

AI-based Machine Translations in Tourism and Hospitality: An Exploratory Study of Travelers' Perceptions and Future Challenges

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Abstract

With the progress of AI-driven technologies, machine translation has significantly impacted tourists' travel experiences by transforming how they engage with or interpret language at their destinations. However, the body of empirical literature on the benefits, obstacles, and future prospects of these emerging technologies in tourism and hospitality is yet to be fully explored. This study aims to explore and outline 320 travelers' perceptions of machine translation. A distinctive sample of Italian travelers, along with their current and potential customers in the digital environment, is analyzed. Descriptive statistics was used to present the number and main characteristics of travelers' perceptions about AI-based machine translators. Travelers were grouped into two clusters based on perceived benefits and implementation challenges. The results contribute to the growing literature on AI-based machine translators in the tourism and hospitality industries and offer managerial insights by mapping the benefits, challenges, outlook, and maturity levels of machine translations. This is among the first studies exploring the tourism and hospitality approaches adopted by travelers to manage their interactions with AI-based machine translations while traveling abroad.

Keywords: Machine translation, artificial intelligence, tourism and hospitality, destination

Introduction

Technological progress, especially in artificial intelligence (AI), has significantly impacted the tourism and hospitality industries (Gurso & Cai, 2025).

The development of AI-driven technologies has accelerated the development of machine translation, providing a broad array of translation services, including text, voice, and even image translations (Alhaj, 2024). AI-based machine translations have become increasingly prevalent in the travel and tourism sectors. In particular, AI-based machine translators have significantly influenced tourists' travel experiences (Wang & Kirilenko, 2024) by changing how they interact with or comprehend language at their destinations (Carvalho et al., 2023). Research has demonstrated that utilizing technological tools in translation reduces cognitive effort while enhancing speed, efficiency and consistency (Alsaawi, 2024).

With the rapid pace of globalization and increasing intercultural mobility (Fan et al., 2022), tourists often face encounters with different cultures and communication as part of their cross-cultural experiences. However, tourists from various cultural and linguistic backgrounds, especially those with limited language proficiency in the local language of their travel destination, may experience challenges during their trips, as international travel involves interactions between speakers of different languages (Higgins & Ikeda, 2021). The inherent linguistic diversity in international tourism creates language barriers that disrupt smooth intercultural communication (Liu et al., 2023), and language differences can lead to misunderstandings and miscommunications (Fiset et al., 2024). The inability to speak the local language or having limited foreign language skills can result in a wide range of interpersonal difficulties, often accompanied by heightened anxiety or discomfort (Lu et al., 2021). Since language barriers can lead to dissatisfaction among tourists and negatively affect their overall travel experiences (Kim et al., 2020), overcoming these obstacles is crucial.

In this context, AI-based machine translation could be considered an effective tool for assisting tourists with communication challenges during travel to international destinations (Carvalho et al., 2023). Given the substantial impact of machine translation on how tourists engage in multilingual environments and foster intercultural communication with people from different linguistic and cultural backgrounds (Stewart, 2019), it can serve as an effective aid for tourists with limited local language skills, helping them bridge language gaps (Liebling et al., 2020). Tourists may face greater

challenges when evaluating the quality of machine translation in non-native languages, especially when they lack proficiency in those languages.

In the field of tourism research, there is a dearth of research that delves into how tourists experience machine translations and how AI-based machine translations play a role in shaping their travel experiences. It is important to understand how travelers perceive the use of AI-based machine translation in international communication because machine translations not only have revolutionized the way tourists communicate during overseas travel, but they can also affect tourists' performance and the overall quality of tourist experiences (Carvalho et al., 2023).

This study will explore the role of AI-based machine translations in affecting tourist experiences and provide new insights into the usage practices and limitations of AI-based machine translations.

Research outcomes should shed light on analyzing the impact of AI-based machine translations on travelers, understanding how machine translations can influence travel decisions, concluding by offering practical recommendations for tourism commerce, and communicating the desired features of AI-based machine translations that influence travelers' purchase intention. Consequently, there are three specific objectives in this study:

1. Investigate the usage of tools of AI-based machine translation and the perception of the effectiveness of AI-based machine translations. This objective provides much better insight into the existing partial and fragmented knowledge in current trends in AI-based language processing applications and their application in improving the quality of the tourism experience;
2. Identify strengths, weaknesses, opportunities and threats of AI-based machine learning;
3. Provide managerial implications for practitioners and marketers of the tourism sector to increase the AI-based machine translations' ability to attract floating consumers thereby achieving a competitive advantage.

Literature Review

Machine translation and artificial intelligence (AI) have seen significant advancements in recent years, profoundly impacting translation and cross-border communication. Modern, advanced technology is commonly used for tasks like creating translation memories, aligning texts, managing terminology, checking spelling and grammar, accessing and searching electronic corpora, and performing translations. Additionally, the development of Neural Machine Translation (NMT) has made it possible to interpret context and linguistic nuances, leading to more accurate and contextually informed translations. This rapid progress has opened up new opportunities in various fields, including tourism and hospitality, where the

demand for cross-language communication and cultural exchange continues to grow.

A major advantage of these technologies is their ability to quickly and efficiently produce translations. By automating the complex process of language conversion, they facilitate the rapid dissemination of information to a global audience, greatly minimizing the time and effort required. Additionally, AI technology plays a key role in maintaining consistency in both language and style across diverse content, which is essential for ensuring clarity in tourism-related communication.

Despite these benefits, machine translation and AI technology have limitations that can affect the quality of translated tourism messages. One significant drawback is the potential for inaccuracies and mistranslations, especially when dealing with culturally specific references and idiomatic expressions. Additionally, the technology still struggles to fully adapt to the target audience, take into account local cultural norms, or handle languages that are less commonly spoken, such as those beyond English, German, or Spanish.

Recent academic studies have explored the transformative impact of advanced AI models, particularly ChatGPT, on translation and content retrieval in the tourism sector. For instance, ChatGPT's effectiveness in translating English into Hindi, Telugu, and Kannada can assist tourists in India's diverse linguistic landscape (Kolar & Kumar, 2023). Their findings indicated that while Hindi translations were notably accurate and fluent, Telugu translations were less effective. Furthermore, several studies examined ChatGPT's potential contributions to various tourism operations, including accommodation, transportation, and food services (Erul & Işın, 2023). They concluded that ChatGPT could significantly enhance customer service by providing instant assistance and personalized recommendations, thereby improving the overall tourist experience.

However, despite these advancements, challenges persist. The authors highlighted potential risks associated with ChatGPT's application in tourism, such as the dissemination of inaccurate information and the lack of human empathy in customer interactions (Carvalho & Ivanov, 2024). They emphasized the necessity of human oversight to mitigate these issues and ensure the delivery of reliable and culturally sensitive information to travelers.

In summary, while AI technologies like ChatGPT offer promising enhancements in translation and information retrieval within the tourism industry, it is crucial to balance automation with human intervention to address inherent limitations and uphold service quality.

Methodology

To investigate our research propositions, researchers adopted an exploratory descriptive approach, which emphasizes identifying patterns in data rather than testing theory-driven hypotheses (Mason et al., 2010). This approach is suitable when a field is relatively new or underexplored (Denzin & Lincoln, 2005) and when there is limited or no existing theory to comprehensively explain the phenomenon (Truong et al., 2020). Exploratory descriptive research aims to propose causal relationships by examining and outlining connections between variables, helping to build a foundation for understanding those relationships before formally testing them through explanatory research. This research design has been successfully utilized in many tourism and hospitality studies.

An exploratory design is essential in the initial stages of investigating a phenomenon in the tourism and hospitality field (Pantano & Servidio, 2011), especially for emerging and widely discussed technologies. The limited practical and theoretical understanding of machine translations in tourism and hospitality inspired our methodological approach. Additionally, there have been numerous calls in the tourism and hospitality literature for more empirical observations and descriptions of machine translation adoption and usage (Lee and Lee, 2024).

An introduction to the questionnaire was just below the seven questions on the cover page, including an assurance to respondents that their responses would be kept confidential.

The questionnaire has three sections and five two questions. The first section included demographic questions. Another section asked respondents to report their travel habits in a series of dichotomous questions. To explore the relationship between respondents and usage of IA-based machine translations for travel, the intensity has been measured using a 5-point Likert scale that varies between not useful at all = 5 to very useful = 1. The remainder of the questionnaire focused on the general knowledge of AI-based machine translators and their influence on holiday, including an exhaustive list of strengths, weaknesses, opportunities and threats.

The questionnaire was written in Italian because all respondents are Italian to limit nationality and social influence. To facilitate interviews, participants lived in Italy and used smartphone apps or at least had experience and knowledge of using smart devices.

An eleven-page questionnaire was used as the survey instrument and it was developed with four main constructs including scale items. Further, to collect required information from many respondents, interviewers used a face-to-face survey method.

Two-period pretests were conducted to test the questionnaire among tourism experts to enhance the length of the questionnaire. The validity of the

research instrument can be appraised by a panel of able professionals whose expertise can judge whether the scale measures what it intends to measure and the questions are clear (Zikmund et al., 2013).

The first pretest (n = 32) employed interviews with experts in restaurants and hotels. Some basic formatting issues were addressed because of the pretest. A second pretest (n = 12) was conducted with experts from travel agencies. Modifications and reviews, including a radical change of seven questions, were made because of this second test.

Based on the input received, modifications and reviews, including the cancellation of a few items in the questionnaire and a radical change of seven questions, were done and wording was changed to enhance understandability.

This study adopted a one-stage questionnaire survey approach to address concerns about non-temporal causal relationships in cross-sectional studies. Data collection occurred in September 2024. Questionnaires were sent out through email, and steps were implemented to verify IP addresses and avoid duplicate submissions. A total of 380 completed questionnaires were received, resulting in a response rate of 46.38%. Respondents were explicitly asked to reflect on the online context when filling out the responses to the questionnaire items. Fifty responses were eliminated due to their non-random missing value. The non-response biases were tested and compared the “early” and “late” respondents’ responses, based on the date of the received replies to the questionnaire (Tjuatja et al., 2024). Useable responses in the sample set from the face-to-face survey, from the total of 320 collected surveys (Table 1).

The data for the main study were collected, coded, and entered into the SPSS (Statistical Product and Service Solutions) program and tested via descriptive statistics.

Table 1. Descriptive information of the sample

Item		Per-cent (n) 100 (320)
Sociodemographic characteristics		
Gender	Male	37,30 (119)
	Female	62,70 (201)
Age (20-over 60)	20-29	29,68 (95)
	30-39	25,02 (80)
	40-49	18,12 (58)
	50-59	17,18 (55)
	Over 60	10 (32)
Nationality	Italian	100 (320)
Origin	Milan	91,88 (294)
	Milan suburbs	8,12 (26)
Relationship status	Single	20,94 (67)
	Living with another	16,56 (53)
	Married	50,31 (161)
	Widowed	0 (0)

	Separated Divorced	9,69 (31) 2,5 (8)
Education completed	High School Undergraduate Graduate Other	28,13 (90) 33,75 (108) 25,63 (82) 12,50 (40)
Occupation	Not employed Student Self-employed Professional Work in a firm Other	1,56 (5) 30,31 (97) 3,75 (12) 42,5 (136) 15,00 (48) 6,88 (22)
Vacation characteristics		
Vacation destination	Italy EU Outside EU	92 (420) 4,84 (25) 3,16 (10)
Principal means of transport	Ferries and boats Plane Train Rental car Personal car and motorbike	5,4 (25) 7,2 (33) 13,7 (62) 5 (23) 68,7 (312)
Motivations	Scout Family Sport Religion Business Education Culture and leisure	0,4 (2) 38,2 (174) 8 (36) 1,7 (8) 4,1 (19) 28,7 (131) 18,9 (85)

Findings and discussion

The results of this study yield several insights that confirm previous findings and shed light on the future of AI-based machine translations in tourism and hospitality.

Most of the respondents consider it very important to communicate in a foreign language while traveling. 82.6% of the participants reported encountering communication difficulties in a foreign country, but they believe that language barriers are not a major obstacle to travel. During their trips, many people use AI-based translation apps, such as Google Translate and ChatGPT, mainly to translate images (45.7%) and for voice translation (41.3%). Only 13% of the sample use them to translate messages or emails.

The use of AI-based translation software has allowed 52.2% of people to solve language misunderstandings, while 54.3% believe it increases independence while traveling. Only 34,8% of the sample believe it improves tourism experience.

Despite the use of intelligent translation software, most people believe it can never replace learning a foreign language. While traveling, people

primarily use Google Translate and ChatGPT to read tourist information and menus (65.2%) or to communicate with locals (47.8%).

However, the accuracy of translations is still a topic of discussion due to the immaturity of computer algorithms and cultural differences. Additionally, 71.7% of respondents expressed concerns about personal data security, believing that there are risks, but that these risks can be managed with proper data security safeguards.

The questions to the open questions proposed in the questionnaire about strengths, weaknesses, opportunities and threats are interesting. Out of a total of 145 responses, there are some recurring strengths, weaknesses, opportunities and threats that many respondents are interested in (Table 2).

Table 2. Strengths, weaknesses, opportunities and threats of AI-based machine translations

Strengths	-Speed and efficiency: machine translation can process texts and speech almost instantly, reducing the time needed to translate documents or communications. This is particularly useful in business contexts, travel, or emergencies. -Affordability: many AI-based translation tools, such as Google Translate or DeepL, are free or require a low-cost subscription. This makes them accessible to private users, businesses, and organizations of all sizes. -Multilingual support: AI tools can translate between dozens or even hundreds of languages, including less common dialects, helping bridge the language gap in many areas around the world.
Weaknesses	-Limited precision and quality: despite advancements, IA-based machine translations can contain errors, especially in complex or technical texts. There are still challenges in translating idioms, slang, or creative content such as poetry. -Lack of cultural context: AI struggles to grasp the cultural or emotional context of a phrase. Literal translations or misinterpretations can lead to misunderstandings, particularly in sensitive situations. -Dependence on data: the quality of translations heavily depends on the quantity and diversity of the data used to train the models. Languages that are less represented in datasets may receive less accurate translations.
Opportunities	-Expansion of global markets: AI-based translations enable businesses to communicate with international customers without language barriers, opening new commercial opportunities. -Integration with emerging technologies: AI can be combined with emerging technologies like augmented reality (AR) or virtual reality (VR). For instance, tourists could use AR devices to translate street signs or menus in real-time. -Specific sectors: the development of AI models tailored for sectors such as law, medicine, or engineering can lead to more accurate and useful translations for professionals and organizations.
Threats	-Growing competition: The increasing number of AI-based translation service providers can make it challenging for businesses to differentiate themselves and maintain market share. -Privacy concerns: Translation tools that process sensitive data could compromise user privacy or be vulnerable to security breaches.

	-Risk of misunderstandings: Translation errors in critical contexts (e.g., medical or legal) can have serious consequences, leading to misunderstandings or wrong decisions.
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Intelligent translation apps are important tools for travelers, primarily used to communicate with locals, translate menus, and obtain tourist information, somewhat enhancing the comfort of the travel experience. However, due to the current immaturity of computer algorithms and cultural differences, translation errors may occur. Additionally, some tourists have concerns about data security, fearing potential privacy breaches. Despite this, the questionnaires indicate that the use of AI-based translation tools will never replace learning and knowing a foreign language.

Conclusions

Previous research demonstrated that AI machine translations significantly influence the experience that a tourist perceives or expects from tourism products or services. Furthermore, tourist's experiences could change across different countries. While a growing body of research has explored the perception of AI machine translations (Carvalho et al., 2025) and the experiences of travelers, there has been no research that reveals several suggestions that could be applied by manufacturers of AI-based translation devices to improve the product and, consequently, enhance the consumer experience. First and foremost, improving the accuracy of translations, as it is not always guaranteed, was a key point. It is therefore recommended that providers of AI-based translators invest further in optimizing algorithms to improve precision. Regular updates to language databases and the introduction of models that consider cultural nuances could reduce errors and enhance the user experience. Concerns about data security are evident among users. Therefore, it is essential that AI-based translation applications adopt strict data protection measures, such as encryption and transparent privacy policies. This way, users will be more willing to use these tools without the fear of compromising their privacy. Additionally, to improve the user experience, translation apps should be easily integrable with other device functions, such as the camera, messages, and voice calls. A single app that offers real-time voice, text, and image translations could be very useful, eliminating the need to switch between different applications. By implementing these improvements, AI-powered translation tools could become even more effective and appreciated by travelers, enhancing the overall travel experience and increasing user trust. However, travelers still perceive the knowledge of a foreign language as highly necessary, and how these new AI-based translator systems are not yet a primary tool for consumers to satisfy this need. In conclusion, there is no doubt that AI-powered automatic translators are a

breakthrough in terms of the tourism experience. They are an evolving and changing tool that is being refined year after year, ensuring smaller margins of error and an increasing number of translatable languages. This new tool could revolutionize the tourism sector, smoothing out language barriers that still exist today and also making the work of industry operators easier. The marketing efforts of the main producers of this service should, therefore, focus on continuously improving the product. In addition, they should tailor their sales approach to highlight the consumer's need to interpret a foreign language as quickly and accurately as possible, while also making their own needs more understandable in a country where they do not speak the local language. While this research offers important insights, it does have some limitations. The study was primarily conducted with participants from Italy, which could affect how widely the results can be applied. Moreover, nearly half of the participants were in their 20s and 30s with strong digital skills. Different age groups often have distinct views on machine translation, especially since older adults may struggle with it due to their unfamiliarity or limited experience with such technology (Panayiotou et al., 2019). The study also raised additional questions and hypotheses that should be explored in future research. To begin with, the implication of the subject matter on the acceptability of the visitors in relation to the host communities, such as locals, retailers, tourism employees, and other tourists, should form part of future research (Lee & Lee, 2025). Further studies could explore how individual characteristics, such as cultural backgrounds or linguistic knowledge, as well as age, influence opinions on machine translation usage in tourism and hospitality. Gaining an understanding of these differences could offer valuable insights into how different demographic groups perceive and use machine translations. Furthermore, as artificial intelligence technology continues to advance, the accuracy of machine translations in grammar and vocabulary translation is improving (Chen, 2023). As a result, tourists' perspectives on machine translations may change or evolve over time. Therefore, a longitudinal study would be useful for capturing a more nuanced understanding of context-dependent and individual-specific views on machine translations in the tourism and hospitality sector.

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References:

1. Alsaawi, A. (2024). Role of machine translation in promoting the tourism sector in support of Saudi Vision 2030. *International Journal of Linguistics, Literature and Translation*, 7(12), pp. 180-195, <https://doi.org/10.32996/ijllt.2024.7.12.21>.
2. Alhaj, A.A.M. (2024). The impact of machine translation on the development of tourism translation from the perspectives of translators and experts in Saudi Arabia. *Theory and practice in Language Studies*, 14(4), pp. 1274-1283, <https://doi.org/10.17507/tpls.1404.35>.
3. Carvalho, I., Ramires, A., Iglesias, M. & Fidalgo, A. (2025). Not all language tourists take language courses – the determinants of formal and informal language tourism. *Journal of Vacation Marketing*, 31(1), pp. 83–97. <https://doi.org/10.1177/13567667231185378>.
4. Carvalho, I., Ramires, A. & Iglesias, M. (2023). Attitudes towards machine translation and languages among travelers. *Information Technology & Tourism*, 25, pp. 175–204. <https://doi.org/10.1007/s40558-023-00253-0>.
5. Denzin N.K., & Lincoln, Y.S. (2005). *Handbook of Qualitative Research*. Sage: London.
6. Fan, D.X.F., Tsaur, S.H., Lin, J.H., Chang, T.Y., & Tsa, Y.R.T. (2022). Tourist Intercultural Competence: A Multidimensional Measurement and Its Impact on Tourist Active Participation and Memorable Cultural Experiences. *Journal of Travel Research*, 61(2), 414-429, <https://doi.org/10.1177/0047287520982372>.
7. Fiset, J., Bhavé, D. P., & Jha, N. (2024). The Effects of Language-Related Misunderstanding at Work. *Journal of Management*, 50(1), 347-379, <https://doi.org/10.1177/01492063231181651>.
8. Gursoy, D. & Cai, R. (2025). Artificial intelligence: an overview of research trends and future directions. *International Journal of Contemporary Hospitality Management*, 37(1), pp. 1-17, <https://doi.org/10.1108/IJCHM-03-2024-0322>.
9. Higgins, C. & Ikeda, M. (2021). The materialization of language in tourism networks *Applied Linguistics Review*, 12(1), pp. 123-152, <https://doi.org/10.1515/applirev-2019-0100>.
10. Jones, M.A., & Reynolds, K.E. (2006). The role of retailer interest on shopping behavior. *Journal of Retailing*, 82(2), 115-126, <https://doi.org/10.1016/j.jretai.2005.05.001>.

11. Kim, J. H., Wang, Y., & Song, H. (2020). Understanding the causes of negative tourism experiences. *Current Issues in Tourism*, 24(3), pp. 304–320, <https://doi.org/10.1080/13683500.2020.1711711>.
12. Law, R., Lei, S.I, Zhang, K., & Lau, A. (2024). Bridging theory-practice gap: a critical reflection on information and communication technology research. *International Journal of Contemporary Hospitality Management*, 36(6), 1980-1990, <https://doi.org/10.1108/IJCHM-02-2023-0131>.
13. Lee, K., & Lee, N. (2025). Applying cultural-historical activity theory to understand Korean tourists' experiences with language translation applications. *Current Issues in Tourism*, 1–18. <https://doi.org/10.1080/13683500.2025.2464773>.
14. Lee, N., & Lee, K. (2024). Travelers' viewpoints on machine translation using Q methodology: a perspective of consumption value theory. *Information Technology in Tourism*, 26, 611–632, <https://doi.org/10.1007/s40558-024-00296-x>.
15. Li, Z., Yang, Y., & Zhang, X. (2024). Family travel as educational experience: revealing multi-level parents' perceived value through a family system approach. *Tourism Management Perspectives*, 53, <https://doi.org/10.1016/j.tmp.2024.101301>.
16. Liebling, D.J., Robertson, S., Heller, K., & Deng, W.H. (2022). Opportunities for human-centered evaluation of machine translation systems. Findings of the Association for Computational Linguistics: NAACL 2022, pp. 229 – 241, <https://doi.org/10.18653/v1/2022.findings-naacl.17>.
17. Lu, L., Wong, I.A., & Zhang, Y. (2021). Second language acquisition and socialization in international trips. *Journal of Hospitality and Tourism Management*, 47, pp. 1-11, <https://doi.org/10.1016/j.jhtm.2021.02.007>.
18. Mason, P., Augustyn M., Seakhwa-King, A. (2010). Exploratory study in tourism: designing an initial, qualitative phase of sequenced, mixed methods research. *International Journal of Tourism Research*, 12(5), pp. 432-448, <https://doi.org/10.1002/jtr.763>.
19. Pantano, E. & Servidio, R. (2011). An exploratory study of the role of pervasive environments for promotion of tourism destinations. *Journal of Hospitality and Tourism Technology*, 2(1), pp. 50-65, <https://doi.org/10.1108/17579881111112412>.
20. Puppel, M. & Borg, C. (2025). Evaluating ChatGPT's performance in creative text translation for communication: a case study from English into German. *Media and Intercultural Communication: A Multidisciplinary Journal*, 3(1), pp. 1-27, <https://doi.org/10.22034/mic.2024.480506.11023>.

21. Shuang, L., Gallois, C., & Volvic, Z. (2023). *Introducing intercultural communication: global cultures and contexts*, London: Sage Publications.
22. Stewart, D (2019). English for tourism in the non-native English classroom: machine translation and corpora. in: Ennis MJ, Petrie GM (eds) *Teaching English for tourism: bridging research and praxis*. Routledge, Amsterdam, pp 114–130, <https://doi.org/10.4324/9780429032141>.
23. Truong, D., Xiaoming Liu, R. & Yu, J.(J). (2020). Mixed methods research in tourism and hospitality journals. *International Journal of Contemporary Hospitality Management*, 32(4), pp. 1563-1579, <https://doi.org/10.1108/IJCHM-03-2019-0286>.
24. Wang, L., Kirilenko, A.P. (2021). Do Tourists from Different Countries Interpret Travel Experience with the Same Feeling? Sentiment Analysis of TripAdvisor Reviews. In: Wörndl, W., Koo, C., Stienmetz, J.L. (eds) *Information and Communication Technologies in Tourism 2021*. Springer, Cham. https://doi.org/10.1007/978-3-030-65785-7_27.