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for Tourism and Hospitality (JAAUTH)**journal homepage: <http://jaauth.journals.ekb.eg/>**Investigating the Ethical Considerations in the Use of Artificial Intelligence
in Tourism: Perceptions of Egyptian Tourists**

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ARTICLE INFO Abstract**Keywords:**

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The rapid innovation in the field of artificial intelligence has raised an urgent necessity to adhere to ethical principles governing its use. Such adherence could improve the effectiveness of AI tools and mitigate the risk of data misuse. Consequently, this study aims to investigate the perceptions towards ethical considerations in the application of AI within the tourism sector. To achieve this aim, the study employed the Spearman rank correlation coefficient to analyze the association between the perceptions of a sample of 387 Egyptian tourists regarding the five dimensions of the ethical considerations scale and trust in using AI applications. The findings revealed that perceived transparency, accountability, privacy, and fairness have a significant positive correlation with trust in AI tools among Egyptian tourists. Conversely, perceived human oversight did not show a significant correlation with trust in AI within the sample. Moreover, the multiple regression analysis indicated that usage frequency did not moderate the relationship between perceived ethical considerations and trust in these tools. Additionally, age can be considered a moderating variable in the association between trust and perceived ethical considerations. Based on these findings, the study proposes recommendations for AI application developers concerning the five ethical dimensions to enhance the performance of AI models within the tourism sector.

1. Introduction

Artificial intelligence presents a significant transformative force in the tourism and travel industry (OECD, 2024), as it has the capability to analyze tourists' preferences and consequently offer them the most suitable package of services (Zsarnoczky, 2017). Moreover, generative AI has significantly enhanced tourism services by offering personalized itineraries, instant responses, and virtual experiences based on machine learning and deep learning models that are trained on large databases (Ilieva *et al.*, 2024). As a result, AI tourism and travel applications intend to offer a seamless experience with tailored recommendations to suit individual preferences (Mishra *et al.*, 2024).

While various benefits can be gained from AI in tourism, there are also some risks and ethical concerns that may threaten the privacy of users (OECD, 2024; Seyfi, 2025). These

concerns arise from the fact that the AI mechanism of work mainly depends on analyzing massive data to generate and recommend personalized travel recommendations (Kumar *et al.*, 2025). In addition, data obtained from tourists is considered highly sensitive (Alyasiri *et al.*, 2024).

Furthermore, there are serious concerns regarding the possibility of AI providing false or inaccurate information and misusing users' private data (Seyfi, 2025). Therefore, privacy is a vital factor to ensure the effectiveness of AI in tourism services. On the other hand, trust and privacy are closely interrelated. If users trust the application, they will be more likely to share additional personal data (Adegbenro *et al.*, 2021).

The OECD (2024) clarified that the impacts, challenges, and risks of applying AI in tourism have become inevitable. Therefore, ethical considerations are a pivotal factor in establishing a trustworthy AI system that respects human rights (Dignum, 2018). There is also a crucial need to uphold the dimensions of privacy, validity of information, data ownership, accountability, bias, cultural sensitivity, and transparency, as these are regarded as key ethical considerations in implementing AI in tourism (World Tourism Organization, 2024). This underscores that human values must be the core of AI systems (Kieslich *et al.*, 2022).

Accordingly, the research problem can be outlined as follows: Despite the significant influence of AI applications in the tourism industry, which have facilitated the process of generating personalized preferences and recommendations for travelers, it remains unclear whether these innovative technologies are transparent, safe, accountable, fair, properly monitored, and trusted. Hence, ethical concerns must be integrated within the deployment of AI within the tourism industry.

Additionally, several studies have discussed and analyzed the application of AI technologies in different sectors of the tourism and hospitality industry. The study of Zsarnoczky (2017) highlighted the potential of AI tools in designing customized services. Huang *et al.* (2021) emphasized the importance of considering perceived risks associated with these applications. Also, Harahap (2023) indicated that AI applications can enhance travel experiences by offering personalized services.

Moreover, García-Madurga and Grilló-Méndez (2023) aimed to analyze the existing research that has investigated the application of AI in tourism and categorized the studies according to their main contributions in the fields of sustainability, forecasting, enhancing tourism experiences, and improving the efficiency of tourism operations. Besides, Elisa Sousa *et al.* (2024) conducted a theoretical review of publications discussing the concept of AI in the tourism industry. In Egypt, Shalan *et al.* (2024) investigated the role of AI in enhancing the quality of tourism services by exploring the perspectives of tourists.

In contrast, academic research that discussed the ethical concerns that affect tourists' perceptions of AI is considered rare. The study of Kieslich *et al.* (2022) investigated the perceptions of the public of the ethical challenges of AI. Also, Gündüz *et al.* (2023) discussed the ethical concerns and challenges in adopting AI from the perspective of professionals and employees in the tourism sector. Hwang *et al.* (2024) indicated that privacy and time risk have a significant impact on the attitudes of Korean travelers towards using AI, whereas Americans are only affected by psychological risks while using AI technologies. In 2024, the study of Shi *et al.* (2024) explored the intentions of tourists to use ChatGPT, and it examined the impact of perceived privacy, accuracy, and overreliance risks on their behaviors. Additionally, Alyasiri *et al.* (2024) indicated that ethical concerns must be integrated to enhance the reliability of AI applications in tourism.

To date, no academic studies have been conducted within the Egyptian context regarding the ethical considerations of AI usage in tourism. In this setting, this paper contributes to filling the research gap by investigating perceptions of Egyptian tourists regarding the ethical concerns associated with the use of AI. This contribution provides an overview of the considerations that can enhance the reliability of using AI applications in tourism and increase trust in the travel recommendations that they provide.

Based on the above, this paper aims to shed light on the ethical considerations that must be integrated into AI applications in the tourism industry. It also seeks to statistically explore the associations between Egyptian tourists' perceptions regarding these considerations and their trust in the outputs of AI applications. Furthermore, the paper aims to investigate the moderating effects of usage and age on the relationship between perceived ethical considerations and trust in AI. These objectives could be addressed using the Spearman rank correlation coefficient and the multiple regression analysis. Additionally, the study proposed seven research hypotheses that were developed based on the literature review.

2. Literature Review

2.1 AI Applications in the Tourism Industry

The concept of artificial intelligence was first introduced as smart machines designed and operated by humans, providing computer programs with inputs and appropriate algorithms to identify possible outputs and predictions (Tsaih and Hsu, 2018). It is pivotal to note that algorithms are sets of rules and procedures used in computer programming and AI applications to solve problems or achieve a mission (Jones, 2023).

Moreover, Machine learning and deep learning are considered the core components of AI in tourism applications (World Tourism Organization, 2024). Machine learning includes the ability of the algorithm to learn from the obtained data and make an appropriate decision or prediction based on this data, while deep learning means the ability to imitate human intelligence and resolve complex issues (Sharifani and Amini, 2023).

In recent years, many studies have discussed the applications of AI in the tourism industry and reviewed their importance of providing personalized recommendations, image recognition, facial recognition technologies, and demand flows forecasting (Knani *et al.*, 2022; Elisa Sousa *et al.*, 2024). Also, Huang *et al.* (2021) highlighted the competitiveness of applying AI applications in the industry, as these applications can enable natural language processing, through which smart software can imitate natural conversations between the AI apps and users. There are many AI applications that are deprived of this concept. For instance, chatbots, multilingual apps, and virtual assistants (World Tourism Organization, 2024; López Naranjo *et al.*, 2025).

Generative AI applications like Chatbots and ChatGPT made a revolution in the field of content creation and also personalized storytelling content (World Tourism Organization, 2024). For instance, Chatbots can be used in tourism information offices, tourist sites, etc., to offer accurate and immediate information to the visitors (Alyasiri *et al.*, 2024; Elisa Sousa *et al.*, 2024). Additionally, ChatGPT has great potential in enhancing tourism experiences (Harahap, 2023), as it can challenge language barriers for tourists in destinations by offering a real-time translation (Alyasiri *et al.*, 2024). AI tools can detect and extract data from social media activities, travel, and booking patterns (Kumar *et al.*, 2025). Besides, these tools can design tourism offerings that target different segments according to their profiles. Consequently, they can segment markets based on behavioral analysis mechanisms and design a market profile (OECD, 2024; López Naranjo *et al.*, 2025).

On the contrary, Edge AI technologies are directly integrated into local devices, such as autonomous tour guides and real-time translation apps. These kinds of technologies offer a more secure connection as the collected data is not published throughout the cloud. Also, Blockchain technology can be integrated with AI applications to provide a secure and transparent ecosystem for tourism services (Yadav *et al.*, 2021; World Tourism Organization, 2024).

Based on the above, it is clear that AI has numerous applications in the tourism industry, including generating personalized offerings, analyzing data, predicting tourist arrivals, overcoming language barriers, and creating market profiles. The effectiveness of these applications primarily depends on the availability of accurate and reliable data and user inputs. Hence, protecting users' data and emphasizing the ethical considerations involved in using AI tools is a critical factor in enhancing AI's role in tourism.

2.2 Ethical Considerations in the Use of AI in Tourism and Hypotheses Development

As mentioned earlier, the work mechanism of the AI mainly relies on data processing. Therefore, the amount and the quality of these data will highly influence the accuracy of the processing and analysis (OECD, 2024). Additionally, tourism and travel businesses that have integrated AI into their work tend to gather and analyze a massive amount of data about travelers more effectively (Köseoglu *et al.*, 2020). Also, the travel decision-making process depends on the quality of data. Thus, the better the quality of the data, the better the decision. However, tourists may be sensitive about sharing their personal data with AI (OECD, 2024), especially since there is a potential for data leakage (University of Queensland, 2021).

The potential of data misuse or leakage raises concerns about the ethics that should be followed by AI tools. Limited studies have reviewed these ethical considerations and the perceptions towards them. The study of Milwood *et al.* (2023) analyzed tourism academic research that discussed the ethical issues concerned with AI in the tourism industry, it also declared that ethical AI should obtain the following: fairness, accountability, autonomy, trust, data privacy, and artificial intimacy policy. Ferhataj and Memaj (2024) studied the perceptions of tourists in using AI technologies, and they referred to the ethical concerns that are related to data privacy, bias, and transparency while using these technologies.

In addition, Kwong *et al.* (2024) discussed that data privacy, user consent, transparency, and data discrimination are among the most influential ethical concerns arising from using AI. In 2024, Mishra *et al.* argued that content generated by AI applications should consider the ethical factor of cultural sensitivity, as individuals are different in their expectations, cultural backgrounds, and values. Ahmed (2025) referred to the crucial aspect of data privacy and algorithmic bias in integrating AI in tourism. Besides, López Naranjo *et al.* (2025) clarified that data privacy is the main driver in gaining trust in AI technologies. Also, Koo *et al.* (2025) discussed that AI tools should include the following concepts: transparency, accountability, confidentiality, and impartiality.

There are some factors that individuals should be aware of while dealing with AI: 1. There is an essential need for high-quality data to generate the most suitable decision or recommendation. 2. Individuals must know the value and potential risk of obtaining this data. 3. Users should know who has access to their data. 4. They also should know how their data is protected, where it is stored, and who is responsible for protecting it (University of Queensland, 2021). Therefore, Data protection is a crucial factor in adopting AI technologies in the tourism industry (Ferhataj and Memaj, 2024).

In 2018, seven key principles were legislated by the European Commission to define ethical AI (European Commission, 2019). It is important to note that the order of these principles is rearranged in the current study to align with its context. The principles are as follows:

1. **Transparency:** Users should know why they offer their data, how it is used, and where it is stored. Humans must be aware of the capabilities and limitations of AI tools, as a lack of transparent data can cause mistrust among travelers, specifically in aspects like pricing (Kumar *et al.*, 2025). Furthermore, Kieslich *et al.* (2022) clarified that transparency and explain ability are concerned with how algorithms work, which can be difficult to explain to regular users. Accordingly, the first hypothesis is:

H1: There is a significant correlation between perceived transparency as an ethical consideration and trust in AI tools among Egyptian tourists.

2. **Accountability:** There must be a responsibility for the outcome generated by AI tools. Moreover, the continuous assessment of the process through which algorithms work can enhance trust in AI (European Commission, 2019). Accordingly, the second hypothesis is:

H2: There is a significant correlation between perceived accountability as an ethical consideration and trust in AI tools among Egyptian tourists.

3. **Privacy and data governance:** Legislation must be enacted to ensure that the use and transportation of data is of high quality. 4. **Technical safety:** A backup plan must be integrated to ensure the security of the data and prevent any cyber-attacks. Also, AI tools should be reliable, flexible, and accurate (European Commission, 2019). As leakage of personal data can reduce trust in dealing with AI travel apps and consequently reduce the intention to adopt them in the future (Kumar *et al.*, 2025). Accordingly, the third hypothesis is:

H3: There is a significant correlation between perceived privacy as an ethical consideration and trust in AI tools among Egyptian tourists.

4. **Fairness and Non-discrimination:** All humans should have access to use AI tools without bias against certain minority groups. It is also important to note that algorithm discrimination can be caused by biased data that is used to train the model or to architect its mechanism (Shin and Park, 2019). Accordingly, the Fourth hypothesis is:

H4: There is a significant correlation between perceived fairness as an ethical and trust in AI tools among Egyptian tourists.

5. **Human oversight,** which means that humans must be the prominent decision makers, not the AI. Also, human direct interaction is a fundamental factor in a trustworthy AI tool, while ensuring a continuous monitoring of the process. Accordingly, the fifth hypothesis is:

H5: There is a significant correlation between perceived human oversight as an ethical consideration and trust in AI tools among Egyptian tourists.

6. **Societal and environmental well-being:** Taking into consideration the future societal and environmental impacts of AI systems is a must to ensure their sustainability (European Commission, 2019).

In 2025, Saatci proposed the AI and ethics perception scale, which explored the following factors that contribute to the perception of ethical considerations towards AI across various sectors: transparency, accountability, privacy, fairness, and human oversight. The scale has

34 items that test each factor of the scale by a number of sentences. The research methodology will depend on this scale, as it was statistically tested for validity.

On the other hand, trust and privacy are interrelated. If users trust the application, they will be able to provide more data about themselves (Adegbenro *et al.*, 2021). Also, Seo and Lee (2021) declared that trust can decrease the perceived risk of using advanced AI technologies like robots. Moreover, Information security can increase the intention to use innovative AI applications in tourism and hospitality services (Pizam *et al.*, 2024). This indicates that trust is the milestone factor through which AI tools can be improved to generate more transparent customized outputs, while ensuring data security (Koo *et al.*, 2025). Accordingly, the sixth hypothesis is:

H6: AI usage frequency moderates the relationship between perceived ethical consideration and trust in AI tools among Egyptian tourists.

Moreover, the study of Torabi *et al.* (2025) indicated that there is a difference between generations towards using and dealing with AI, as it clarified that younger generations tend to be seamlessly engaged with these tools, while older ones have concerns about dealing with such tools. Based on that, the seventh hypothesis is:

H7: Age moderates the relationship between perceived ethical consideration and trust in AI tools among Egyptian tourists.

In light of the above formulated hypotheses, the following conceptual model presents the expected relationships between variables that will be statistically tested.

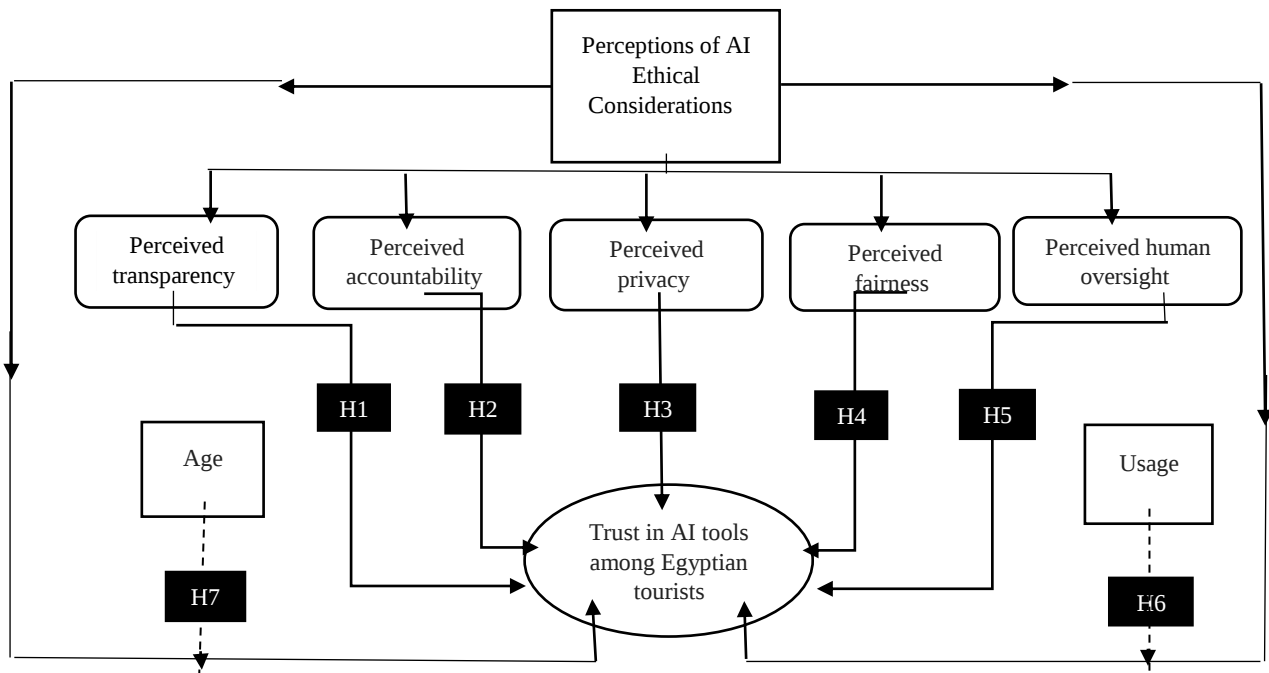


Figure 1. The Conceptual Model

The model shows that there are expected correlations between the five perceived ethical considerations: transparency, accountability, privacy, fairness, human oversight and trust in AI tools among Egyptian tourists. These relationships are represented in H1, H2, H3, H4, and H5. Usage and age are considered the moderators' variables in the model with H6 and H7, as they can impact the direction and strength of the relationship between the perceived ethical considerations and trust in the AI tools.

3. Methodology

A descriptive analytical methodology was employed to investigate the correlations between perceived ethical considerations and trust in using AI applications among Egyptian tourists. The study depends on a quantitative approach to statistically analyze the relationships between variables.

3.1 Data Collection and Analysis

The data were collected through the development of an online questionnaire designed to test the research hypotheses. The questionnaire was divided into four sections: demographic characteristics, usage frequency of AI applications, trust in AI applications, and the AI ethical considerations scale. The items in the usage and trust sections were adopted from the Initial Trust Model of McKnight *et al.* (2002) and were modified to suit the current study.

Also, the AI ethical considerations dimension was adopted from the AI and Ethics Perception Scale, developed by Saatci (2025). The original scale explored the five main factors of ethical considerations: transparency, accountability, privacy, fairness, and human oversight. The scale contained 34 items, which were tested for reliability and validity. Each factor included 5 to 7 items was designed to assess the ability of users to understand how AI systems work, to determine the extent to which an AI system is considered transparent and accountable, to evaluate users' confidence in the privacy protocol, to assess the ability of AI systems to provide fair outputs across different cultural groups; and to review the importance of human supervision on AI tools.

However, according to the aim of the present study, only 17 items were adopted. The selected items were chosen for their representativeness of the five main factors. The first factor, transparency, consisted of four items assessing the perceived transparency of AI tools in terms of a transparent decision-making process, clarity in explaining decisions and recommendations, and sufficient outputs. The accountability dimension consisted of three items evaluating perceived accountability in terms of the protocols assigned to ensure the reliability of the AI tool and the legal responsibility of the AI system when used for travel purposes.

The privacy dimension consisted of three items analyzing perceived privacy in terms of the protection of users' personal and sensitive data, the degree of users' confidence in AI tools when sharing personal data, and the privacy policies followed by AI applications. The fairness dimension consisted of four items assessing perceived fairness in terms of potential bias or discrimination in AI systems when providing travel recommendations, and the ability of the AI system to ensure equity across different social and cultural groups.

Finally, the human oversight dimension consisted of three items evaluating perceived human oversight in terms of the importance of human supervision of AI applications used for travel purposes, and the pivotal factor of human feedback in regularly assessing the performance of AI systems.

The questionnaire was distributed during the period from July to November 2025. To ensure the consistency of the results, a Cronbach's Alpha test was conducted, revealing a reliability rate of 0.790, which is considered an acceptable level.

Since the simple scatterplot examination of the variables revealed a nonlinear distribution of data points, the study employed the Spearman correlation coefficient to investigate the relationships between perceived ethical considerations and trust in AI, as it is considered the most suitable test for the ordinal and nonparametric data shown in the results. Additionally, a multiple regression analysis was conducted to explore the influence of moderator variables on

the strength and direction of the relationship between perceived ethical dimensions and trust. The regression analysis was appropriate for testing the moderators, as this type of analysis does not require linearity of the data.

3.2 Sampling Method

The study employed the purposive convenience sampling technique by selecting 387 Egyptian individuals who are familiar with AI applications from travelers who actively use AI in their travels, and also potential travelers, including different demographic characteristics. This sampling technique was adopted due to the ease of access to respondents and the ability to verify their background in AI. Moreover, the study is an initial investigation into perceptions towards AI ethical considerations among Egyptian tourists. Thus, this sampling method is considered the most suitable one for the study.

4. Results

The following represents the statistical results of the study, which were generated using SPSS version 25.

4.1 Demographic Characteristics

The results indicate that 55.3% of the sample were female, and 44.7% were men. The majority of the sample 40% were in the age group from 18 to 24 years. Besides, 25% were in the age group from 25 to 34. Also, 15% represents the age group from 35 to 44, while 11.9% were in the age range from 45 to 54. Only 8% represents the age group above 55 years old. Since the majority of the sample were in the age range from 18 to 24, 42.6% of the respondents are university students. Also, 29.7% have a bachelor's degree, while 25.6% have a master's degree, and only 2.1% have a Ph.D. degree.

Table 1. Demographic Characteristics

Demographic Characteristics			
		Frequency	Percent %
Gender	Male	173	44.7
	Female	214	55.3
Age	18-24	155	40.1
	25-34	97	25.1
	35-44	58	15
	45-54	46	11.9
	Above 55	31	8
Education	University student	165	42.6
	Bachelor's degree	115	29.7
	Master's degree	99	25.6
	Ph.D. degree	8	2.1
	Total	387	100.0

4.2 Usage Frequency of AI Applications

The majority of the sample, 22.2% revealed that they spend from 1 to 2 hours per week using AI applications; also 22% of them spend from 30 to 60 minutes, while 17.6% use AI for about 2-4 hours per week. In addition, 15.8% spend 30 minutes on AI tools. Only 5.9% use these tools for more than 8 hours per week, while 6.7% indicated that they do not use AI applications at all. As for using AI applications to access travel information, 25.1% spend from 1 to 2 hours searching for travel recommendations. Also, 18.6% spend from 30 to 60

minutes, and 18.3% use these applications for travel purposes for 2 to 4 hours, while 11.1% revealed that they do not use AI tools in searching for travel recommendations.

Table 2. Usage Frequency of AI Applications

		Frequency	Percent
How much time per week do you spend on AI applications?	None	26	6.7
	30 minutes	61	15.8
	30-60 minutes	85	22.0
	1-2 hours	86	22.2
	2-4 hours	68	17.6
	4-8 hours	38	9.8
	more than 8 hours	23	5.9
	Total	387	100.0

		Frequency	Percent
How much time do you spend accessing travel information and recommendations from AI applications?	None	43	11.1
	30 minutes	52	13.4
	30-60 minutes	72	18.6
	1-2 hours	97	25.1
	2-4 hours	71	18.3
	4-8 hours	39	10.1
	more than 8 hours	13	3.4
	Total	387	100.0

4.3 Descriptive Statistics of the Trust Dimension and Ethical Considerations Scale

According to the performed descriptive statistics analysis in (Table 3), the mean of the trust dimension is 3.063, indicating a moderate degree of agreement among responses regarding using AI. Concerning the ethical consideration scale, the mean values of transparency, accountability, privacy, fairness, and human oversight suggest that there is an acceptable level of consistency between answers, as they ranged from 2.970 to 3.473. Moreover, the standard deviation values of all the dimensions of trust and the ethical considerations scale reflect a normal level of variation, as they ranged from 0.547 to 0.656.

Table 3. Descriptive Statistics of the Trust and Ethical Considerations Scale

	N	Mean	Std. Deviation
Trust	387	3.063	.594
The Ethical Considerations Scale			
Transparency	387	3.282	.618
Accountability	387	3.495	.547
Privacy	387	2.970	.596
Fairness	387	3.235	.558
Human oversight	387	3.473	.656

4.4 Testing the Hypotheses

To test the previously mentioned research hypotheses, a Spearman's rank correlation coefficient was employed to investigate the associations between the ethical considerations dimensions and trust in AI. Moreover, a multiple regression analysis was conducted to explore the influence of the moderators' variables on the relationships between ethical dimensions and trust. The analysis was conducted using SPSS software version 25.

4.4.1 The Correlations between Perceived Ethical Considerations and Trust in AI Tools

Table 4. Spearman Correlation Coefficients

	Correlation Coefficient	Sig. (2-tailed)	N
Transparency	.635**	.000	387
Accountability	.356**	.000	387
Privacy	.268**	.000	387
Fairness	.353**	.000	387
Human Oversight	.061	.230	387
Correlation is significant at the level of 0.01 (2-tailed)			

Spearman's correlation coefficients in (Table 4) revealed that there is a strong positive relationship between trust and perceived transparency ($\rho = 0.635$). Moreover, the (p -value < 0.001) indicates a statistically significant correlation between the two variables. Accordingly, H1: *"There is a significant correlation between perceived transparency as an ethical consideration and trust in AI tools among Egyptian tourists"* is significantly supported. In addition, spearman's rho referred to a moderate positive association between accountability and trust which is statistically significant ($\rho = 0.356$, p -value < 0.001). Based on that, H2: *"There is a significant correlation between perceived accountability as an ethical consideration and trust in AI tools among Egyptian tourists"* is statistically supported.

Furthermore, the analysis revealed that there is a moderate positive correlation between perceived privacy as an ethical consideration dimension and trust ($\rho = 0.268$). Also, the (p -value < 0.001) refers to the significance of the analysis. Thus, H3: *"There is a significant correlation between perceived privacy as an ethical consideration and trust in AI tools among Egyptian tourists"* is statistically approved. As for perceived fairness, Spearman's rho clarified that there is a statistically significant moderate positive association between fairness and trust ($\rho = 0.353$, p -value < 0.001). Accordingly, H4: *"There is a significant correlation between perceived fairness as an ethical and trust in AI tools among Egyptian tourists"* is statistically supported.

On the contrary, Spearman's coefficient revealed that there is a weak correlation between perceived human oversight and trust. Additionally, there is no significant relationship between the variables ($\rho = 0.061$, p -value > 0.05). Therefore, H5: *"There is a significant correlation between perceived human oversight as an ethical consideration and trust in AI tools among Egyptian tourists"* is not statistically approved.

4.4.2 Testing the Influence of Moderator Variables

The ANOVA analysis revealed that the overall regression model is statistically significant ($p < 0.001$). However, the regression analysis indicated a very weak and negative influence of usage as a moderating variable on the relationship between the ethical consideration dimensions and trust in AI. This was reflected by the unstandardized coefficient (B), which was -0.008 . Additionally, the p -value of the interaction term between ethical considerations

and usage was 0.084, indicating no statistical evidence to suggest that usage has a moderating effect on the relationship between ethical considerations and Egyptian tourists' trust in AI tools. Based on this result, there is no statistical evidence to support H6: *AI usage frequency moderates the relationship between perceived ethical consideration and trust in AI tools among Egyptian tourists.*

Table 5. Regression Coefficients of the Moderating Effect of Usage

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-1.200	.484		-2.479	.014
Perceived Ethical Considerations	1.336	.149	.843	8.968	.000
Usage	.222	.149	.468	1.496	.135
Interaction term	-.078	.045	-.596	-1.733	.084
a. Dependent Variable: Trust					

Regarding age as a moderating variable, the unstandardized coefficient ($B=0.116$) reflects a weak positive moderating impact of age on the relationship between the dimensions of the ethical consideration and tourists' trust in AI applications. In addition, the p-value of the interaction term was 0.001, indicating that age has a statistically significant moderating effect on the relationship between ethical considerations and trust. Therefore, H7, which posits that *age moderates the relationship between perceived ethical consideration and trust in AI tools among Egyptian tourists*, is statistically supported.

Table 6. Regression Coefficients of the Moderating Effect of Age

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.577	.435		1.328	.185
Perceived Ethical Considerations	.735	.129	.464	5.672	.000
Age	-.344	.117	-.755	-2.939	.003
Interaction term	.116	.036	.799	3.248	.001
a. Dependent Variable: Trust					

To summarize the results, the following table illustrates the findings that was conducted based on the Spearman rank correlation coefficient and the multiple regression analysis.

Table 7. Hypotheses Testing Results Summary

The Hypothesis	Spearman's rho	P-Value	The Result
H1: There is a significant correlation between perceived transparency as an ethical consideration and trust in AI tools among Egyptian tourists.	0.635	P < 0.001	Statistically Significant
H2: There is a significant correlation between perceived accountability as an ethical consideration and trust in AI tools among Egyptian tourists.	0.356	P < 0.001	Statistically Significant
H3: There is a significant correlation between perceived privacy as an ethical consideration and trust in AI tools among Egyptian tourists.	0.268	P < 0.001	Statistically Significant
H4: There is a significant correlation between perceived fairness as an ethical and trust in AI tools among Egyptian tourists.	0.353	P < 0.001	Statistically Significant
H5: There is a significant correlation between perceived human oversight as an ethical consideration and trust in AI tools among Egyptian tourists.	0.061	.230	Not Statistically Significant
Moderator Variables			
The Hypothesis	Unstandardized Coefficients (B)	P-value	The Result
H6: AI usage moderates the relationship between perceived ethical consideration and trust in AI tools among Egyptian tourists	- 0.078	.084	Not Statistically Significant
H7: Age moderates the relationship between perceived ethical consideration and trust in AI tools among Egyptian tourists.	0.116	.001	Statistically Significant

5. Discussion

The main purpose of the study was to investigate the perceptions of Egyptian tourists regarding the ethical considerations in using AI tools for generating travel information and recommendations. Few prior studies have addressed the topic of ethical concerns of AI in tourism. To date, no academic studies have examined the perceptions of Egyptian travelers in this context. Hence, the present study aimed to explore Egyptian tourists' perceptions of the dimensions of ethical considerations and to analyze the relationships between these perceptions and trust in using AI applications in tourism.

The study employed the Spearman's correlation coefficient to explore the associations between the dimensions of ethical considerations and trust in AI. The main findings indicated

that perceived transparency, accountability, privacy, and fairness as ethical considerations have a moderate to strong positive association with trust in AI tools among Egyptian tourists. Additionally, the analysis revealed that these four dimensions were statistically correlated with trust. Consequently, H1, H2, H3, and H4 were statistically supported.

Notably, the analysis indicated that perceived human oversight has a weak positive association with trust in using AI among Egyptian travelers. Moreover, there was no statistical evidence of this relationship. Therefore, H5 was not statistically supported.

The interpretation of the results can be related to the cultural and social background of Egyptian society. Egyptians are particularly concerned with issues of transparency and the justification for providing their data to AI applications to receive customized travel recommendations. They also need to know where their data are stored and how it might be used in the future. In addition, accountability as an ethical dimension is closely linked to the way Egyptians make travel decisions, as they require a responsible entity for the travel information or recommendations provided by AI. Therefore, users need to understand the algorithms that guide the responses of AI travel applications, since lacking this information can lead to mistrust when using these tools in tourism. These results are consistent with the studies of Kieslich *et al.* (2022), Kwong *et al.* (2024), and Kumar *et al.* (2025) which emphasized the role of transparency and accountability in enhancing trust in AI tools.

Furthermore, the moderate positive correlation between perceived privacy and trust in AI tools among Egyptian tourists could be interpreted in light of the cultural characteristics of the Egyptian society, which suggest that personal data such as income, preferences, personal photos, and documents are considered sensitive for many individuals. Besides, payments for travel information and services through AI require a high degree of trust in these tools. This result is compatible with the study of Sadiq *et al.* (2022), which revealed that perceived risk can affect attitudes and behaviors towards online purchases. In addition, OECD (2024) and Pizam *et al.* (2024) emphasized that AI-provided services for tourists must implement highly secure measures to protect users' data. However, the study of Alfred (2014) indicated that most Egyptian internet users do not read the privacy policies of various applications.

Moreover, the moderate positive correlation between perceived fairness and trust can be explained by the cultural and educational background of the Egyptian travelers who are aware of the importance of inclusiveness in presenting information. Individuals are also concerned about potential discrimination that may arise due to algorithmic bias towards certain issues or specific cultural groups, which could affect trust in AI applications. This finding is closely related to the results of the study of Kieslich *et al.* (2022) and Shin and Park (2019), which indicated that algorithmic discrimination can result from biased data used to train the model or to design its mechanisms.

On the other hand, there is no significant relationship between perceived human oversight and trust in AI. This result may be attributed to the lack of awareness among Egyptian users regarding the pivotal factor of human monitoring in AI tools and how this ethical consideration affects the quality of outputs and the personal data from any threat that could occur. Moreover, mechanisms for human supervision of AI applications are not widely accessible to common users. However, this finding is inconsistent with the studies of the European Commission (2019) and Shin and Park (2019), which highlighted that human oversight is a crucial factor in enhancing trust in the use of AI tools in tourism.

Regarding the moderating variables, the findings revealed that usage frequency of AI does not affect the relationship between the ethical consideration dimensions and trust in AI tools among Egyptian tourists. Additionally, there is no statistical evidence to support this effect.

Therefore, H6 was not statistically significant. This result is inconsistent with the studies of Pizam *et al.* (2024) and Koo *et al.* (2025). This can be explained by the fact that AI tools are still relatively new to Egyptian society, and the frequency of using AI for general or tourism purposes remains limited. Based in this, AI usage does not influence the relationship between perceived ethical considerations and trust in AI tools.

As for age as a moderating variable, there is a moderate positive influence of age on the relationship between the ethical considerations and trust in AI. The analysis also provided statistical evidence that age affects the relationship between perceived ethical considerations and trust in using AI among Egyptian tourists, which supported H7. Specifically, older users tend to have more rigid perceptions regarding ethical considerations, which may lead to lower trust when using AI for travel information and recommendations. This result aligns with the studies of Alfred (2014) and Torabi *et al.* (2025), which emphasized that there is variance between generations in the acceptance of innovative technologies.

It is crucial to note that several limitations may have influenced the results of the study. Some questionnaire items might have been difficult for certain participants to understand, particularly in the human oversight dimension, which could have affected their responses. Furthermore, the study was only concerned with investigating the perceptions of Egyptian tourists due to the ease of access to the population and, most importantly, for the scarcity of research in this field involving Egyptian tourists.

Based on the previous findings, the current study provides new insights into the field of ethical considerations related to the use of AI and their correlation with trust among Egyptian tourists. The results offer practical implications for companies specializing in developing AI applications, emphasizing the importance of studying the cultural backgrounds of diverse users across the world and analyzing their perceptions of the different dimensions of ethical considerations. Accordingly, AI applications could be developed to align with societal standards, thereby fostering higher levels of trust in their outputs.

Future studies could conduct in-depth research on perceived human oversight of AI technologies to gain a deeper understanding of users' perspectives in the tourism industry, and how this factor could affect their experience. Furthermore, future studies could explore differences in perceptions among international tourists from diverse cultural backgrounds regarding the ethical concerns of AI, as well as investigate their potential effect on the intention to use AI for travel purposes.

6. Conclusion

Artificial intelligence has the potential to provide personalized services that can enhance the overall travel experience. However, there are several barriers that can significantly affect the application of AI in tourism, including ethical considerations. The present study addressed this knowledge gap by investigating the perceptions of Egyptian tourists regarding the ethical aspects of transparency, accountability, privacy, fairness, and human oversight when using AI applications in tourism, and the correlations of these perceptions with trust in such tools.

The study concluded that perceived transparency, accountability, privacy, and fairness are significantly correlated with Egyptian tourists' trust in using AI tools to search for travel information and recommendations. On the contrary, the dimension of perceived human oversight appeared to have a non-significant association with trust in using AI among Egyptian tourists. The results also indicated that usage frequency has no impact on the relationship between perceived ethical considerations and trust, while age has a moderating

influence on the correlation between the perceived dimensions of ethical considerations in AI and trust among Egyptian tourists.

The need for further research in this field is crucial, particularly to explore the perceptions of international tourists visiting Egypt, as this will provide deeper insights into how the ethical aspects of AI models within the tourism industry can be improved.

7. Recommendations

Based on the above, the study presents several recommendations regarding the five main factors of AI ethical considerations:

▪ Transparency

Developers should reveal information that clarifies how the AI model functions, including its limitations, strengths, and weaknesses. Also, AI algorithms should be trained to provide a clear explanation of how decisions or recommendations are generated, including the factors influencing AI outputs and any constraints that may affect their performance. Besides, Algorithms should justify the reasons for including or excluding specific travel options, and clearly provide transparent information on the data sources used to train the model.

▪ Accountability

There must be a clear identification of the developer who is accountable for the performance, outcomes, and potential errors of the AI model. Also, implementing an audit trail could serve as a vital feature to record all decision-making steps of the model, this could facilitate tracking and investigating technical errors. An appeal mechanism is also considered critical to ensure accountability, as it allows users to question the credibility of the system and request human intervention when unexpected circumstances arise.

▪ Privacy

A privacy protocol should be clearly stated to ensure that users' data is protected from any misuse. The AI system should be trained to aggregate only the essential data required to provide a personalized experience, without requesting for sensitive information. User consent is a critical element for ensuring privacy, as it informs users about the types of data that will be collected by the system and how it will be used.

Furthermore, the data should also be encrypted during storage, transmission, and processing to ensure the privacy of users and prevent data breaches. In addition, security patches must be updated on a regular basis to reduce potential security gaps in the systems. Also, integrating advanced technologies such as Blockchain and Edge AI can reduce the risk of data misuse, as they process data within local devices rather than through cloud servers, which provides a more secure and trusted experience for the user.

▪ Fairness

The data used to train AI models must represent all demographic groups in terms of age, gender, region, and other factors. Statistical measures should be implemented to assess bias levels in the outputs and retrain the model to minimize discrimination. The training phase should exclude any data that is considered biased towards social, cultural, or political issues. Additionally, a pre-launch test should be conducted to ensure that the decisions of the model are balanced and equitable.

▪ Human Oversight

Human operator should remain in command to modify algorithms that appeared to be biased, and to reconfigure the AI system settings in response to technical issues. operators should also be trained to monitor the patterns of generated decisions or recommendations and to detect potential errors and discrimination of the results. This can be implemented through

dashboards that present error rates, bias levels, and trust indicators for each decision carried out by the model. In the event of a cyber-attack, the human-in-command should disable the model to prevent severe consequences and protect data. Moreover, sensitive decisions should be referred back to a human operator to ensure credibility and prevent any harm. Also, all errors must be continuously registered and evaluated to provide future solutions and enhance the work of the AI model.

▪ Regarding national tourism authorities

They should develop short instructional videos on how to use AI tools and applications across all the stages of travel, including planning, booking, and also the use of these applications at the destination. These videos should aim to raise awareness among active and potential tourists about how to effectively engage with AI in tourism and increase their trust in such tools. Additionally, there is a critical need for legislation concerning data protection within the digitalized work environment, as multiple parties may be involved in the process of AI data analysis. Thus, Clear regulations could help to reduce the danger of cyber-attacks, which present a severe threat to the privacy of data obtained by AI models.

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References

- Adegbenro, D.R., Nwaocha, V., Akintunwa, F., Longe, B-P., Iwayemi, A., Omotosho, M.O. & Longe, O.B. (2021). Privacy Trust Framework for Evaluation of Security Breaches in Digital Learning Environment. *Journal of Behavioral Informatics, Digital Humanities and Development Research*. Vol. 7.No. 2, pp 193-199.. Available online at <https://www.isteam.net/behavioralinformaticsjournal.DOI:dx.doi.org/10.22624/AIMS/BHI/V7N2P10x>
- Ahmed, S. (2025). The ethics of AI in tourism and hospitality. In *The Role of Artificial Intelligence in the Tourism and Hospitality Sector* (pp. 346-370). Routledge
- Alfred, D. N. (2014). Online privacy issues: Awareness, attitudes, and perceptions amongst internet users in Egypt, Master's Thesis, *the American University in Cairo*. AUC Knowledge Fountain. <https://fount.aucegypt.edu/etds/1826>
- Alyasiri, O. M., Selvaraj, K., Younis, H. A., Sahib, T. M., Almasoodi, M. F., & Hayder, I. M. (2024). A survey on the potential of artificial intelligence tools in tourism information services. *Babylonian Journal of Artificial Intelligence*, 2024, 1-8.
- Dignum, V. (2018). Ethics in artificial intelligence: introduction to the special issue. *Ethics and Information Technology*, 20(1), 1-3.
- Elisa Sousa, A., Pais, S., & Sofia Viana, A. (2024). Applications of artificial intelligence in tourism and hospitality: A systematic literature review. In *International conference on management, tourism and technologies* (pp. 291-302). Springer, Cham.
- European Commission. (2019). Ethics guidelines for trustworthy AI, <https://digital.strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai>
- Ferhataj, A., & Memaj, F. (2024). Challenges And Opportunities Of Ai Implementation In Tourism: An Ethical And Technological Perspective. *STUDIJS-VERSLAS-VISUOMENĖ: DABARTIS IR ATEITIES ĮŽVALGOS*, 1(IX), 217-231.

- García-Madurga, M.-Á., & Grilló-Méndez, A.-J. (2023). Artificial Intelligence in the Tourism Industry: An Overview of Reviews. *Administrative Sciences*, 13(8), 172. <https://doi.org/10.3390/admsci13080172>
- Gündüz, C., Rezaei, M., & Pironti, M. (2023). Ethical challenges in using artificial intelligence in knowledge management; considering in tourism industry. In *Artificial Intelligence and Social Sciences* (pp. N-A). Ufuk University. Ethical challenges in using artificial intelligence in knowledge management, considering in tourism industry. In *Artificial Intelligence and Social Sciences* (pp. N-A). Ufuk University.
- Harahap, M. A. K., Ausat, A. M. A., Rachman, A., Riady, Y., & Azzaakiyyah, H. K. (2023). Overview of ChatGPT technology and its potential in improving tourism information services. *Jurnal Minfo Polgan*, 12(1), 424-431
- Huang, A., Chao, Y., Velasco, E. d. l. M., Bilgihan, A., and Wei, W. (2021). When artificial intelligence meets the hospitality and tourism industry: an assessment framework to inform theory and management. *J. Hosp. Tour. Insights* 5, 1080–1100. doi: 10.1108/JHTI-01-2021-0021
- Hwang, J., Kim, J., Joo, K. H., & Choe, J. Y. (2024). An integrated model of artificial intelligence (AI) facial recognition technology adoption based on perceived risk theory and extended TPB: A comparative analysis of the US and South Korea. *Journal of Hospitality Marketing & Management*, 33(8), 1071-1099.
- Ilieva, G., Yankova, T., & Klisarova-Belcheva, S. (2024). Effects of Generative AI in Tourism Industry. *Information*, 15(11), 671. <https://doi.org/10.3390/info15110671>
- Jones, A. (2023). Algorithms: What Are They, University of Chester, DOI:10.13140/RG.2.2.13707.26406.
- Kieslich, K., Keller, B., & Starke, C. (2022). Artificial intelligence ethics by design. Evaluating public perception on the importance of ethical design principles of artificial intelligence. *Big Data & Society*, 9(1), 20539517221092956.
- Knani, M., Echchakoui, S. & Ladhari, R. (2022). Artificial intelligence in tourism and hospitality: Bibliometric analysis and research agenda. *Int.l J. of Hosp. Man.*, 107, 103317. DOI: <https://doi.org/10.1016/j.ijhm.2022.103317>.
- Koo, I., Zaman, U., Ha, H., & Nawaz, S. (2025). Assessing the interplay of trust dynamics, personalization, ethical AI practices, and tourist behavior in the adoption of AI-driven smart tourism technologies. *Journal of Open Innovation: Technology, Market, and Complexity*, 11(1), 100455.
- Köseoglu, M.A., Morvillo, A., Altin, M., De Martino & M., Okumus, F. (2020). Competitive intelligence in hospitality and tourism: a perspective article, *Tourism Review*, 75(1), 239–242.
- Kumar, A. S., Mosikan, M., Dutta, A., Musirin, I. B., Akula, V. S. G., Khalid, S., & SK, T. (2025). AI-driven personalization in tourism: Balancing innovation with ethical challenges. In *AI Technologies for Personalized and Sustainable Tourism* (pp. 31-58). IGI Global
- Kwong, A. T. M., Omar, S. I., & Aliah, M. N. (2024). The ethical implications of AI-Powered personalization in hospitality and tourism. In *Impact of AI and tech-driven solutions in hospitality and tourism* (pp. 103-122). IGI Global. The ethical implications

- of AI-Powered personalization in hospitality and tourism. In *Impact of AI and tech-driven solutions in hospitality and tourism* (pp. 103-122). IGI Global.
- López Naranjo, A. L., Puente Riofrío, M. I., Carrasco Salazar, V. A., Erazo Rodríguez, J. D., & Buñay-Guisñan, P. A. (2025). Artificial Intelligence in the Tourism Business: A Systematic Review. *Frontiers in Artificial Intelligence*, 8, 1599391.
- McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information systems research*, 13(3), 334-359.
- Milwood, P. A., Hartman-Caverly, S., & Roehl, W. S. (2023). A scoping study of ethics in artificial intelligence research in tourism and hospitality. In *ENTER22 e-tourism conference* (pp. 243-254). Springer, Cham.
- Mishra, D., Das, S. & Patnaik, R. (2024). Application of AI Technology for the Development of Destination Tourism towards an Intelligent Information System. *Econ. Aff.*, 69(02): 1083-1095.
- OECD (2024). Artificial Intelligence and tourism. G7/ OECD policy paper”, OECD Tourism Papers, 2024/02, OECD Publishing, Paris. <http://dx.doi.org/10.1787/3f9a4d8d-en>.
- Pizam, A., Ozturk, A. B., Hacikara, A., Zhang, T., Balderas-Cejudo, A., Buhalis, D., & State, O. (2024). The role of perceived risk and information security on customers' acceptance of service robots in the hotel industry. *International Journal of Hospitality Management*, 117, 103641.
- Saatci, E. (2025). AI and Ethics: Scale Development for Measuring Ethical Perceptions of Artificial Intelligence Across Sectors and Countries, *International Journal of Economic Behavior and Organization* (Volume13,Issue\1).
- Sadiq, M., Dogra, N., Adil, M., & Bharti, K. (2022). Predicting online travel purchase behavior: The role of trust and perceived risk. *Journal of Quality Assurance in Hospitality & Tourism*, 23(3), 796-822.
- Seo, K. H., & Lee, J. H. (2021). The emergence of service robots at restaurants: Integrating trust, perceived risk, and satisfaction. *Sustainability*, 13(8), 4431.
- Seyfi, S., Gorji, A. S., Vo-Thanh, T., & Zaman, M. (2025). Travel Virtual Assistant or Untrusted Advisor? Developing a Typology of Resistance to AI-Generated Travel Advice. *International Journal of Tourism Research*, 27(4), e70082.
- Shalan, I. S., Gaafar, H., Al-Romeedy, B., & Shawaly, A. E. (2024). The impact of Artificial Intelligence on improving tourism service quality in the Egyptian destination. *Journal of the Faculty of Tourism and Hotels-University of Sadat City*, 8(2), 1-26.
- Sharifani, K., & Amini, M. (2023). Machine learning and deep learning: A review of methods and applications. *World Information Technology and Engineering Journal*, 10(07), 3897-3904
- Shi, J., Lee, M., Girish, V. G., Xiao, G., & Lee, C. K. (2024). Embracing the ChatGPT revolution: unlocking new horizons for tourism. *Journal of Hospitality and Tourism Technology*, 15(3), 433-448.
- Shin D & Park YJ. (2019). Role of fairness, accountability, and transparency in algorithmic affordance. *Computers in Human Behavior* 98: 277–284. Available at Role of fairness,

- accountability, and transparency in algorithmic affordance. *Computers in Human Behavior* 98: 277–284
- Torabi, Z. A., Hall, C. M., Kokabnia, M., & Hassani Jalilian, P. (2025) Exploring Ai Adoption in Travel Planning Across Generations: The Influence of Smart Tourism Readiness. Available at SSRN 5218832. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5218832
- Tsaih, R. H., & Hsu, C. C. (2018). Artificial intelligence in smart tourism: A conceptual framework. Available at https://iceb.johogo.com/proceedings/2018/ICEB2018_paper_84_full.pdf
- University of Queensland (2021). Data Governance Essentials Handbook, Australia, university of queensland press. Available at <https://data.uq.edu.au/files/6833/Data%20Governance%20Essentials%20handbook%20August%202021.pdf>
- World Tourism Organization (2024). Artificial Intelligence Adoption in Tourism Key Considerations for Sector Stakeholders, World Tourism Organization (UN Tourism). Available at <https://pre-webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2024-12/artificial-intelligence-adoption-in-tourism.pdf>
- Yadav, J.K., Verma, D.C., Jangirala, S. & Srivastava, S.K. (2021). An IAD type framework for Blockchain enabled smart tourism ecosystem. *J. of High Tech. M. R.*, 32, 100404. <https://doi.org/10.1016/j.hitech.2021.100404>.
- Zsarnoczky, M. (2017). How does artificial intelligence affect the tourism industry?. *Vadyba*, 31(2), 85-90.



دراسة الاعتبارات الأخلاقية لاستخدام الذكاء الاصطناعي في السياحة: تصورات السائحين المصريين

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المخلص

معلومات المقالة

أثار التطور السريع في مجال الذكاء الاصطناعي الحاجة الملحة نحو الالتزام بالمبادئ الأخلاقية التي تحكم استخدامه. حيث من الممكن أن يحسن هذا الالتزام من فعالية تلك الأدوات ويقلل من المخاطر المرتبطة بسوء استخدام البيانات. بناءً على ذلك، تهدف الورقة البحثية إلى دراسة الاعتبارات الأخلاقية المرتبطة باستخدام تطبيقات الذكاء الاصطناعي في قطاع السياحة. لتحقيق هذا الهدف، استخدمت الدراسة معامل ارتباط سبيرمان لتحليل العلاقة بين تصورات عينة مكونة من ٣٨٧ سائحًا مصريًا حول الأبعاد الخمسة لمقياس الاعتبارات الأخلاقية ومدى الثقة في استخدام تطبيقات الذكاء الاصطناعي. أظهرت النتائج أنه يوجد ارتباط إيجابي ودال إحصائيًا بين العلاقة بين تصورات العينة تجاه الشفافية، والمساءلة، والخصوصية، والعدالة وبين الثقة في استخدام أدوات الذكاء الاصطناعي. من ناحية أخرى، بينت الدراسة عدم وجود علاقة دالة إحصائية بين التصورات الإدراكية تجاه عنصر الإشراف البشري والثقة في الذكاء الاصطناعي بين أفراد العينة. بالإضافة إلى ذلك، أظهر تحليل الانحدار المتعدد أن معدل تكرار الاستخدام لا يؤثر على العلاقة بين التصورات تجاه الاعتبارات الأخلاقية والثقة في أدوات الذكاء الاصطناعي. بينما يمكن اعتبار العمر متغيرًا مُعدلاً للعلاقة بين الثقة والاعتبارات الأخلاقية لدى السائحين المصريين. بناءً على ذلك، قدمت الدراسة بعض التوصيات لمطوري تطبيقات الذكاء الاصطناعي لتحسين أداء النماذج المستخدمة في القطاع السياحي، فيما يخص الأبعاد الخمسة لمقياس الاعتبارات الأخلاقية.

الكلمات المفتاحية

الذكاء الاصطناعي؛
الاعتبارات الأخلاقية؛
التصورات؛
السياحة؛
الثقة.

(JAAUTH)

المجلد ٢٩، العدد ١،
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ص ٢٠٥-٢٢٤.