engineering, and finance.

This analysis highlights how AI integration is reshaping recruitment on these platforms, leading to new job categories, evolving skill requirements, and an increased focus on roles with AI expertise. AI’s integration across these job portals has transformed the hiring landscape. Platforms like hh.uz and LinkedIn are leading in AI-driven job matching, significantly reducing the manual effort for both job seekers and employers. AI is primarily being used to:

- Automate resume filtering and match applicants with job requirements.
- Analyze job trends and provide real-time labor market insights.
- Optimize recruitment through predictive analytics and skills gap identification.

Here is an analysis of the most popular job sites in Uzbekistan, represented in a table with available statistics (Table 6).

hh.uz is Uzbekistan's leading job platform, drawing over 50,000 daily visitors and hosting more than 15,000 active listings. It covers a wide range of sectors, making it a top choice for job seekers and employers alike. Rabota.uz follows with approximately 35,000 daily users, offering diverse job categories and intuitive navigation.

**Table 6**

**The most popular tourism-related job sites in Uzbekistan<sup>8</sup>**

Job Portal	Industry Coverage	Daily Visitors	Job Listings	Unique Features
<b>hh.uz</b>	Tourism, Finance, IT, Marketing, Construction, Healthcare	50,000+	15,000+	Advanced filtering options, CV building, AI-driven matching
<b>Rabota.uz</b>	General (all sectors)	35,000+	10,000+	Easy navigation, wide variety of sectors
<b>E'lon.uz</b>	Classifieds and Job Listings	20,000+	7,000+	Combines job postings with other services (real estate, items)
<b>Jobs.uz</b>	Professional and high-skilled jobs	10,000+	3,000+	Focus on top company listings, competitive salary roles
<b>Zarplata.uz</b>	General with salary focus	5,000+	2,000+	Job postings with detailed salary information

Specialized sites like Jobs.uz and Zarplata.uz focus on roles requiring higher skills, appealing to candidates in technical and professional fields. Together, these platforms highlight the growing demand for expertise across various industries in Uzbekistan. The share of tourism-related job seekers on Uzbekistan’s job platforms reflects a growing interest in the tourism industry, largely spurred by government efforts to enhance the sector and accommodate an increasing number of tourists. Here’s a summary analysis based on recent data:

**Table 7**

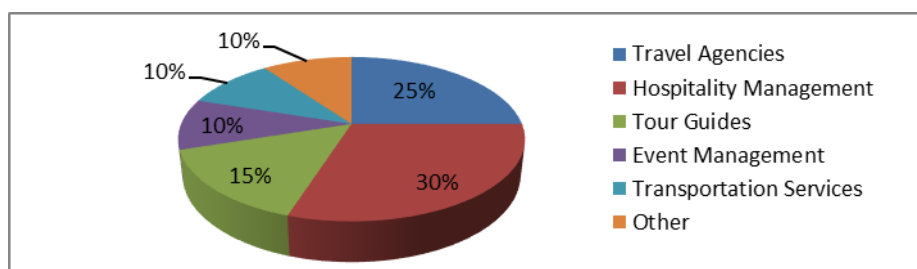
**The proportion of job vacancies and job seekers in job portals of Uzbekistan**

Job Portal	Tourism Job Listings	Tourism Job Seekers Proportion	Notes on AI Impact
<b>hh.uz</b>	15-20% of all listings	~18%	AI-driven algorithms enhance job matching, with specific filters for tourism, customer service, and hospitality roles.
<b>Rabota.uz</b>	10-15%	~12%	Limited AI features; mostly focuses on navigation and search efficiency.
<b>E'lon.uz</b>	~8%	~7%	Basic search with classified features; no specific AI-driven support for tourism job listings.
<b>Jobs.uz</b>	~10%	~9%	Emphasis on professional roles; AI filtering options for high-skilled positions.
<b>Zarplata.uz</b>	~5%	~5%	Provides salary data but lacks advanced AI functionalities for role recommendations.

<sup>8</sup> Created by the author

This trend reflects how AI is reshaping workforce requirements across diverse industries, and is crucial for applicants to be aware of the growing demand for skills related to AI and data science across these sectors.

The study of occupations in the tourism sector reveals that the most prominent roles on the hh.uz job platform include positions like travel agent, hospitality management, tour guides, event management and transportation services. These roles hold a significant proportion of tourism-related job postings, reflecting the sector's focus on customer service, planning, and organizational skills (Fig.2.).



**Fig. 2. An estimated breakdown of the proportion of tourism vacancies on hh.uz<sup>9</sup>**

This analysis shows how AI is gradually transforming the tourism industry in Uzbekistan, emphasizing the importance of adapting to technological advancements for job seekers in this field. For more detailed insights and statistics, you can explore relevant job market reports and analysis on platforms like hh.uz and industry studies related to tourism in Uzbekistan. Positions related to AI are typically associated with higher average monthly salaries. The demand for employees with AI skills is high, and their salaries are generally higher than those of other professionals. It has been found that monthly salaries in AI-related vacancies can be 30-40% higher.

### **Conclusion**

As in other sectors, the integration of artificial intelligence is increasing in the tourism sector. This is being done step by step in Uzbekistan. The implementation of artificial intelligence in various professions of the tourism sector is focused on the simplification and optimization of labor activities. In addition, in the labor economy, artificial intelligence is becoming popular in functions such as employment and job search. In conclusion, this will lead to a change in skill requirements in work. The labor market in Uzbekistan, especially platforms such as hh.uz, Rabota.uz and specialized sites such as Jobs.uz and Zarplata.uz, reflects a dynamic shift towards technology and artificial intelligence-related roles in tourism. The increasing demand for advanced skills

<sup>9</sup> Created by the author

in automation, data analysis and artificial intelligence is also having an impact on the tourism sector. One of the highlights is that hh.uz, leading the job portal landscape with more than 50,000 daily visitors on job platforms in Uzbekistan, plays a crucial role in highlighting these trends. Analysis of these platforms reveals a competitive environment where employers are looking for highly skilled professionals to keep pace with the emerging digital economy.

Trends show the importance of continuous training. Along these lines, AI continues to impact not only job availability, but also salary levels, especially for specialized technical roles. Monitoring these platforms can provide valuable insights into tourism industry trends and emerging career opportunities in the emerging workforce.

**Table 10**

**Offers key recommendations <sup>10</sup>**

<b>Recommendation</b>	<b>Description</b>
<b>Upskill Workforce</b>	Tourism organizations should invest in training programs to equip employees with skills for working with AI technologies, including digital literacy and data analytics.
<b>Enhance Cybersecurity Measures</b>	To address the risks of public cloud data storage, tourism companies must implement strong cybersecurity frameworks to protect customer information.
<b>Leverage AI for Personalization</b>	Tourism companies should utilize AI to personalize customer experiences by tailoring services and recommendations based on individual behavior and preferences.
<b>Monitor Market Trends</b>	Organizations should regularly monitor AI developments and market trends, collaborating with tech firms and conducting analysis to stay updated on new technologies.
<b>Encourage Ethical AI Use</b>	It is crucial for tourism companies to implement ethical practices in AI usage, ensuring transparency and accountability in customer interactions with AI systems.

These recommendations are essential for enhancing operational efficiency and improving customer satisfaction within the tourism sector. By prioritizing workforce training and ethical AI practices, companies can effectively adapt to the evolving demands of the market while ensuring the security and personalization of their services.

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