Factors Influencing Technology Usage among Event Attendees

Nurakmal Ramli*, Azmatun Nadiah Hamdan, Syafiqah Mohd Razani, Ezza Ezzati Ramli, Syahirah Salsagap, Fitri Aimal Nasaruddin, Muhammad Nabil Hazizan
Faculty of Business and Management, Universiti Teknologi MARA, Malaysia
*nurakm2956@uitm.edu.my, ndhhmdn@gmail.com, syafiqah.razani@gmail.com, ezaaramli@gmail.com, syahirahsalsaggap@gmail.com, aimalfitri@gmail.com, nabil42work@gmail.com

Abstract: The digital proliferation and business innovation where ICT plays an important role in enhancing event experiences, has transformed the event industry to fundamentally deal with understanding the attendees' experience at events. The purpose of this study is to examine the factors that contribute to event technology usage among event attendees and how it influences them. A total of 202 sets of data were collected from the event management students in UiTM Puncak Alam through a convenience sampling approach from several online platforms. The results were analyzed using SPSS by conducting reliability analysis, correlation analysis, and regression analysis. The result of this study found that there was a significant relationship between memorable experiences, perceived value, and enjoyment of technology usage. The limitations, recommendations, and implications of the study were suggested for future research.

Keywords: Memorable Experience, Perceived Value, Enjoyment, Technology Usage, Event Attendees, Event Organization.

1. Introduction and Background

Technologies in these modern days are the pillar for any support of professional business services where it provides any good information objectives and communication technologies (ICT). Event organizers that operate in the industry are using technologies to help them in event planning and organization (Rogers & Wynn-Moylan, 2022). Technology in event industries is also known for dynamically embracing changes in any situation to meet customer satisfaction and expectations and delivering an outstanding experience (Pine & Gilmore, 1999). The types of technologies that are being along with the modern and upgraded system are online registration and ticketing, event mobile apps, and engagement technology such as polls, apps, and live engagement. To add, other technologies are being created as smartphones are being upgraded every year which also creates a new ecosystem by including Virtual Reality (VR), Augmented Reality (AR), and Artificial Intelligence (AI). Technologies in the event industry context also help organizers enhance users' experiences and keep them up to date by using smart access, payment systems, and any event apps. In addition, crafting memorable experiences relies on various elements including encouraging regular attendee participation.

Offering suitable activities, addressing relevant topics and contemporary focus, and tailoring them to a sizable range of audiences (Ryan, Fenton, Ahmed & Scarf, 2020). Covid-19 has created an impact on the tourism industry where this sector is struggling through the policies of traveling that have been prohibited throughout the world. Recent studies show that the maximum loss in the event industry loss is more than \$666 million due to the cancellation of traveling and events. This also causes 85.9 million unemployed because of the usage of technology such as online distance learning, live chat, and webinars (Madray, 2020). Although technologies are the new trend, these technologies also can cause isolated experiences towards the people which reduce the social value of gatherings, one-to-one communication, and human experiences (Rihova, Buhalis, Gouthro & Moital, 2018). The change in the dynamics of the events paired with the developments of technology and the embracement of the same within the industry has highlighted the need for additional research in the area (Bustards, Bolan, Devine & Hutchinson, 2019; Ryan et al., 2020). Therefore, as there is still discussion related to the use of event technology, this study aims to examine the factors that contribute to event technology usage among event attendees and how it influences them.

2. Literature Review

Technology Usage: The objective of utilizing technology is to acquire a better knowledge of people's tendency to adopt and utilize cutting-edge technologies. Over the last decade, mobile commerce, social networking, and smartphone technology have all had an impact on almost every consumer's life. Technology

provides a platform for global audiences to access a variety of activities via the Internet and allows individuals to share experiences via digital platforms, helping businesses attract prospective consumers and create loyalty (Sangkaew, 2020). With new technology, the business events industry's usage of event content via the internet and social media was increasing since smartphone and tablet users could access event information anywhere and whenever they wanted. Events are considered complicated supply chains and having digital capabilities in events provides competitive benefits to the event organizer (Ryan et al., 2020). Through continuous technological developments, the interaction and engagement with the fans, spectators, delegates, or organizers in real-time during the events will be collected as data. This, in turn, can improve the social aspects of events, fine-tune event personalization and thereby create enhanced experiences (Ryan et al., 2020; Madray, 2020).

Memorable Experience: Memorable experiences happen in the event industry which can be defined as something unforgettable and people will remember it back in their head even though days months, and even years have passed especially if it's a huge success (Kruger & Saayman, 2017). Event professionals are investing more in event technology to make their events exciting, convenient for the attendees, and becoming an event that stands out from others (Ryan et al., 2020). There is no doubt that technology usage can significantly affect attendees' experience. Not to mention, an event that is going for the most significant wow factor with mixed reality technologies can often create the most memorable experiences for the people who attend or even participate in the event. Memorable experiences of attendees have a positive influence on event technology usage thus significantly influencing revisit intention (Coudounaris & Sthapit, 2017). The memorable experience that the attendees had while attending any event, would likely make them interested to participate again in the future (Melo et al., 2022). In addition, the use of technologies can help in faster communication and processing, hence increasing the productivity of an event. This too will contribute to having a memorable experience for the attendees. Thus, the following hypothesis is proposed:

H1: There is a relationship between memorable experiences towards technology usage.

Perceived Value: Perceived value refers to the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given (Parasuraman, Zeithaml, & Berry, 1988). Perceived value becomes very important for making sure that consumers will come back and repeat it. Mainly, it reflects the consumer's perspective of the performance, quality, and price of the service. Event technology usage is used to describe all the digital tools and software that have been used in the events industry. Everything from check-in and registration to diagramming, to social media tools, and many more. The use of all these technologies in events provides an advantage in ensuring event organizers deliver quality events. A study by Jeong and Kim (2020) found that event quality acts as an antecedent of perceived value and leads to attendees' satisfaction. It is found that people feel capable of using IoT services competently, and they strongly consider that technology is useful and creating value for them (El-Haddadeh, Weerakkody, Osmani, Thakker & Kapoor, 2019). Effective utilization of event technology can create a perceived value for consumers. Thus, the following hypothesis is proposed:

H2: There is a relationship between perceived value towards technology usage.

Enjoyment: Enjoyment helps in bringing satisfaction when it comes to their wants and needs. The event technology usage may help in terms of convenience. It refers to sensory, functional, social, natural, and cultural stimuli in a service encounter, embedded in a culture of hospitality (Bitner, 1992). From an event management perspective, emotions, and enjoyment typically take a central role play in experiencing events (Jang, Wu & Wen, 2021). It becomes evident that positive feelings such as enjoyment or emotional satisfaction serve as precursors for explaining the intention to engage with digital services (Capasa, Zulauf & Wagner, 2022). Therefore, the use of technology in events is essential. At all stages of the event experience journey, the focus on using technology through integrated information and communication technologies (ICTs) has become the key strategy to enhance satisfaction and sustainable advantages among event and tourism stakeholders (Bustard et al., 2019). The technology could help the event organizer collect enough data regarding their attendees' information. This helps the organizer to understand whom they are approaching and how they are going to conduct an event that will be suitable for the attendees (Ryan et al., 2020). Since, attendees' positive perceptions of enjoyment lead to a high evaluation of attendees' experience (Dong & Siu, 2013); enjoyment is likely to form a favorable attitude. Thus, the following hypothesis is proposed:

H3: There is a relationship between enjoyment towards event technology usage.

3. Research Methodology

This research employed a descriptive survey technique to measure the variables. The population for this study was students from the Event Management Program, UiTM Puncak Alam, and the samples were derived from convenience sampling techniques. The questionnaires were distributed online to the respondents and a total of 202 respondents answered and completed the questionnaires. The instruments were adapted from various sources (Sangkaew, 2020; Sherlock & Connor, 2015). A structured questionnaire was created and a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used to measure the respondent perception of the relationship between dimensions of memorable experience, perceived value, and enjoyment towards technology usage. Statistical Package for Social Sciences (Version 22) was used for the data analysis. Multiple regression analysis was employed to examine the hypothesis testing and to indicate the intensity of the relationship among the variables. Furthermore, Pearson's correlation analysis was conducted to understand the nature and strength of connections between memorable experiences, perceived value, enjoyment, and technology usage.

4. Results and Discussion

Profile of Respondents: Table 1 depicts the demographic profile of the respondents who participated in the study. Of the total of 202 respondents, 94 were males (45.5%) and 108 were females (53.4%) who participated in this research. Most of the respondents' ages were between 21-23 years old (49.5%), followed by those aged group of 18-20 years old (31.2%) and 24-26 years old (5%). Regarding their ethnicity, there were 157 students (77.7%) of the respondents identified as Malay, and the remaining were Bumiputera Sabah 31 students (15.3%), and Bumiputera Sarawak 14 students (6.9%). Based on the table below, the frequency of attending events was assessed. The majority of the respondents have attended events 5-10 times (40.65%), followed by those who attended more than 10 times (34.2%) and 1-5 times (25.5%). In this research, the respondents were asked about the types of events that they preferred to attend the most. 150 students selected physical events (74.3%) while 52 students selected virtual events (25.75%).

Table 1: Demographic Information of the Respondents

VARIABLES	FREQUENCY	TAGE	
GENDER			
Males	94	46.5	
Females	108	53.4	
AGE			
18-20	63	31.2	
21-23	100	49.5	
24-26	39	5	
Ethnicity			
Malay	157	77.7	
Bumiputera Sabah	31	15.3	
Bumiputera Sarawak	14	6.9	
How often do you attend an			
event			
1-5 times	51	25.5	
5-10 times	82	40.6	
More than 10 times	69	34.2	
Total			
Type of event preferred.			
Physical event	150	74.3	
Virtual Event	52	25.7	

Descriptive Statistics: Results in Table 2 show descriptive statistics for event attendees regarding their satisfaction with technology usage. Technology usage has the highest mean score compared to the other variables, which is 4.4668. Meanwhile, memorable experience and enjoyment have quite similar mean values which are around 4.44. This could imply that the participants had a good experience and enjoyed the activity

the technology provided. The Cronbach's Alpha values of the variables shown in Table 2 fall between the range of 0.869 and 0.872. These results fulfilled the reliability criteria of "good reliability" (Zikmund, Babin, Carr & Griffin, 2013), and can be used for further analysis.

Table 2: Descriptive Statistics and Reliability Analysis

Variables	Mean	Std. Dev.	Cronbach's alpha
Memorable experience	4.4455	0.36653	.872
Perceived experience	4.4590	0.34758	.869
Enjoyment	4.4470	0.37630	.871
Technology Usage	4.4668	0.33806	.870

Pearson Correlation Analysis: Table 3 shows the relationship between three independent variables (memorable experience, perceived value, and enjoyment) with technology usage. The result shows all correlation scores fall between 0.700 to 0.748 which implies a moderate relationship with the dependent variable. Memorable experience had the lowest correlation score of r=.700, with perceived value similar scores r=0.716 while enjoyment had the highest score of r=0.775. All the variables have a significant and positive relationship with technology usage which implies that as the variable increases in value, the other variable also increases in value.

Table 3: Pearson Correlation Analysis

	Memorable Experience	Perceived Value	Enjoyment	Technology Usage
Memorable	1			osuge
Experience	•			
Perceived Value	.748**	1		
Enjoyment	.704**	.668**	1	
Technology Usage	.700**	.716**	.775**	1

Regression Analysis Results: The study used multiple regression analysis to examine the best prediction from the independent variables toward technology usage. The findings show that memorable experience, perceived value, and enjoyment significantly predicted technology usage. Memorable experience scored (β = .151, t = 2.277, p < 0.05) indicating that memorable experience had a significant contribution to the prediction of technology usage. Next, perceived value scores (β = .282, t = 4.436, p < 0.05), hence implying that perceived value had significant influences on technology usage. The score for enjoyment (β = .480, t = 8.096, p < .05) also reflected that it significantly influences the values of technology usage. Overall, the results depict that all the dependent variables significantly contributed to technology usage. As shown in Table 4, the F value was 140.254 and significant (p<0.05). The R² value = 0 .680 which indicates that 68% of the variations in the technology usage could be explained by the independent variables. Based on the findings, memorable experience, perceived value, and enjoyment can predict more than 68% of technology usage leaving 32% of variables unexplained by the factors of this study. Therefore, it can be concluded that Hypothesis 1, Hypothesis 2, and Hypothesis 3 were supported.

Table 4: Multiple Regression Analysis

Independent variables	Standard Coefficients Beta	t	Sig.	
Memorable Experience	0.151	2.277	0.024	
Perceived Value	0.282	4.436	0.000	
Enjoyment	0.480	8.096	0.000	
R^2	0.680			
Adjusted R ²	0.675			
F-value	140.254			
Significance F-value	0.001			

Table 5: Hypotheses Testing Results

Нур	otheses	Results
H1	There is a relationship between memorable experiences towards technology usage.	Supported
H2	There is a relationship between perceived value towards technology usage.	Supported
Н3	There is a relationship between enjoyment towards technology usage.	Supported

Discussion: The purpose of this study is to examine the factors that influence technology usage. Each of the three constructs of independent variables was analyzed individually, namely memorable experience, perceived value, and enjoyment. The regression analysis implied that memorable experiences had a significant influence on technology usage. This finding is supported by Bustard et al. (2019) who encourage event practitioners to use technology in offering significant and memorable experience-enhancing opportunities. It can be concluded that event attendees are seeking experiences that they can cherish, and the use of technology helps to relish the memory through the innovation and interaction of the technology used at the event. Next, the study shows that perceived value had a significant impact on technology usage in events. This result is similar to other studies by El-Haddadeh et al. (2019) that found the impact of perceived value is influenced by the perceived usefulness of IoT within public services. The enjoyment variable was also found to significantly influence the prediction of technology usage at events. This finding is aligned with the study by Campos, Mendes, Valle, and Scott (2018) which indicates that technology could help in offering enjoyment in socializing, environment, and organizational dynamics. Multiple Linear Regression Analysis was used to explain the answer to each of the research questions to further validate the significant effect of the independent predictors on the dependent variable. The results indicate that 68% of the total variance in technology usage was related to memorable experiences, perceived value, and enjoyment. This means that the independent variables can predict more than 68% of technology usage. Furthermore, the result from regression and correlation analysis established that all three hypotheses are supported.

5. Managerial Implications and Recommendations

The findings of this study provide insights to the event manager in utilizing the event technology in crafting the event experiences for the attendees. This study focuses on the technology usage at events among the students at UiTM Puncak Alam. Thus, future research can be extended to other event attendees including families and workpeople. Besides, the variables were limited only to four predictor factors memorable experiences, perceived value, and enjoyment. The results of the current study indicate that it is worth continuing future research to explore other possible variables that could have an emphasis on technology usage.

Conclusion: The purpose of this study was to examine the factors that influence the usage of technology at events. The findings of the study indicated that memorable experiences, perceived value, and enjoyment have a significantly positive influence on technology usage at events. Based on the result of this study, the event attendees are anticipating event organizers to embed the elements of technology in delivering the event services as it enhances the value of event experiences for event attendees to derive enjoyment from the events. Furthermore, the advancement of technology has created vast opportunities for event organizers to apply technology as part of event planning and organization to achieve competitive advantage and be at the cutting edge of innovation and efficiency. Technology makes an event manager's job easier, allowing them to focus on the most important aspects of the event, such as improving the attendees' experiences at an event.

References

- Bitner, M. J. S. (1992). The Impact of Physical Surroundings on Customers and Employees in Journal of Marketing, 56.
- Bustard, J. R. T., Bolan, P., Devine, A. & Hutchinson, K. (2019). The emerging smart event experience: an interpretative phenomenological analysis. *Tourism Review*, 74(1), 116-128.
- Campos, A. C., Mendes, J., Valle, P. O. D. & Scott, N. (2018). Co-creation of tourist experiences: A literature review. *Current Issues in Tourism*, 21(4), 369-400.
- Capasa, L., Zulauf, K. & Wagner, R. (2022). Virtual reality experience of mega sports events: A technology

- acceptance study. Journal of Theoretical and Applied Electronic Commerce Research, 17(2), 686-703.
- Coudounaris, D. N. & Sthapit, E. (2017). Antecedents of memorable tourism experience related to behavioral intentions. *Psychology & Marketing*, 34(12), 1084-1093.
- Dong, P. & Siu, N. Y. M. (2013). Servicescape elements, customer predispositions, and service experience: The case of theme park visitors. *Tourism management*, 36, 541-551.
- El-Haddadeh, R., Weerakkody, V., Osmani, M., Thakker, D. & Kapoor, K. K. (2019). Examining citizens' perceived value of the Internet of Things technologies in facilitating public sector services engagement. *Government Information Quarterly*, 36(2), 310-320.
- Jang, W., Wu, L. & Wen, J. (2021). Understanding the effects of different types of meaningful sports consumption on sports consumers' emotions, motivations, and behavioral intentions. *Sport Management Review*, 24(1), 46-68.
- Jeong, Y. & Kim, S. (2020). A study of event quality, destination image, perceived value, tourist satisfaction, and destination loyalty among sports tourists. *Asia Pacific Journal of Marketing and Logistics*, 32(4), 940-960.
- Kruger, M. & Saayman, M. (2017). An experience-based typology for natural event tourists. *International journal of tourism research*, 19(5), 605-617.
- Madray, J. S. (2020). The impact of COVID-19 on the event management industry. *International Journal of Engineering Applied Sciences and Technology*, 5(3), 2455-2143.
- Melo, M., Coelho, H., Gonçalves, G., Losada, N., Jorge, F., Teixeira, M. S. & Bessa, M. (2022). Immersive multisensory virtual reality technologies for virtual tourism: A study of the user's sense of presence, satisfaction, emotions, and attitudes. *Multimedia Systems*, 28(3), 1027-1037.
- Parasuraman, A. B. L. L., Zeithaml, V. A. & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality, 64(1), 12-40.
- Pine, B. J. & Gilmore, J. H. (1998). Welcome to the *Experience Economy*, 76(4), 97-105. Cambridge, MA, USA: Harvard Business Review Press.
- Rihova, I., Buhalis, D., Gouthro, M. B. & Moital, M. (2018). Customer-to-customer co-creation practices in tourism: Lessons from Customer-Dominant logic. *Tourism Management*, 67, 362-375.
- Rogers, T. & Wynn-Moylan, P. (2022). Conferences and conventions: A global industry. Routledge.
- Ryan, W. G., Fenton, A., Ahmed, W. & Scarf, P. (2020). Recognizing events 4.0: The digital maturity of events. *International Journal of Event and Festival Management*, 11(1), 47-68.
- Sangkaew, P. (2020). An investigation of how the adoption of event mobile applications influences satisfaction and post-event behaviors of business event attendees (Doctoral dissertation, University of Surrey).
- Sherlock, J. & Connor, N. O. (2015). Research into the Impact of Technology in the Events Industry. *The International Hospitality and Tourism Student Journal*, 7(1), 88-102.
- Zikmund, W. G., Babin, B. J., Carr, J. C. & Griffin, M. (2013). Business research methods. Cengage learning.