

# Chapter 4

## Emerging Technologies at the Events

**Cihan Cobanoglu**

*University of South Florida, USA*

**Seden Doğan**

 <https://orcid.org/0000-0001-8547-7702>

*Ondokuz Mayıs University, Turkey*

**Mehtap Yücel Güngör**

*Anadolu University, Turkey*

### ABSTRACT

*Events are creating huge demand, have a vital role, and contribute to the tourism industry considerably. Whatever the objective or topic of the event, they are popular attraction to achieve diverse outputs. There are different types of events such as mega-events, special events, festivals, conventions, exhibitions, fairs, concerts, sporting events, and trade shows. They all have different purposes, different target audiences, and different planning processes. But the common thing that they need is to finish an event successfully and beneficially for both organizers and attendees. In this respect, they need to benefit from the advantages of technology. Technology use to plan, perform, and finalize an event is important. In this chapter, both academic studies and industrial articles have been reviews to provide information regarding the emerging technologies at the events with real-world examples. It has been seen that most music and sporting events used new technologies to attract and satisfy the attendees.*

### INTRODUCTION

The event industry has been one of the fastest evolving industries in the world. Even though COVID-19 pandemic impacted the event industry significantly, the trends in countries that controlled the pandemic such as China shows that event industry will recover quickly (Farazad, 2020). Oxford Economics and Events Industry Council pointed out that only the meetings generated 1294 USD spending per attendee

DOI: 10.4018/978-1-7998-4954-4.ch004

in 2018 (Event MB, 2019). Whether an event focuses on sport, luxury, entertainment, or music; event industry around the world is generating billions of revenues and changing the way of operation in the hospitality industry. A conference, a trade show, a concert, a sport event or a festival are samples of this important industry. Different destinations in many countries are realizing that the event industry is vital to attract visitors and they are trying to create new events (Glion, 2020) to gain more from this vibrant industry.

The event industry has the ability to utilize the emerging technologies before many other industries. There has been a growing trend of using more sophisticated technologies in event and meeting planning and production in recent years. The emerging technologies and applications transformed the nature of event planning and production (Yen, Wey, & Sullivan, 2016) in many attractive ways. Back in 1980s, event organizers were using basic computerized badge production and accept the reservation by a phone call or by walk-in customers. It was not possible to talk about any event technologies at that time. In 2000, first virtual tradeshow which was Expo Exchange has been organized by SpotMe in London. The show allowed the attendees to see pictures and contact information of other attendees. Following years, many technological developments have been presented such as wi-fi, iPhone, Skype, Face Time and others (Aksentyeva et al., 2020). With the emergence of Internet, the event planners started to build informative and up-to-date web sites to provide necessary information. Then, they started to create social media accounts to engage both stakeholders and attendees for more productive event experiences. Website of the events has always allowed one-way communication between organizers and stakeholders of the events but with the help of social media platforms, organizers were able to not only communicate but also interact with the people who were interested in to attend the event as participants or traders. Social media platforms were also beneficial to develop different strategies to promote the event. With the beginning of the fourth industrial revolution, new technologies have emerged into the business life in many different, attractive and productive ways. Automation, virtual reality applications, augmented reality, artificial intelligence development, Internet of Things and sensors, unmanned flying objects, driverless vehicles, and many other were started to be used by many industries such as automotive, medicine, retail, and agriculture as well as the tourism industry. Artificially intelligent robots are employed at hotels, restaurants, and airports to provide information and deliver items. Virtual reality and augmented reality are used in cultural heritage sites and museums to improve the visitor engagement. With the help of Internet of Things which can be defined as the connectiveness between devices with the help of internet protocol, contactless orders and contactless payments became possible. Wearable technologies help people to track the movements. Unmanned flying objects like drones provide nearly perfect visual ability to record videos and take photos (Ivanov et al., 2019; tom Dieck & Hyungsoo Jung, 2017; Stek, 2016). These technologies have also been started to be used effectively and creatively by the event industry. It is possible to experience augmented reality and hologram technologies at the sporting events or concerts. Massive events have started to use wearable technologies to provide constant information to the attendees and track their behavior. Facial recognition technology allows the organizers to perform the check-in process fast and more efficiently. However, academic studies about usage of these technologies at the events are very limited. In the existed literature, some of the authors evaluated the usage and role of social media in the events (Strickland et al., 2016; Severt, Fjelstul, & Breiter, 2013; Lee, Xiong, & Hu, 2012) while some of the others investigated the impact of mobile applications in the event industry (Ziyadin et al., 2019). From the attendee perspective, these technologies have also many advantages like saving time, securing personal information, watching a unique show, and exchanging information with other attendees. Wearable technologies help to terminate long lines on the different

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/emerging-technologies-at-the-events/267502](http://www.igi-global.com/chapter/emerging-technologies-at-the-events/267502)

## Related Content

---

### Collaborative Work Environments in Smart Oil Fields: The Organization Matters!

Ewoud Guldemon (2013). *Integrated Operations in the Oil and Gas Industry: Sustainability and Capability Development* (pp. 59-75).

[www.irma-international.org/chapter/collaborative-work-environments-smart-oil/68709](http://www.irma-international.org/chapter/collaborative-work-environments-smart-oil/68709)

### Pareto Evolutionary Optimization of Joint Network Design and Pricing Strategies Related to Emissions in Urban Networks

Loukas Dimitriou, Antonios Kaltsounis and Antony Stathopoulos (2014). *International Journal of Operations Research and Information Systems* (pp. 56-85).

[www.irma-international.org/article/pareto-evolutionary-optimization-of-joint-network-design-and-pricing-strategies-related-to-emissions-in-urban-networks/114936](http://www.irma-international.org/article/pareto-evolutionary-optimization-of-joint-network-design-and-pricing-strategies-related-to-emissions-in-urban-networks/114936)

### Modeling and Forecasting of Tourist Arrivals in Crete Using Statistical Models and Models of Computational Intelligence: A Comparative Study

Stefanos K. Goumas, Stavros Kontakos, Aikaterini G. Mathheaki and Sofoklis Xristoforidis (2021). *International Journal of Operations Research and Information Systems* (pp. 58-72).

[www.irma-international.org/article/modeling-and-forecasting-of-tourist-arrivals-in-crete-using-statistical-models-and-models-of-computational-intelligence/268354](http://www.irma-international.org/article/modeling-and-forecasting-of-tourist-arrivals-in-crete-using-statistical-models-and-models-of-computational-intelligence/268354)

### The Role of Teams in Business Process Change

Jyoti Choudrie (2003). *Knowledge and Business Process Management* (pp. 259-276).

[www.irma-international.org/chapter/role-teams-business-process-change/24847](http://www.irma-international.org/chapter/role-teams-business-process-change/24847)

### Supporting Semantically Enhanced Web Service Discovery for Enterprise Application Integration

Dimitrios Kourtesis and Iraklis Paraskakis (2010). *Semantic Enterprise Application Integration for Business Processes: Service-Oriented Frameworks* (pp. 105-130).

[www.irma-international.org/chapter/supporting-semantically-enhanced-web-service/37935](http://www.irma-international.org/chapter/supporting-semantically-enhanced-web-service/37935)