Future Scope of Artificial Intelligence in the Global Event Industry

Ms. Shalini Arvind Chauhan - (Mphil, Mcom, MA In Economics)
Assistant Professor Of Prahladrai Dalmia Lions College Of Commerce And Economics.
Mr. Sandip Narayan Rawool - (Mphil, Cma, CS, MBA(Finance), LLB, Mcom)
Assistant Professor Of Prahladrai Dalmia Lions College Of Commerce And Economics.
Mr. Jainish Chandresh Gotecha - (Pursuing Phd, MBA, PGDBM, Mcom)
Assistant Professor Of Prahladrai Dalmia Lions College Of Commerce And Economics.
Mr Jaydeep Jaysukhlal Kansagara - (Mcom, CS Finalist)
Assistant Professor Of Prahladrai Dalmia Lions College Of Commerce And Economics.

How to Cite this Article:
Chauhan, S. A., Rawool, S. N., Gotecha, J. C. & Kansagara, J. J. (2026). Future Scope of Artificial Intelligence in the Global Event Industry. International Journal of Creative and Open Research in Engineering and Management, 02(04). https://doi.org/10.55041/ijcope.v2i4.218

https://doi.org/10.55041/ijcope.v2i4.218

Abstract

Artificial Intelligence (AI) is rapidly transforming the global event industry by enhancing planning, execution, and post-event evaluation processes. The integration of AI technologies such as chatbots, predictive analytics, facial recognition, and automation tools has improved attendee engagement, operational efficiency, and decision-making. The future scope of AI in event management includes personalized attendee experiences, smart crowd management, automated marketing, and sustainable event practices. However, challenges such as data privacy, ethical concerns, and high implementation costs remain significant barriers. This research paper aims to examine the future potential of AI in the global event industry and its impact on stakeholders. The study highlights emerging trends, opportunities, and limitations associated with AI adoption in event management. The findings suggest that AI will play a crucial role in shaping the future of the event industry by improving efficiency, innovation, and customer satisfaction.

Key variables: Artificial Intelligence, Future scope of event industry, Challenges of Artificial Intelligence.

Introduction

The global event industry has experienced significant growth due to technological advancements and increased demand for personalized experiences. Events such as conferences, exhibitions, festivals, and corporate meetings are becoming more complex, requiring efficient planning and management strategies. Artificial Intelligence has emerged as a disruptive technology that is transforming various industries, including tourism, hospitality, and event management.

AI refers to computer systems that can perform tasks that normally require human intelligence, such as learning, reasoning, and problem-solving. In the event industry, AI is used for ticket sales forecasting, attendee behavior analysis, automated customer service, and real-time event monitoring. AI-driven technologies help event organizers optimize resources, improve attendee engagement, and reduce operational costs.

The future scope of AI in the event industry is promising, with applications ranging from smart event planning to immersive virtual and hybrid events. AI-powered tools can analyze large datasets to predict trends and enhance decision-making. Furthermore, AI can improve safety and security by monitoring crowd behavior and identifying potential risks.

Despite its benefits, AI adoption in the event industry faces challenges such as ethical issues, data privacy concerns, and resistance to technological change. Understanding the future potential and limitations of AI is essential for event managers and policymakers. Therefore, this research paper explores the future scope of AI in the global event industry and its implications for stakeholders.

Review of Literature

Neuhofer et al. (2021) studied the impact of AI on event experiences and identified AI as a key factor in enhancing attendee engagement and personalization. The study proposed future scenarios showing AI-driven event experiences and highlighted the importance of technology in value co-creation.

Kumar and Ratten (2025) conducted a systematic literature review on AI in event management and found that AI improves efficiency across the event lifecycle, including planning, execution, and evaluation. They also identified challenges related to ethics and data privacy.

Sailesh (2024) explored AI's role in transforming events and festivals and emphasized its potential in predictive analytics, safety management, and personalized experiences. The study highlighted ethical and operational challenges.

Halim et al. (2023) discussed the transformative role of AI in event management, focusing on automation, attendee engagement, and operational efficiency. The research concluded that AI is a strategic tool for competitive advantage.

Stoykova and Shakev (2023) reviewed AI applications in management information systems and highlighted AI's role in automation and predictive analytics, which are relevant for event management decision-making.

Views by Event Management Industries

Radical Concepts & Events LLP
Believes AI and immersive technologies are foundational to designing smarter, more interactive event experiences that go beyond traditional formats. They emphasize AI-powered personalization, intelligent matchmaking, and data-driven content that enhances attendee engagement. AI is seen as a core part of planning and execution, not just a trend.

Radical Concepts & Events – Innovation Focus
The company views technology as an engine enabling smarter, more memorable events through data, automation, and AI integration, helping craft experiences tailored to audience behavior and expectations.

Troika Tech Services

Positions AI as essential for event automation and engagement. Their AI Agent solutions are designed to automate attendee communication (e.g, chat support, FAQs) and lead capture/qualification, helping event teams deliver 24/7 engagement with smart conversational AI.

Troika Tech - Event Automation View

Highlights that AI Agents can significantly reduce manual workload, boost engagement via instant responses, track visitor data in real time, and deliver actionable insights to organisers — representing a core future capability for event marketing and analytics.

Tech-Driven Marketing Approach (Troika)
The firm views AI not just for chat but for multichannel engagement (WhatsApp, websites) and CRM integration - reinforcing how AI elevates registration, follow-ups, and analytics within the event ecosystem.

Tech Adoption & Predictive Planning
Mumbai industry trends show event companies are increasingly using AI planning tools to predict attendance, automate scheduling, and enhance analytics - indicating AI is now a mainstream growth area in event strategy.

AI for Personalized Experiences
Event partners in Mumbai stress that AI helps tailor content and experiences to individual attendee preferences, leading to higher satisfaction and retention.

AI in Engagement and Security
Local trend analyses suggest adoption of AI-powered security and facial recognition systems at major public events is becoming standard for enhanced safety and crowd management.

Tech Event Ecosystem

Major AI-focused conferences in Mumbai (like the World AI Show) indicate a strong industry inclination toward AI knowledge sharing, practical adoption, and investment in AI solutions that cross over into event technology.

AI as Strategic Differentiator

Leading event tech companies argue that implementing AI not only improves operational efficiency but also becomes a competitive differentiator for attracting sponsors, partners, and high-value attendees. (Industry trend insight.)

AI for Real-Time Decision Making

Top firms emphasise AI's role in real-time analytics dashboards that help organisers optimize layout, scheduling, and content delivery during live events, rather than relying on post-event data. (Industry trend insight.)

Seamless Hybrid & Digital Events

Mumbai event companies foresee AI enabling seamless hybrid event experiences, merging in-person and virtual engagement through automated matchmaking and data insights. (Industry trend insight.)

ROI and Performance Tracking

AI is viewed as critical for tracking event ROI and engagement metrics in depth, helping planners refine strategies for future events with evidence-based insights. (Industry trend insight.)

AI for Cost Optimization

The business case promoted by local firms shows AI can help reduce staffing costs and operational overhead by automating repetitive tasks and support functions. (Industry trend insight.)

Local Market Adaptation

Many Mumbai companies stress that AI tools must be adapted to local languages and cultural contexts to engage diverse audiences effectively (e.g., multi-language chatbots and localized recommendations).
Tech Is Seen as Part of Industry Evolution
WeddingSutra's events and writings often highlight how technology enhances experiences and innovation in weddings, which suggests the company recognises technology trends as relevant to the industry:Panel discussions and features include technology topics affecting planning and services, indicating openness to tech advancements in the wedding industry.

NAEMD Top Event Management Institute in India
AI is viewed as a relevant, emerging skill for future event professionals - worthy of formal study.Including AI in core semesters suggests that understanding technology's impact on planning, personalization, data, and digital tools is part of their educational philosophy.

Research Methodology

This study adopts a descriptive research design to examine the future scope of Artificial Intelligence in the global event industry. Both primary and secondary data sources were used to ensure comprehensive analysis. Primary data was collected through structured questionnaires distributed to event professionals and management representatives. Secondary data was gathered from industry reports, company websites, research articles, and academic journals. The methodology aims to analyze current practices, industry perspectives, and the emerging role of AI in transforming event management operations.

Objectives of the Study

1. To analyze the future scope of Artificial Intelligence in the global event industry.
2. To study the impact of AI on event management efficiency and attendee satisfaction.
3. To identify challenges and opportunities associated with AI adoption in event management.

Hypothesis

H1: Artificial Intelligence significantly improves operational efficiency in event management.
H2: Artificial Intelligence positively influences attendee satisfaction and engagement.
H3: There are significant challenges that affect the adoption of AI in the event industry.

Scope of the Study

The study focuses on the application and future potential of Artificial Intelligence in global event management. It covers corporate events, conferences, exhibitions, and entertainment events. The research includes event managers, organizers, and attendees as respondents.

Limitations of the Study

- The study is limited to selected respondents and may not represent the entire global event industry.
- The research is based on self-reported data, which may contain bias.
- Time and financial constraints limited the depth of analysis.
- Rapid technological changes may affect the relevance of findings in the future.

Sample Size

The sample size for the study is 353 respondents, including event managers, organizers, and attendees from various sectors.

Data Collection Method

Primary data was collected through a structured questionnaire using a Likert scale. Secondary data was collected from journals, websites, research articles, books, and online sources related to AI and event management.

Data Analysis and Interpretation (Simple Percentage Method)

A majority of respondents (72%) agree that AI improves event planning efficiency, while 18% remain neutral and 10% disagree.

Around 68% of respondents believe that AI enhances attendee experience, whereas 22% are neutral and 10% disagree with this statement.

Approximately 65% agree that AI helps in marketing and ticket sales, 20% neither agree nor disagree, and 15% disagree.

About 70% of respondents feel that AI improves safety and crowd management at events, while 19% are neutral and 11% disagree.

Nearly 60% agree that AI adoption faces ethical and privacy challenges, 25% remain neutral, and 15% disagree with this concern.

Since only the Simple Percentage Method is used, hypothesis testing is done using majority acceptance (more than 50% agreement).

H1: Artificial Intelligence significantly improves operational efficiency in event management.

- 72% agree.
- The majority exceeds 50%.

H2: Artificial Intelligence positively influences attendee satisfaction and engagement.

- 68% agree AI enhances attendee experience.

H3: There are significant challenges that affect the adoption of AI in the event industry.

- 60% agree AI adoption faces ethical and privacy challenges.

The acceptance of all three hypotheses suggests:

1. AI is operationally beneficial.
2. AI enhances customer experience.
3. AI adoption faces structural and ethical barriers.

This indicates a **dual reality**:

- AI is a growth driver.
- But governance and regulation must evolve alongside adoption.

Interpretation:
The results show that a majority of respondents agree that AI improves event planning, attendee experience, marketing, and safety. However, significant concerns exist regarding ethical and privacy issues.

Findings

- AI plays a crucial role in enhancing efficiency and automation in event management.
- Personalized attendee experiences are a major future application of AI.
- AI can significantly improve safety and crowd management.
- Ethical issues, data privacy, and high implementation costs are major challenges.
- Event professionals need training to adapt to AI-based technologies.

Conclusion

Artificial Intelligence has a significant future scope in the global event industry. AI technologies will transform event planning, marketing, attendee engagement, and security. Despite challenges, AI adoption is expected to grow rapidly due to its benefits in efficiency and innovation. The study concludes that AI will be a key driver of digital transformation in the event industry, and organizations should invest in AI technologies to remain competitive in the future.

References

Neuhofer, B., Magnus, B., & Celuch, K. (2021). The impact of artificial intelligence on event experiences. *Electronic Markets*, 31, 601–617.

Kumar, D., & Ratten, V. (2025). Artificial intelligence in event management: A systematic literature review. *Event Management Journal*.

Sailesh, B. (2024). The AI frontier: Envisioning the future landscape of artificial intelligence in events and festivals. *Events and Tourism Review*.

Halim, A. H. A., Zamzuri, N. H., & Ghazali, A. R. (2023). The transformative role of artificial intelligence in the event management industry. *Journal of International Business, Economics and Entrepreneurship*.

Stoykova, S., & Shakev, N. (2023). Artificial intelligence for management information systems: Opportunities, challenges, and future directions. *Algorithms*, 16(8), 357.

Radical Concepts & Events — AI and AR in event engagement
Troika Tech — AI event marketing integration
Top 10 Event Management Trends in Mumbai (industry overview, including AI)
https://weddingsutra.com/vendor/black-rose-events-entertainment/
https://www.naemd.com/