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# Festivals in Age of AI: Smarter Crowds, Happier Fans

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**Abstract:** Artificial intelligence (AI) stands out as a transformative force in various sectors, offering both new opportunities and challenges. In tourism and music events, AI has proven to be a powerful tool for improving the attendee experience, personalizing artist recommendations, optimizing event logistics in real time, and enhancing audience interaction through virtual assistants and immersive visual effects, thus highlighting its transformative potential. This study aims to analyze the impact of applying AI to the experience of consumers at music festivals. In particular, the research examines the impact of AI on the quality of information delivered, the extent of consumer engagement with brands at the event, and the level of trust in the technology. A quantitative methodology was used, collecting 400 responses from Portuguese consumers who attended music festivals. The results show that the quality of information and the AI positively influence customer engagement with the brand. Greater customer engagement, in turn, increases the willingness to use AI solutions. Trust in AI is significantly shaped by the quality of the information and the reliability of the system, which further promotes electronic word-of-mouth (eWOM) and the willingness to adopt AI. In addition, eWOM plays a key role in encouraging the use of AI technologies. Finally, memorable tourist experiences positively influence the willingness to adopt AI, underlining the importance of experiential factors in promoting adoption. These results highlight the interconnected roles of information quality, trust, involvement, and user experiences in shaping attitudes toward artificial intelligence applications. This study expands the literature by analyzing how AI-driven information quality influences consumer trust and engagement, thus emphasizing the need to optimize these factors for better festival strategies. It highlights the link between trust and positive eWOM, showing that trust based on high-quality information enhances the festival's reputation and attracts participants. A key contribution is its exploration of how trust and eWOM influence AI adoption at future festivals, which offers insights to boost credibility and acceptance. Lastly, it provides strategic guidelines that improve attendee experience and festival management.

**Keywords:** artificial intelligence; electronic word-of-mouth; memorable experiences in tourism; system quality; information quality; customer involvement with the brand

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## 1. Introduction

Artificial intelligence (AI) is redefining the music festival and tourism sectors, improving the personalization of the attendee experience, optimizing the logistical management of events, and facilitating real-time interaction while at the same time presenting challenges related to the adoption of and trust in technology. In everyday life, there has been a significant increase in approaches based on this technology (Gomes & Lopes, 2024; Vinuesa et al.,

2020). According to [Duan et al. \(2019\)](#), industries such as manufacturing, commerce, and services have integrated AI solutions to increase the efficiency and effectiveness of their processes. In the context of tourism and music events, AI has shown great potential for transforming the attendee experience ([Buhalis & Sinarta, 2019](#)) by offering personalized recommendations, customized customer service, and real-time data analysis ([Camilleri & Troise, 2023](#)). This transformative role of AI aligns with the nature of music festivals as hedonic experiences, which enhances attendees' sense of escape by delivering seamless, personalized interactions and optimizing event logistics for a more immersive and enjoyable atmosphere.

According to [Morgan \(2008\)](#), music festivals are hedonic events that provide an opportunity to escape from the daily grind. These events have become increasingly popular, and their participants seek memorable experiences ([Oliva, 2023](#); [Saragih & Amelia, 2020](#)). AI facilitates these experiences by offering personalized recommendations, creating immersive interactions through augmented reality and chatbots, and optimizing event management in real-time, thus ensuring a more fluid and engaging experience. [Sisson and Alcorn \(2022\)](#) point out that creating an exceptional experience is crucial to the success of a festival as this contributes positively to audience loyalty and amplifies intentions related to the electronic word-of-mouth (eWOM). Thus, by leveraging AI, festivals can create exceptional experiences that foster audience loyalty and amplify eWOM as it enables more sophisticated personalization, predicts preferences, and optimizes event scheduling ([Lopes et al., 2024a](#); [Luxford & Dickinson, 2015](#)). According to [Liu et al. \(2017\)](#), understanding the connections between experience, entertainment, and aesthetics is essential for organizers to adapt to the design of music events. AI can facilitate this understanding by analyzing large volumes of data in order to identify patterns of behavior and preferences, which allow for real-time adjustments that significantly enhance participants' experiences ([Doborjeh et al., 2022](#); [Wang, 2024](#)). Focusing on these factors allows organizers to not only improve experiences but also build stronger, longer-lasting relationships with customers ([Fernandes & Krolikowska, 2023](#)).

Given this context, two research questions arise: (1) What is the impact of AI on consumer experience at music festivals? (2) How can AI be used to enrich consumer engagement at music festivals and promote a greater emotional connection and engagement with companies? This study aims to analyze the impact of applying AI to the experience of Portuguese consumers at music festivals. In particular, the research focuses on assessing how AI influences the quality of the information provided, the level of consumer engagement with the brands present at the event, and the degree of trust placed in the technology, highlighting its potential to create deeper and more memorable emotional connections. In addition, it seeks to analyze the influence of these factors on consumers' intention to use AI at future festivals, as well as through eWOM. To achieve these objectives, they were collected from Portuguese consumers who attended music festivals.

The study makes six important contributions. Firstly, it presents a detailed analysis of how the quality of information provided by AI systems impacts consumer trust and engagement, highlighting the need to optimize these variables to improve strategies at festivals. Secondly, it contributes to the existing literature by exploring the relationship between AI-driven trust and positive eWOM, showing that trust built on quality information can generate positive recommendations. These recommendations, in turn, influence potential participants and add value to the festivals' image. Third, the study investigates how AI-based trust and positive eWOM directly affect consumers' intention to use AI technologies at future festivals, offering valuable insights for organizers to increase the adoption and credibility of AI applications at events. Fourthly, it provides an in-depth

overview of the benefits associated with implementing AI at festivals, highlighting how this technology can optimize consumer experience and improve event management.

Fifth, this study highlights the crucial role of AI-generated information quality in fostering consumer trust and engagement at music festivals. By demonstrating that reliable and transparent AI systems improve attendee confidence and encourage interaction with brands, the research underscores the necessity for festival organizers to prioritize the accuracy, clarity, and accessibility of AI-driven communication.

Finally, the study provides insights into the potential of AI-driven personalization to enrich festival experiences. By recommending strategies such as real-time personalized recommendations, AI-powered chatbots, and sentiment analysis, the research offers practical applications for enhancing attendee satisfaction. Furthermore, it emphasizes AI's role in improving event logistics such as crowd management and tailored VIP experiences.

## 2. Literature Review

### 2.1. Theoretical Framework

The Technology Acceptance Model (TAM) is a widely recognized framework that seeks to explain how users come to accept and use technology (Dabić et al., 2025; Rodrigues et al., 2021). TAM posits that perceived ease of use and perceived usefulness are the primary determinants of a user's intention to use technology (Camilleri, 2024; Lopes et al., 2024b). These constructs play a crucial role in assessing the impact of artificial intelligence (AI) on the quality of information delivered to consumers. When consumers perceive that AI enhances the usefulness and usability of information, they are more likely to engage with the technology and trust its outputs. This model has been applied in various fields, for example, in health information systems, where it has demonstrated its efficacy in predicting user acceptance and behavior (Rahimi et al., 2018). As AI continues to evolve, understanding TAM's relevance becomes essential for evaluating its influence on consumer engagement with brands and the overall quality of information presented.

In contrast to TAM, the Unified Theory of Acceptance and Use of Technology (UTAUT) offers a broader perspective by incorporating additional factors that influence technology acceptance (Lee et al., 2025). UTAUT identifies four key constructs: performance expectancy, effort expectancy, social influence, and facilitating conditions (Bervell & Umar, 2017). These elements provide a more comprehensive understanding of how consumers interact with technology, particularly in the context of AI's role in enhancing information quality and fostering brand engagement at events. For instance, performance expectancy relates to the degree to which using AI is perceived to enhance the quality and relevance of information presented, while social influence encompasses the effect of peer behaviors on individual acceptance. This model's multifaceted approach enables marketers to better grasp how AI can enhance consumer trust and engagement with brands, ultimately leading to more successful technology implementations.

When comparing TAM and UTAUT, it becomes evident that both models offer valuable insights into the acceptance of AI technologies, yet they differ in their breadth and applicability (Al-Tarawneh, 2019). TAM provides a straightforward framework focused on ease of use and usefulness, making it particularly useful for evaluating specific AI applications in terms of information quality. Conversely, UTAUT encompasses a wider array of factors that can affect consumer engagement, making it particularly relevant in event settings where social dynamics play a crucial role (Lee et al., 2025). For example, while TAM might predict individual user adoption based on perceived benefits, UTAUT can account for how group norms and support systems influence broader consumer behaviors. By integrating insights from both models, we can develop a more nuanced understanding of the interplay between

AI, information quality, consumer engagement, and trust, thereby informing strategies for effective technology adoption in various contexts (Raffaghelli et al., 2022).

### 2.2. Artificial Intelligence in Music Festivals

According to Avdeeff (2019), AI challenges traditional concepts of creativity and authenticity in music, directly influencing the experience of festival-goers. AI also plays an essential role in introducing technological innovations that enhance personalization and interactivity at music events, as well as optimizing operational efficiency (Robertson et al., 2015). These emerging technologies are transforming music festivals, highlighting the importance of integrating tools such as AI, augmented reality, and streaming performances to exceed attendees' expectations, making the experience more unique and memorable.

Historically, the growth of AI in music events has been marked by significant technological advances. Its presence reflects not only technological evolution but also the growing intersection between art and technology, promoting more immersive and personalized experiences for attendees (Starkey et al., 2020). An example of this impact is the use of a real-time music tracking algorithm, which aided the orchestra's performance by synchronizing the visual content with the live music, enriching the audience's understanding and appreciation, and optimizing the spectators' experience (Arzt et al., 2015; Arzt & Widmer, 2015).

The application of innovative technologies has transformed the way music festivals are experienced, making them more immersive and engaging for audiences (Elnur, 2024; Sebata & Mollah, 2022). This idea reflects a general perception that AI plays a key role in elevating the live music experience. The benefits of AI in music festivals are wide-ranging, including everything from personalizing experiences based on individual preferences (Cheng, 2022), to increasing operational efficiency through tools such as chatbots. In addition, AI makes it possible to captivate audiences by creating immersive experiences and promoting personalized interactions during events (Rihova et al., 2015).

However, the use of AI presents major challenges, such as issues related to privacy, data security and resistance to adopting new technologies (Williamson & Prybutok, 2024). To address these challenges, organizations must implement transparent AI governance frameworks and ethical guidelines that prioritize user privacy and data security, fostering greater acceptance and trust in the technology. According to Aldboush and Ferdous (2023), it is essential to ensure compliance with data protection laws and adopt corporate digital responsibility practices to mitigate resistance and strengthen public and organizer trust. In addition, it is essential for festival organizers to be aware of emerging trends in order to maximize the potential of these technologies, considering the constantly evolving technological landscape (Robertson et al., 2015; Sebata & Mollah, 2022).

### 2.3. The Quality of Artificial Intelligence and Customer Engagement with the Brand

The implementation of an integrated quality management system based on AI technology highlights the need to improve traditional quality management systems (Aniba et al., 2024; Hassan et al., 2024), which is in line with contemporary trends of innovation and continuous improvement. In this context, the quality of the data used by AI plays a critical role. High-quality data significantly improve the efficiency and accuracy of AI models, while low-quality data can have negative impacts such as failures in results and loss of user confidence. It is, therefore, essential to establish robust mechanisms for quality control and systematic verification of these data (Bayram et al., 2024).

It is essential to explore and understand the elements that guarantee the effectiveness of AI systems, especially with regard to the quality of the results produced. According to Colosimo et al. (2021), practices such as systematic data quality management, analysis

of the causes of errors, rigorous quality measurement and effective fault correction are indispensable for promoting the consistency, reliability and excellence of AI systems. In addition, the acceptance and effectiveness of these systems are directly related to trust and understanding on the part of users, elements that need to be cultivated through accurate and transparent results (Ryan, 2020).

The relevance of the information produced by AI goes beyond technical performance, playing a central role in the interaction between customer and brand. According to Huang and Rust (2018), AI's ability to provide personalized information increases customer satisfaction and encourages deeper and more frequent interactions with the brand. This personalization allows AI to offer tailored recommendations by drawing on consumers' purchase history and preferences, thus strengthening the emotional connection between consumer and brand (Grewal et al., 2017).

According to Luo et al. (2019), AI-equipped chatbots are efficient at solving problems, which increases consumer loyalty to the brand. The accuracy and relevance of the information provided by these systems are key to establishing trust, which has a direct and positive impact on consumer experience (Ridzuan et al., 2024). In addition, as Kumar et al. (2019) point out, the integration of AI into marketing strategies can significantly improve consumers' perception of the brand, reinforcing its relevance and credibility in the market.

Building on these findings, it becomes evident that the quality of AI-generated information is a determining factor in shaping consumer engagement with brands. Reliable, accurate, and personalized AI-generated content enhances consumer trust and fosters more meaningful interactions, leading to stronger engagement (Wirtz et al., 2018). When AI delivers high-quality recommendations and transparent communication, consumers are more likely to develop a positive perception of the brand and engage with it more actively (Pantano & Pizzi, 2020).

**H1a:** *The quality of AI information has a positive impact on customer engagement with the brand.*

According to Tanzaretha and Rodhiah (2022), customer engagement with the brand has a direct and positive impact on brand loyalty, which reinforces the emotional attachment and predisposition of consumers to maintain lasting relationships with the brand. In addition, Khrais (2020) points out that customer interactions, especially on social media platforms, are largely favored by positive experiences, which, in turn, stimulates a stronger and more active commitment to the brand.

In this context, high-quality AI systems are emerging as key elements in enhancing these interactions. As Yang (2023) points out, these systems not only promote greater satisfaction in the long term but also guarantee reliable and efficient interactions, which are essential for building and sustaining consumer trust. AI's ability to analyze large volumes of data and identify complex patterns plays a crucial role in personalizing marketing strategies, enabling brands to offer more relevant experiences aligned with their customers' individual preferences. This, in turn, contributes to strengthening the relationship between consumers and brands, generating deeper engagement (Vinerean & Opreana, 2021).

A well-designed and quality AI system enhances consumer engagement by delivering seamless, responsive, and adaptive interactions. AI-driven systems that offer real-time personalization and proactive customer support significantly improve consumer-brand relationships by fostering trust and satisfaction (Whig et al., 2024). Furthermore, AI systems with advanced natural language processing capabilities create a more human-like experience, increasing consumer confidence and engagement (Garima & Bansal, 2024).

**H1b:** *The quality of the artificial intelligence system has a positive impact on customer engagement with the brand.*

Customer recognition of the community and the brand is a critical agent for customer involvement. This recognition promotes a deeper interaction between the consumer and the brand, establishing a relationship of mutual value. According to [H. L. Kim and Hyun \(2019\)](#), customer engagement with the brand on social media is indispensable, as it can significantly increase eWOM. In addition, customer engagement not only increases eWOM but also strengthens brand loyalty as a strong emotional connection is established with the customer ([Leite et al., 2024](#)). The emotional connection is essential for turning occasional consumers into brand advocates, acting as mediators of positive information about the brand on social networks. According to [Martínez-López et al. \(2021\)](#), commitment directly favors participation in the community and the desire to co-create with the brand, as well as positively influencing eWOM. This commitment not only increases interaction within virtual communities but also encourages consumers to become active collaborators in building the brand's reputation. According to [Zhao et al. \(2016\)](#), more engaged consumers tend to share their experiences of brands on social media, influencing other potential consumers. These ideas are considered more credible than information provided by marketing ([Dobre et al., 2021](#)).

**H2a:** *Customer engagement with the brand has a positive impact on eWOM.*

According to [Ao et al. \(2023\)](#), the truthfulness and credibility of virtual influencers are critical factors that shape trust and acceptance of new technologies. Virtual influencers who are well aligned with brand values have the potential to amplify this trust, promoting consumer acceptance of the technology. A high level of consumer engagement with the brand not only strengthens loyalty but also increases consumers' willingness to use new technologies ([Thomas, 2023](#)). [Thomas \(2023\)](#) also points out that loyal consumers are more open to exploring technologies that bring tangible benefits, such as AI solutions integrated into the customer experience. As noted by [Gerlich \(2023\)](#), the trust and credibility that are established by consistent and controlled interactions contribute to greater consumer engagement and acceptance of AI technologies. This trust-building process is facilitated by well-designed and engaging experiences, which make consumers more receptive to technological innovations. Brands that succeed in creating positive engagement experiences are in a better position to introduce AI solutions effectively and with a higher acceptance rate ([Binsaeed et al., 2023](#)).

**H2b:** *Customer engagement with the brand has a positive impact on the willingness to use artificial intelligence.*

#### 2.4. Artificial Intelligence and Trust

According to [Siau and Wang \(2018\)](#), trust is a critical element for the acceptance and adoption of artificial intelligence technology, as it reduces uncertainty and increases consumers' willingness to interact with AI. A key factor in building this trust is the transparency of AI processes, which enhances perceptions of effectiveness and fairness while reducing perceived risks ([Hulsen, 2023](#); [Yu & Li, 2022](#)).

By providing reliable and verifiable information, AI can mitigate consumer mistrust, ensuring consistency in accuracy and reliability over time ([Ferrario et al., 2020](#)). This consistency is essential for transforming one-off interactions into lasting relationships between consumers and AI-based systems. Moreover, transparency fosters the perception that AI operates fairly, reinforcing the importance of eliminating bias in decision-making ([Hoff & Bashir, 2015](#)).

**H3a:** *The quality of information provided by artificial intelligence has a positive impact on trust.*

The quality of AI systems is a key element in building and maintaining consumer trust, encouraging the adoption and continued use of the technology. According to [Hoffmann and Reich \(2023\)](#), the consistency and accuracy of the information created by AI systems are determining factors for user acceptance and trust. In addition, the clarity with which systems communicate the logic of their recommendations is crucial to reducing the perception of risk. By providing insights into how decisions are made, AI systems can reduce risk perception and increase consumer trust ([Gupta, 2024](#)). According to [Yin and Qiu \(2021\)](#), the effectiveness of AI in providing personalized recommendations, improving the experience, and ensuring accuracy influences not only trust in these systems but also favors purchase intention and brand loyalty.

**H3b:** *The quality of the artificial intelligence system has a positive impact on trust.*

Trust directly impacts eWOM, as it significantly increases the likelihood that users will participate in positive eWOM by sharing their experiences and opinions with other users ([Seo et al., 2020](#)). This sharing amplifies brand credibility, especially in digital environments where consumers trust the opinions of peers more than information provided directly by companies. According to [Hossain et al. \(2019\)](#) and [Wirtz and Chew \(2002\)](#), trust is a crucial relational factor that persuades eWOM behaviors, promoting greater dissemination of feedback. From a sociological perspective, social trust ([Luhmann, 2018](#)) plays a key role in shaping these interactions. When AI systems are perceived as reliable and unbiased, users are more likely to engage in positive eWOM, reinforcing collective trust in both the technology and the brand. Conversely, if AI-generated content is inconsistent, misleading, or perceived as unfair, trust deteriorates, leading to negative eWOM and reputational damage for the brand ([Jingchuan & Wu, 2024](#); [Toff & Simon, 2025](#)). Consumers' perception of systems technology improves significantly due to trust, which has a direct effect on participation in positive eWOM ([Reza Jalilvand & Samiei, 2012](#)).

**H4a:** *Trust in artificial intelligence has a positive effect on eWOM.*

Understanding and ease of use of AI systems contributes to increased user satisfaction, as well as reducing perceived risk. This creates a positive feedback loop in which satisfaction fosters greater use, consolidating trust in AI systems. According to the Trust and Risk Model ([Mayer et al., 1995](#)), trust is built upon the perceived competence, integrity, and benevolence of a system. In the context of AI, competence is linked to the system's accuracy and effectiveness, integrity relates to transparency and fairness, and benevolence reflects the AI's alignment with user interests. If any of these elements are compromised, such as when AI systems exhibit biases or errors, trust diminishes, reducing user engagement and adoption ([Jingchuan & Wu, 2024](#)). Conversely, when trust is reinforced, users are more likely to feel confident in the system's reliability, increasing their willingness to integrate AI into their daily activities. This increase stimulates the intention to use AI technologies and shows a positive impact on trust in AI technologies ([Seo & Lee, 2021](#)).

According to [Milicevic et al. \(2024\)](#), trust in AI is connected to a greater willingness to adopt and use AI systems, as users trust the accuracy and safety of this technology. This trust is key to overcoming initial resistance and promoting wider acceptance of AI in various contexts, such as music festivals ([Gvili & Levy, 2018](#)). However, biases in AI decision-making can significantly erode trust, especially when users perceive AI systems as reinforcing social inequalities. For example, [Z. Chen \(2023\)](#) and [Roy et al. \(2024\)](#) have shown that biased AI algorithms in hiring processes have led to discriminatory outcomes, disproportionately disadvantaging women and minority groups. Such cases damage users' perception of AI's fairness and reduce their willingness to use these systems in critical

decision-making contexts (Shulner-Tal et al., 2024). On the other hand, when AI systems demonstrate fairness and transparency, they create a sense of security and predictability for users, further strengthening trust. This trust not only increases acceptance but also encourages users to explore new applications of AI, reinforcing a cycle of technological engagement and long-term adoption. In addition, trust establishes an environment conducive to experimentation and the discovery of new uses for AI. According to Mim et al. (2022), a cycle of technological acceptance and engagement develops as trust broadens users' willingness to adopt and use AI technologies.

**H4b:** *Trust has a positive impact on the willingness to use artificial intelligence.*

### 2.5. Artificial Intelligence and eWOM

As a means of digital communication between consumers, eWOM has had a direct and increased influence on the adoption behavior of new technologies (Tassiello et al., 2024). This impact stems from the exchange of experiences and opinions, which help shape perceptions about the usefulness and reliability of technologies. This influence is particularly notable when the perceived information is considered credible. According to Nofal et al. (2022), eWOM considerably influences consumer decisions, especially when the perceived information is credible. The credibility of eWOM increases when the opinions shared are detailed, specific, and come from sources that consumers perceive as impartial.

The varying sequence of eWOM (negative and positive comments) can lead to a change in consumer behavior, which can be applied to influence the willingness to use technologies such as AI (Park & Jeon, 2018). This alternation effect highlights that the balance between positive and negative information is crucial to creating realistic and trustworthy perceptions of technology. According to Lee and Shin (2014), the quality of information can affect consumers' perceptions of the usefulness and trustworthiness of a product or service, thus impacting adoption and use. High-quality information provides insights that increase understanding and reduce uncertainties, strengthening consumer confidence.

Customer engagement with AI is fundamental to the success of these emerging technologies, and it is essential to find solutions that overcome any existing barriers to acceptance and understanding (Williams et al., 2020). This engagement is facilitated when the eWOM acts as a clarification channel, helping consumers overcome initial doubts about the functioning and benefits of AI. The eWOM can therefore increase consumers' willingness to use AI by providing detailed and reliable information, reducing concerns, and increasing confidence in the technology. Thus, it plays an essential role in normalizing the use of AI, making it more accessible and attractive to consumers.

**H5:** *The eWOM has a positive impact on the willingness to use artificial intelligence.*

### 2.6. Memorable Experiences in Tourism with Artificial Intelligence

Artificial intelligence has been recognized as a key factor in the tourism industry due to its potential to improve customer experiences and optimize business operations (Nadda et al., 2024). Its application allows destinations and companies in the tourism sector to offer personalized services, reduce costs, and improve process efficiency, promoting greater tourist satisfaction and loyalty.

The AIDE model, described by Popovici (2023), focuses on Attention, Interest, Desire, and Emotion. This model assesses AI's impact on tourism. It examines how AI captures tourists' attention. It also explores how AI sparks interest. Additionally, it looks at how AI encourages interaction. Furthermore, it studies how AI builds emotional connections with visitors. The AIDE approach highlights AI's role in streamlining processes. It also shows how AI creates immersive experiences. Moreover, it demonstrates how AI makes

experiences memorable. Finally, it strengthens the emotional link between tourists and destinations. According to [Rusu et al. \(2023\)](#), the model highlights the potential of AI to create unique and impactful tourist experiences that are personalized and engaging. This potential is especially relevant in tourism, where differentiated experiences play a crucial role in forming memories and building visitor loyalty.

By emphasizing the emotional dimension of AI-driven experiences, the AIDE model provides a strong foundation for understanding how AI adoption can be encouraged. When AI systems not only capture attention and interest but also evoke desire and emotion, tourists develop a stronger psychological connection with the technology ([X. Chen et al., 2025](#)). This emotional engagement reduces skepticism and resistance to AI adoption, fostering a sense of trust and comfort ([Freitas et al., 2023](#)). As a result, tourists become more willing to integrate AI-based solutions into their travel experiences, reinforcing the hypothesis that memorable tourism experiences positively impact the willingness to use AI ([Mishra et al., 2024](#)).

For example, AI-powered chatbots assist travelers in real-time by providing instant recommendations, itinerary adjustments, and multilingual support, enhancing convenience and engagement ([Sharma, 2024](#)). Recommendation engines, such as those used by travel platforms like Booking.com and Airbnb, personalize suggestions based on user preferences, making trip planning more efficient and tailored. Additionally, augmented reality applications, such as virtual guided tours in historical landmarks or interactive museum exhibits, enrich the visitor experience by blending digital elements with real-world exploration, fostering deeper emotional connections with destinations ([Fattah et al., 2021](#)).

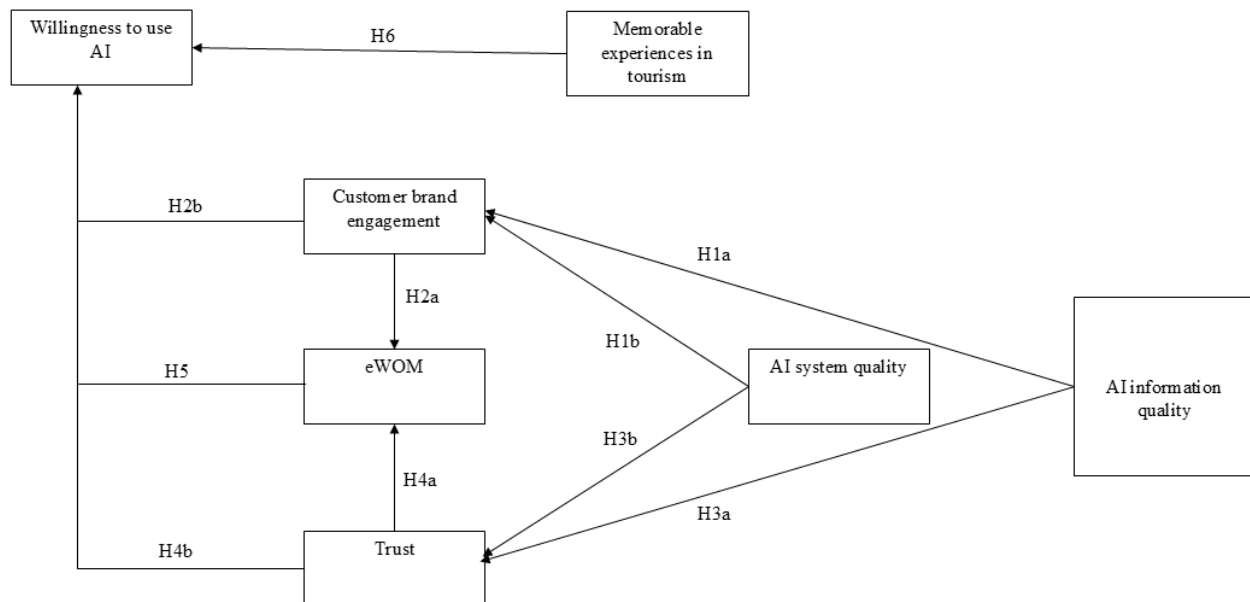
AI-driven experiences tap into tourists' emotions by creating personalized and immersive interactions that foster a sense of belonging and exclusivity. Personalized AI greetings upon arrival at hotels or attractions, for instance, make visitors feel valued, strengthening their emotional attachment to the destination ([Talukder, 2024](#)). Virtual reality and augmented reality tours allow travelers to engage with historical sites in a more intimate way, enabling them to step into different time periods or visualize ancient civilizations in their original splendor ([Leonardi et al., 2023](#); [Semwal et al., 2024](#)). This emotional engagement enhances the perceived authenticity of the experience, leading to a stronger connection with the destination. Additionally, AI-powered immersive storytelling, such as AI-generated narratives in museums or theme parks, can evoke nostalgia, curiosity, and excitement, reinforcing positive emotional memories associated with the brand ([Rachabathuni et al., 2025](#)).

According to [Li and Jiang \(2023\)](#), the perceived usefulness and ease of use of AI are determining factors in the formation of memorable tourism experiences. The combination of usability and perceived value reduces barriers to technological adoption, increasing tourists' confidence and interest in using AI-based solutions. When AI systems are perceived as easy to use and genuinely beneficial, tourists are more likely to engage with them without hesitation ([Topsakal, 2024](#)). The AIDE model aligns with this perspective, as emotionally resonant AI experiences can enhance perceived usefulness by demonstrating clear value in enhancing travel experiences. Furthermore, ease of use is reinforced when AI interactions feel intuitive and personalized, further solidifying trust and increasing the likelihood of continued AI adoption ([Lopes et al., 2024a](#)). These experiences have a significant impact on tourists' attitudes toward using and intention to adopt the technology. [Zhang et al. \(2022\)](#) state that the adoption of smart technologies in tourist destinations significantly improves visitor satisfaction by positively persuading their post-consumption behavioral intentions, such as the intention to repeat the visit and the willingness to pay a premium price. This demonstrates that the integration of smart technologies not only enhances the experience but also creates additional value perceived by tourists.

Smart technologies transform tourist experiences and increase tourists' willingness to use AI by offering interactivity and accessibility (Ionescu & Sârbu, 2024). Through these innovations, destinations are able to meet the expectations of increasingly demanding tourists, making AI an indispensable tool for promoting differentiated and engaging experiences.

**H6:** Memorable tourist experiences have a positive impact on the willingness to use artificial intelligence.

Figure 1 shows the research model.



**Figure 1.** Research model.

### 3. Material and Methods

#### 3.1. Sample Procedures

The study received approval from the Ethics Committee of the (blind for review) (approval number blind for review). First, the original items were translated from English to European Portuguese. Subsequently, a back-translation from Portuguese to English was performed by a native speaker to confirm content accuracy (Chen, 2008). A pilot study was conducted to evaluate the items' clarity and comprehension, with 15 Portuguese consumers reporting no difficulties in understanding the content (e.g., clarity of questions, response time, potential biases, ambiguous questions). Based on the feedback, several refinements were made to the final questionnaire.

The guidelines of the International Test Commission (Gregoire, 2018) were respected. Data collection occurred between September 2024 and November 2024 and was carried out through social media and digital platforms such as WhatsApp, Facebook, and Instagram (i.e., snowball sampling). A link was generated using the Google Forms platform to disseminate the questionnaire. The inclusion criteria required that participants be over 18 years old and attend music festivals. Additionally, the questionnaire included a question that allowed participants to indicate whether, in the past two years, they had attended a music festival in Portugal where artificial intelligence technologies had been used (e.g., ticket purchase—chatbot).

Participation was voluntary, and informed consent was required for all participants to be informed about the study's objectives. All participants provided informed, free, and explicit consent in the research protocol before beginning their responses to the questionnaire.

After a brief explanation of the study, participants indicated whether they agreed or not to participate in the research.

All measures were implemented to maintain the anonymity and confidentiality of the data collected.

### 3.2. Scales

A sociodemographic questionnaire was developed to assess the demographic characteristics of the participants. Additionally, seven instruments, previously adapted from other studies, were used and are detailed below. These instruments were designed to measure the following constructs: Artificial intelligence information quality (AIIQ), artificial intelligence system quality (AISQ), customer brand engagement (CBE), electronic word-of-mouth (eWOM), Trust (T), memorable experiences in tourism (MET), willingness to use artificial intelligence (WUAI). All items are answered using a 7-point Likert scale, ranging from strongly disagree (1) to strongly agree (7).

Artificial intelligence information quality (AIIQ) and artificial intelligence system quality (AISQ) are instruments adapted from [Gajić et al. \(2024\)](#) and [Nguyen et al. \(2022\)](#). AIIQ, which measures artificial intelligence information quality, includes nine items (e.g., “AI tools provide me with the latest information”), while AISQ, which measures artificial intelligence system quality, includes six items (e.g., “AI tools perform reliably”). Electronic word-of-mouth (eWOM) adapted from [Andrade and Tumelero \(2022\)](#) comprises three items (e.g., “I have recommended this brand in online pages to lots of people”). Trust (T) including five items (e.g., I believe this airline/hotel/restaurant is reliable for its customers) and customer brand engagement (CBE) measured by six items were adapted from [Nguyen et al. \(2022\)](#) and [Shabankareh et al. \(2024\)](#) (e.g., “I have a sense of belonging to the brand”). Willingness to use artificial intelligence (WUAI), which includes six items, was adapted from [Chi et al. \(2022\)](#) (e.g., “I am likely to interact with AI devices in airline/hotel/restaurant services”). Memorable experiences in tourism (MET), used to measure memorable travel experiences through six items, was adapted from [Jeong and Shin \(2020\)](#) and [J.-H. Kim \(2018\)](#) (e.g., “I revitalized through this tourism experience”).

### 3.3. Data Analysis

Data analysis was performed using IBM SPSS Statistics (version 29). Descriptive statistics, including means and standard deviations, were calculated for quantitative sociodemographic variables, while frequencies and percentages were determined for nominal variables. Additionally, an exploratory factor analysis (EFA) was conducted as the initial method in order to reveal the principal structure of the questionnaire items.

CFA was performed to confirm the factor structure identified in the EFA. It provided a rigorous method for assessing model fit and the reliability of the factors. A confirmatory factor analysis (CFA) was conducted to test the model fit; the following fit indices, the Comparative Fit Index (CFI) and the Tucker–Lewis Index (TLI), suggest a good model fit when values fall between 0.90 and 0.95, while the Standardized Root Mean Square Residual (SRMR) indicates an acceptable fit with values below 0.08 ([Hu & Bentler, 1999](#)). Additionally, the Root Mean Square Error of Approximation (RMSEA) was employed, with values under 0.10 considered indicative of good fit, evaluated within a 90% confidence interval ([Kline, 2023](#)). The Pearson correlation coefficient was used to evaluate convergent validity and to verify the assumptions necessary for estimating regression between dimensions. They are considered as weak ( $r = 0.10$  to  $0.29$ ), moderate ( $r = 0.30$  to  $0.49$ ), and strong ( $r \geq 0.50$  to  $1$ ) ([Pallant, 2020](#)). Linear regression was conducted considering customer brand engagement (CBE), electronic word-of-mouth (eWOM), willingness to use artificial intelligence (WUAI), and Trust (T) dependent variables for the regression analysis. To assess discriminant validity, the average variance ex-

tracted (AVE) was calculated following the guidelines of [Kline \(2023\)](#) with a threshold of AVE > 0.5 as recommended by [Marôco \(2014\)](#). Reliability for each dimension was evaluated using Cronbach's alpha and composite reliability (CR), with CR values exceeding the recommended minimum of 0.7 ([Hair et al., 2019](#)). Multicollinearity was examined through the Variance Inflation Factor (VIF). According to [James et al. \(2014\)](#), a VIF > 5 may indicate potential concerns, while values exceeding 10 suggest severe multicollinearity. In this study, all independent variables demonstrated VIF values below 5, confirming the absence of multicollinearity issues. A significance level of <0.050 was applied to all analyses.

## 4. Results

### 4.1. Sample Profile

The convenience sample comprised 400 participants (212 women, 53.0%, and 188 men, 47.0%). A cross-sectional was designed. The age range of the participants varied between 18 and 42 years old, with a mean age of 23.75 (SD = 3.60). The age range was 18–42 years old, with a mean age of 23.75 (SD = 3.60). Concerning years of education, 34 (8.5%) participants completed secondary school (12th grade), 258 (64.5%) had a university graduate degree, 100 (25.0%) had a master's degree and 8 (2.0%) had a doctoral degree (PhD). Regarding professional situations, 28.0% described themselves as being students, 37% were working students, 30.0% were employees, 4.5% were independent workers, and 0.5% were retired. The geographical distribution of the responses included the regions of Portugal, with the following results by region: Lisbon with an absolute majority of 67.0%, Centre with 18.5%, North with 5.0%, Algarve with 4.5%, Alentejo with 3.5%, and the remaining autonomous region with a less significant expression, Madeira with 1.5% (Table 1).

**Table 1.** Participants' demographic characteristics (N = 400).

Variables	Frequencies	(%)	Variables	Frequencies	(%)
Gender			Residence in Portugal		
Men	188	47.0	North	20	5.0
Women	212	53.0	Lisbon	268	67.0
Mean Age	23.75 ± 3.60		Centre	74	18.5
Years of education			Alentejo	14	3.5
12th grade	34	8.5	Algarve	18	4.5
Graduate degree	258	64.5	Madeira	6	1.5
Master's degree	100	25.0	Monthly net income		
PhD	8	2.0	0	84	21.0
Professional situation			EUR 1–EUR 824	178	44.5
Student	112	28.0	EUR 1001–EUR 1500	114	28.5
Student Worker	148	37.0	EUR 1501–EUR 2000	16	4.5
Employee	120	30.0	>2000	8	2.0
Independent worker	18	4.50			
Retired	2	0.5			

### 4.2. Statistical Analysis

An exploratory factor analysis (EFA) was performed to examine the factor structure of the survey. The analysis revealed seven factors, accounting for a total variance of 77.74%. For the Trust construct, the items CNF1 and CNF2 showed lower factor loadings than the other items of the scale. However, according to [Marôco \(2014\)](#), factor loadings above 0.50 are considered satisfactory. Descriptive statistics, including the mean and standard deviation for items, were computed. Internal consistency for each factor was evaluated

using Cronbach's alpha and composite reliability, as presented in Table 2. The AVE value was estimated for all constructs, with customer brand engagement (CBE) being slightly below the generally recommended threshold of 0.50. However, it is considered acceptable because the composite reliability (CR) is equal to or above the threshold of 0.70, indicating satisfactory internal consistency. A confirmatory factor analysis (CFA) was conducted to verify the model's fit to the seven-factor model presented in Figure 1. The results indicate that the model is valid and adequate, with the following fit indices:  $\chi^2/df = 1.26$ ;  $\chi^2_{(644)} = 811.82$ ,  $p < 0.001$ ; CFI = 0.99; TLI = 0.99; RMSEA = 0.03 [0.02–0.03]; SRMR = 0.07.

**Table 2.** Factor loadings and reliability scores for each of the measures and items Mean (M) and standard deviation (SD) (N = 400).

Construct and Items	$\alpha$	CR	AVE	Factor Loadings	M	SD
AI Information Quality (AIIQ) (Variance explained = 47.74%)	0.92	0.92	0.68			
QI1				0.822		
QI2				0.841	4.93	0.69
QI3				0.887		
QI4				0.825		
QI5				0.749		
QI6				0.830		
AI System Quality (AISQ) (Variance explained = 11.37%)	0.95	0.95	0.68			
QS1				0.720		
QS2				0.867		
QS3				0.813		
QS4				0.893		
QS5				0.819	4.81	0.71
QS6				0.803		
QS7				0.791		
QS8				0.814		
QS9				0.902		
customer brand engagement (CBE) (Variance explained = 5.47%)	0.95	0.70	0.49			
EMC1				0.429		
EMC2				0.530		
EMC3				0.503	4.39	1.06
EMC4				0.512		
EMC5				0.549		
EMC6				0.616		
electronic word-of-mouth (eWOM) (Variance explained = 5.05%)	0.94	0.96	0.88			
eW1				0.924		
eW2				0.957	3.94	1.35
eW3				0.929		
Trust (T) (Variance explained = 3.27%)	0.90	0.85	0.55			
CNF1				0.530		
CNF2				0.513		
CNF3				0.881	4.64	0.84
CNF4				0.843		
CNF5				0.862		
memorable experiences in tourism (MET) (Variance explained = 2.61%)	0.89	0.92	0.65			
MTE1				0.782		
MTE2				0.841		
MTE3				0.711	4.87	0.73
MTE4				0.857		
MTE5				0.839		
MTE6				0.782		
willingness to use artificial intelligence (WUAI) (Variance explained = 2.23%)	0.90	0.89	0.73			
DUIA1				0.830		
DUIA2				0.871	4.54	0.95
DUIA3				0.864		

A correlation analysis was conducted across all study dimensions to evaluate the research hypotheses, followed by regression analysis. The results revealed positive associations among all the dimensions examined in the study (Table 3). The results indicate strong correlations, with all relationships being statistically significant ( $p < 0.001$ ).

**Table 3.** Correlations between all dimensions of the questionnaire.

	AIIQ	AISQ	CBE	eWOM	T	MET	WUAI
AIIQ							
AISQ	0.788 **						
CBE	0.456 **	0.592 **					
eWOM	0.392 **	0.380 **	0.535 **				
T	0.616 **	0.691 **	0.792 **	0.491 **			
MET	0.580 **	0.646 **	0.459 **	0.296 **	0.481 **		
WUAI	0.394 **	0.517 **	0.788 **	0.472 **	0.766 **	0.401 **	

\*\*  $p < 0.001$ .

Linear regression was calculated to explore the predictors of customer brand engagement (CBE), electronic word-of-mouth (eWOM), willingness to use artificial intelligence (WUAI), and Trust (T) after confirming the fulfillment of assumptions. Table 4 presents the results that allow for the testing of the model described in Figure 1. All hypotheses were confirmed. Regarding the hypotheses tested, the results confirm all the presented hypotheses. All the expected relationships between the independent and dependent variables were substantially supported by the data. These findings do not corroborate the theoretical model outlined, and they provide meaningful insights into how the variables are interrelated and strengthen the validity of the predictions made.

**Table 4.** Hypothesis testing results.

				$\beta$	$t$	$p$	
AI Information Quality (AIIQ)	H1a	→	customer brand engagement (CBE)	0.456	10.215	<0.001	Sig
AI System Quality (AISQ)	H1b	→	customer brand engagement (CBE)	0.592	14.650	<0.001	Sig
customer brand engagement (CBE)	H2a	→	electronic word-of-mouth (eWOM)	0.535	12.633	<0.001	Sig
customer brand engagement (CBE)	H2b	→	willingness to use artificial intelligence (WUAI)	0.788	25.553	<0.001	Sig
AI Information Quality (AIIQ)	H3a	→	Trust (T)	0.616	15.587	<0.001	Sig
AI System Quality (AISQ)	H3b	→	Trust (T)	0.691	19.080	<0.001	Sig
Trust (T)	H4a	→	electronic-word-of-mouth (eWOM)	0.491	11.233	<0.001	Sig
Trust (T)	H4b	→	willingness to use artificial intelligence (WUAI)	0.766	23.773	<0.001	Sig
electronic word-of-mouth (eWOM)	H5	→	willingness to use artificial intelligence (WUAI)	0.472	10.670	<0.001	Sig
memorable experiences in tourism (MET)	H6	→	willingness to use artificial intelligence (WUAI)	0.401	8.744	<0.001	Sig

Note:  $p$  statistical significance ( $p < 0.01$ ).

It should be noted that the model was significant. All hypotheses were confirmed. The significant predictor variables for customer brand engagement (CBE) were AI Information Quality (AIIQ) ( $\beta = 0.456$ ;  $p < 0.001$ ) and AI System Quality (AISQ) ( $\beta = 0.592$ ;  $p < 0.001$ ). Customer brand engagement (CBE) was a predictor for electronic word-of-mouth (eWOM) ( $\beta = 0.535$ ;  $p < 0.001$ ) and willingness to use artificial intelligence (WUAI) ( $\beta = 0.788$ ;  $p < 0.001$ ). Predictors for Trust (T) were AI Information Quality (AIIQ) ( $\beta = 0.616$ ;  $p < 0.001$ ) and AI System Quality (AISQ) ( $\beta = 0.691$ ;  $p < 0.001$ ). On the other hand, Trust became a predictor of electronic word-of-mouth (eWOM) ( $\beta = 0.491$ ;  $p < 0.001$ ) and willingness to use artificial intelligence (WUAI) ( $\beta = 0.766$ ;  $p < 0.001$ ). The willingness to use artificial

intelligence (WUAI) was influenced by electronic word-of-mouth (eWOM) ( $\beta = 0.471$ ;  $p < 0.001$ ) and memorable experiences in tourism (MET) ( $\beta = 0.401$ ;  $p < 0.001$ ).

## 5. Discussion and Implications

### 5.1. Discussion of Results

This study aimed to analyze the impact of AI on the perceptions and behaviors of music festival goers, investigating how specific variables influence the willingness to adopt AI in the context of tourism. The proposed model included variables such as memorable experiences in tourism, information quality, system quality, trust, eWOM, brand-customer engagement, and the willingness to use AI.

The analysis confirmed that information quality and system quality have a positive impact on brand customer engagement, validating hypotheses H1a and H1b. This result indicates that improving information quality can be an effective strategy for increasing brand engagement, with practical implications for marketing strategies and brand management. AI-driven improvements create a seamless and efficient user experience, reducing cognitive overload and enabling deeper engagement with brands. By providing real-time insights and personalized interactions, AI enhances immersion, strengthens emotional connections, and increases brand loyalty among festival-goers. Kulykovets (2024) demonstrated that quality and trust are closely linked in organizational contexts, while Budnik (2012) highlighted the role of trust in the development of high-quality software systems. Similarly, Loureiro et al. (2019) found that media stimuli generated by the consumer promote emotional involvement with the brand. It was also identified that customer engagement positively influences both eWOM and the willingness to adopt AI technologies, validating hypotheses H2a and H2b. The relationship between engagement and willingness suggests that consumers who are more emotionally connected to a brand are more likely to adopt AI solutions. When festival-goers have meaningful and personalized interactions through AI-driven experiences, they are more likely to share positive feedback online, amplifying brand reach and credibility. Additionally, the seamless and intuitive nature of AI-driven systems fosters trust and reduces resistance to technology, encouraging attendees to embrace AI applications in future interactions. This dynamic creates a cycle where AI enhances engagement, leading to increased advocacy and openness to innovation, ultimately transforming the festival experience into a more connected and immersive environment. This finding aligns with studies by Park and Ha (2021), who highlighted the importance of emotional and cognitive engagement for AI acceptance, and Hou et al. (2023), who identified trust and emotional engagement as crucial factors in AI adoption. Additionally, Ziakis and Vlachopoulou (2023) highlighted how AI technologies in digital marketing can personalize interactions, increasing engagement and facilitating the acceptance of AI solutions. The analysis also showed that information quality substantially increases consumer trust, supporting hypothesis H3a. AI plays a pivotal role in enhancing this trust by delivering personalized, real-time updates, ensuring that attendees feel informed and empowered throughout their journey, which in turn strengthens their confidence in both the event and the brands involved. As trust grows, so does engagement, leading to more meaningful interactions with brands and a heightened sense of satisfaction, making AI a crucial factor in shaping a positive festival experience. Nicolaou et al. (2013) pointed out that information quality influences trust in the competence of the system and reduces perceptions of risk in data exchanges. During the COVID-19 pandemic, Huda et al. (2022) found that the quality of information provided by the government increased public trust, illustrating the impact of this variable. Similarly, Um et al. (2022) pointed out that transparency and accuracy in AI information are essential to gaining consumer trust.

In addition, the quality of the system has been shown to have an even more significant impact on trust, corroborating hypothesis H3b. AI-driven systems that are intuitive, responsive, and free of technical glitches not only improve user satisfaction but also foster a sense of security, making attendees more confident in their interactions with the event's digital infrastructure. This trust in the system encourages deeper engagement, as festival-goers are more likely to embrace AI-based services such as personalized recommendations, real-time updates, and virtual assistance, ultimately creating a more enjoyable and efficient experience. [MaeboodMojdehi et al. \(2018\)](#) highlighted the relationship between system quality and user trust, while [Purwanto et al. \(2020\)](#) showed that, in government contexts, perceptions of system quality predict levels of trust. [Han et al. \(2023\)](#) showed that, on e-commerce platforms, system quality increases the value perceived by users, positively influencing trust and purchase intentions. Trust was also identified as an essential mediator between eWOM and the willingness to adopt AI, validating hypotheses H4a and H4b. When attendees trust the system and the technology behind it, they are not only more inclined to share their own experiences through eWOM but are also more open to adopting AI-driven solutions themselves, feeling assured of their benefits. This trust-driven cycle strengthens the festival-goer experience, creating a network of shared positive sentiment that encourages further engagement and enhances the overall perception of AI's value in improving festival interactions. Studies such as [Rao and Rao \(2019\)](#) highlight that trust amplifies the effectiveness of eWOM in shaping behavioral intentions. [Ms Tomi \(2022\)](#) emphasized that reviews and recommendations on social networks strengthen the impact of eWOM as a marketing strategy. In addition, [Butt et al. \(2023\)](#) demonstrated that AI chatbots in online shopping increase consumer satisfaction, continued use intention, and participation in eWOM, suggesting that similar tools could be effective at music festivals. [Kelly et al. \(2023\)](#) pointed out that the perceived usefulness and ease of use of AI can vary according to context, which helps explain variations in the willingness to adopt the technology.

The results also suggest that the willingness to participate in eWOM (H5) is associated with the willingness to adopt AI, as indicated by [Mariani and Borghi \(2021\)](#), who argued that active online communities facilitate the acceptance of emerging technologies. [Wu et al. \(2022\)](#) reinforced that contextual factors significantly shape the willingness to use AI, highlighting the need to adapt implementation strategies according to the characteristics of each sector. In the context of music festivals, where attendees are already highly engaged and immersed in the event atmosphere, AI-powered solutions that enhance personalization (such as smart recommendation systems for performances, AI-driven interactive experiences, or seamless cashless payment methods) can further stimulate openness to AI adoption ([Toubes et al., 2024](#)). The heightened emotional involvement and social sharing behaviors at festivals create an ideal setting for AI technologies to be perceived as valuable, increasing the consumers' willingness to engage with them ([X. Chen et al., 2025](#)). Encouraging online discussions and recommendations can make consumers more receptive to adopting AI.

The relationship between memorable experiences and the willingness to adopt AI, addressed in hypothesis H6, reveals that positive experiences can increase consumers' receptiveness to the technology. When festival-goers have memorable interactions facilitated by AI, such as personalized recommendations or seamless event navigation, they develop a stronger emotional connection to the technology, making them more likely to adopt it in future experiences. These positive encounters not only enhance their overall satisfaction but also create a sense of familiarity and trust, leading to a greater openness toward AI applications and ultimately transforming how attendees engage with future events. [Kumar et al. \(2022\)](#) observed that memorable experiences in cultural destinations influence behavioral intentions and attitudes. [Rafiq et al. \(2022\)](#) demonstrated that AI

chatbots in tourism improve customer engagement and the overall experience, encouraging the adoption of the technology. Memorable experiences increase loyalty and satisfaction, favoring willingness to adopt new technologies. According to [Ilapakurti et al. \(2018\)](#), memorable experiences create emotional connections that shape consumer perceptions of AI, making it more appealing and trustworthy. For example, interactive AI-driven installations at music festivals, such as real-time personalized setlist recommendations or immersive augmented reality experiences, foster a sense of exclusivity and excitement. These emotionally engaging interactions not only enhance the overall event experience but also establish a positive association with AI, reducing skepticism and increasing openness to its adoption ([Lv et al., 2022](#)). According to [Lopes et al. \(2025\)](#) when AI is perceived as a facilitator of unique and enjoyable moments, consumers become more inclined to explore and integrate AI-driven solutions into their daily lives.

### 5.2. Theoretical Implications

The study contributes to the research on AI, as applied to tourism and its events, by reinforcing the idea that the quality of information and the quality of AI systems are both technical and emotional factors influencing customer engagement with brands and trust in innovative technologies. These findings suggest that the perceived quality of AI is a multifaceted dimension, directly influencing consumers' willingness to adopt it. Unlike previous studies that primarily focus on AI's technical efficiency ([Al-Romeedy, 2024](#); [Jogarao, 2024](#); [Nag, 2024](#)), this research highlights how emotional and experiential dimensions shape AI acceptance in tourism, offering a more holistic understanding of consumer behavior in this context.

Furthermore, trust emerged as a mediating variable between the quality of AI systems and the willingness to use them. This concept goes beyond simple technological acceptance, demonstrating that trust amplifies the impact of eWOM and social influence, promoting the spread of positive information. The study thus highlights the importance of online interactions and social networks in the adoption of AI at festivals. By identifying trust as a bridge between AI quality and consumer adoption, this research provides actionable insights for tourism professionals on how to design AI experiences that build credibility and foster long-term engagement.

The role of memorable experiences in tourism was also highlighted: positive experiences increase consumer receptiveness to technologies such as AI. This suggests that the creation of memorable emotions and memories at events can be facilitated by AI technologies, expanding their role in cultural and entertainment contexts. This finding offers new perspectives for tourism and event managers, suggesting that AI-driven personalization, such as interactive chatbots, immersive AR installations, and AI-curated experiences, can strengthen emotional connections with destinations and brands, thereby enhancing customer loyalty and technology adoption.

Another relevant point is customer engagement with the brand. More engaged consumers tend to adopt AI more quickly, reinforcing the fact that emotional attachment and brand loyalty make it easier to accept technological innovations. This engagement should be worked on as a mechanism to foster trust and encourage the use of AI at festivals. This research provides a novel contribution by suggesting that AI-driven personalization strategies should not only be designed for efficiency but also to deepen emotional bonds between consumers and brands, ultimately increasing AI adoption rates.

Finally, the willingness to use AI was analyzed as a variable connected to technical, emotional, and subjective factors, such as the quality of information, trust, and memorable experiences. The acceptance of these technologies depends not only on technical aspects but also on consumers' perceptions and experiences. This study offers an integrative

perspective by bridging technology acceptance models with experience-driven frameworks, providing tourism industry professionals with actionable insights on how AI can serve as both a functional and emotional catalyst for innovation.

### 5.3. Practical Implications

The results offer valuable insights for companies that organize music festivals. The quality of the information provided should be a priority, as it directly influences attendee trust, a crucial variable for AI adoption (Siau & Wang, 2018). Reliable AI systems that provide accurate information promote greater participant trust and engagement (Lee & Shin, 2014). Organizers should prioritize the clarity and reliability of AI-generated information, ensuring positive experiences to foster eWOM. This not only broadens technological acceptance but also strengthens brand loyalty (H. L. Kim & Hyun, 2019). Moreover, festival organizers must focus on designing AI applications that are both intuitive and user-friendly. Simplifying AI interactions through accessible interfaces can significantly enhance user adoption and satisfaction. Providing multilingual AI support and ensuring inclusivity in AI-generated recommendations can further optimize the attendee experience, catering to diverse audiences.

The personalization offered by AI can be particularly useful for enriching the participants' experience since music festivals are contexts in which experience is highly valued (Rihova et al., 2015). To improve AI integration in music festivals, organizers could implement strategies such as real-time personalized recommendations for food, merchandise, and event schedules, allowing attendees to tailor their festival journey. Additionally, incorporating AI-driven chatbots or virtual assistants can help provide instant support for navigating the venue, enhancing attendee satisfaction. Furthermore, leveraging AI for real-time sentiment analysis through social media and direct feedback channels can help organizers adjust event features dynamically, addressing attendee concerns and preferences on the spot. Implementing AI-driven immersive technologies, such as augmented reality and virtual reality, can also elevate the festival experience by offering interactive brand activations and exclusive digital content.

However, it is important for organizers to consider the specifics of each event, as the effects of variables can vary depending on the context. For example, integrating AI to monitor crowd density and suggest optimal times for attending popular events could improve the attendee experience by reducing wait times and overcrowding. In addition, personalized strategies must be adjusted according to individual differences, as memorable tourist experiences are not uniform and depend on the perceptions of each participant. Organizers could use AI to analyze attendee preferences and offer tailored experiences, such as VIP access or backstage tours, based on their activity patterns and interactions. By strategically integrating AI-driven insights, festival organizers can refine operational efficiency, enhance safety measures, and elevate overall event quality. This not only fosters greater engagement and trust but also positions AI as an indispensable tool in the future of live entertainment experiences. Ultimately, a well-executed AI strategy can transform music festivals into highly adaptive and immersive environments, ensuring sustained consumer satisfaction and long-term brand affinity.

## 6. Conclusions

### 6.1. Main Conclusions

This study analyzed the impact of AI on the experience of attendees at music festivals in Portugal, highlighting factors such as the quality of information, engagement with brands, and trust in technology. The quality of information and AI systems proved essential for increasing customer engagement and strengthening trust in technologies, which directly

influenced consumers' willingness to adopt AI and participate in eWOM and expanding the dissemination of online recommendations. Trust emerged as a crucial factor, which emphasizes the need for reliable, high-quality AI systems. In addition, unique and positive experiences at festivals encourage the adoption of innovative technologies, suggesting that creating memorable moments is an effective strategy for promoting the use of AI. Social influence, especially via eWOM, stood out as a catalyst for AI adoption. Campaigns that encourage the sharing of experiences on social media not only increase acceptance of the technology but also expand the reach of brands. Therefore, the strategic integration of AI can improve the experience of participants and strengthen the bond with brands. However, it is essential to balance technological innovation with memorable experiences while always prioritizing consumer trust.

### *6.2. Limitations of the Study and Future Lines of Research*

Despite the significant contributions, this study has limitations that should be considered. The sample, made up exclusively of festival attendees in Portugal, limits the generalizability of the results to other cultural and geographical contexts. It is worth mentioning that all regions of Portugal are represented except for the Region of the Azores as no participants from this region responded. However, studies could be carried out in other countries with the results compared. Furthermore, it was not possible to determine precisely whether the festivals analyzed were homogeneous or heterogeneous in terms of type and organization. This variability may influence the results since different event formats and structures can generate different impacts. Future studies could extend the analysis to other countries and consider the detailed categorization of festivals for a more in-depth understanding of the effects observed. Data collection also faced challenges as there were only a limited number of responses relating to the use of AI at festivals. The rapid evolution of AI technologies is another limitation. The results reflect the current state of these technologies and consumer perceptions at this particular time. Changes in attitudes and perceptions are to be expected as technologies evolve, requiring future studies to keep pace with these transformations. The focus of the study was on the variables of information quality, system quality, trust, and customer involvement. However, other relevant variables, such as economic factors, sustainability, and data privacy, were not explored. Investigating these dimensions could offer a broader and deeper insight into the impact of AI and its adoption in music festivals.

To deepen the analysis, future research should explore how economic factors, such as cost-effectiveness and return on investment, influence the adoption of AI in festivals. For instance, understanding whether AI implementation is financially viable for smaller festivals or how it impacts ticket pricing could provide valuable insights. Additionally, sustainability considerations, such as the environmental impact of AI technologies and their alignment with green tourism practices, should be examined. This would help assess whether AI contributes to or hinders the sustainability goals of festivals. A more detailed investigation into these areas could provide a comprehensive framework for understanding the multifaceted impact of AI, which would guide stakeholders in making informed decisions. Moreover, the exploration of whether variables, such as age, gender, or prior experience with AI, influence the relationships between trust, information quality, and eWOM should be explored in future studies.

Finally, future studies could adopt a longitudinal approach to track changes in AI adoption and its effects over time. This would help capture the dynamic nature of technological advancements and shifting consumer perceptions. Combining qualitative and quantitative methods, such as in-depth interviews with festival organizers and large-scale surveys, could also enrich the findings. By addressing these gaps, researchers can pro-

vide a more holistic understanding of AI's role in enhancing the tourist experience while considering broader economic and sustainability implications.

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