

## TECHNOLOGICAL DEVELOPMENT IN DUBAI: TOURIST'S INSIGHTS ON INNOVATION

Sachin Kumar <sup>1</sup>, (Dr.) Manohar Sajjani <sup>2</sup> and Dr. Ashok Chopra <sup>3</sup>

<sup>1</sup> PhD Scholar, Amity Institute of Travel & Tourism, Amity University, Uttar Pradesh, Noida, India. Email: Sachin10aug@gmail.com

<sup>2</sup> Professor, Dean, Faculty of Hospitality & Tourism, Director, Amity Institute of Travel & Tourism, Amity University, Uttar Pradesh, Noida, India. Email: msajjani@amity.edu

<sup>3</sup> Associate Professor, Management & Commerce, Amity University Dubai, UAE. Email: achopra@amityuniversity.ae

DOI: [10.5281/zenodo.13744323](https://doi.org/10.5281/zenodo.13744323)

### Abstract

Dubai has rapidly become a global innovation powerhouse due to its strategic focus on technical growth. Technological advances, including EXPO-2020, GITEX Technology Week, and many other major events, affect Dubai tourism. These events draw international visitors, highlight cutting-edge technology, and boost the city's tourism. This study shows how technological innovation boosts tourism and changes Dubai's global image through travelers' perspectives. This study examines the impact of technological development in Dubai from a Tourist's perspective. By focusing on the innovations presented at Expo 2020, it hopes to provide insights into how these improvements affect tourist experiences and views of the city. The Expo's impact on Dubai's tourism industry and economic growth is examined in this study by a questionnaire given to attendees. Furthermore, the study assesses the impact of Expo 2020 on Dubai's technological environment and its current attractiveness to tourists. The survey included over 300 visitors from 25 countries, including India, Russia, China, the Philippines, Sri Lanka, the UK, Afghanistan, the USA, Sudan, Spain, the UAE, Canada, etc. The survey covers technology, indigenous enterprise, economic growth, tourism, and Expo pavilion digital connectivity. The Expo's innovation and technology's long-term effects on economic development are also examined. Dubai Expo 2020, technical advancement, and tourism are interconnected, as shown by this study. These findings highlight the importance of technology in Dubai's tourism boom. Digital technologies and a hybrid event approach enabled large-scale stakeholder engagement. Exhibitions enhance foot traffic, benefiting local businesses. AI and robotics can improve consumer experience and reduce health risks. The study found that EXPO 2020 boosted the economy, highlighting the importance of technology and innovation in Dubai's tourism industry.

**Keywords:** Tourism, Technological Advancements, Innovation, Tourism Impact, Dubai Expo 2020, Visitor Experiences, Economic Growth.

### INTRODUCTION

Technology is changing global cities, therefore understanding its impact on tourism is vital. Modern tourists want cutting-edge experiences and digital comforts. This study shows how technology improves tourist satisfaction and urban destination economies. A retroactive appraisal of Dubai Expo 2020 is powerful due to technical advances and the post-pandemic tourism surge. We can understand tourism's partnership with technology by looking back from the tourist's perspective. This perspective helps us understand Expo 2020's influence, overcome challenges, and build Dubai's tourist future. The Dubai Expo 2020, a magnificent international celebration, shows the interconnection of the tourism and travel sectors and technological developments. The major objective of the Expo was to captivate a huge number of people from many parts of the world, with a focal point on sustainability, innovations and technology, and global experience. Mega events are typically large-scale events with substantial economic ramifications for the host nation [1]. Bowdin et al. define a crisis as an event of such magnitude that it considerably affects entire

economies and receives extensive coverage in the world media. Post debating mega-event categorization, Müller [2] deduced that "mega-events are ambulatory occasions of fixed duration that attract a large number of visitors, have a largely mediated reach, incur substantial costs, and have substantial effects on the built environment and population." Such huge occasions are resource-intensive, yet they can enhance heritage and cultural tourism and station brand development. Thus, they often receive large governmental subsidies. [3, 4].

GITEX Technology Week is yet another key event that brings attention to Dubai's outstanding technological skills and the impact that Dubai has had on the tourism sector through its influence. Because it is one of the most important technology displays in the Middle East, GITEX attracts people from all over the world who are passionate about technology, pioneers in their respective industries, and innovators. This event takes place once a year and showcases the most recent advancements in artificial intelligence, blockchain, robots, and smart cities. It offers a glimpse into the future of technology. The presence of tourists from other countries at the GITEX event not only helps Dubai's tourism business to flourish, but it also helps to position Dubai as a leading hub for commercial activity and technological advancement. These visitors, who are drawn to the event, frequently extend their vacations in order to explore the myriad attractions that Dubai has to offer. These attractions include shopping experiences that are extravagant as well as well-known sites such as the Burj Khalifa and Palm Jumeirah. In addition, the event makes it easier to network with other people and share knowledge, which could lead to the formation of long-term partnerships and investments in Dubai's technological sector. Through the staging of important events such as GITEX, Dubai is able to further solidify its position as a city that is in the forefront of innovation and easily mixes cutting-edge technology with exceptional hospitality. Their attraction as a major tourist destination is further enhanced as a result of this.

The present paper studied the influence of Dubai Expo 2020 on Dubai's tourism industry. This also explores the role of technological developments, tourists' perspectives, and overall financial growth. These types of events have the potential to stimulate economic growth both locally and nationally [5]. The present study aims to broadly study the relationship between EXPO 2020 and the tourism and travel sectors, focusing on recent technological developments. The questionnaire used in this work plays an essential tool in gathering data from the visitors of the Expo, helping in the broad assessment of their experience and perspective. Our objective is to assess the possible impact of Dubai Expo 2020 on the travel and tourism industry and the economic growth of Dubai via an analysis of visitors' feedback.

The Expo's success was majorly linked to the application of technological advancements, which assisted the event's digitalization and blended hybrid structure. This method enlarged the Expo's reach and influenced a more divergent audience, including private and public stakeholders from many global sections. The objective of the present study is to assess the scope to which the incorporation of various digital technologies improved the quality of the tourist's experience and assisted in the overall economic development of Dubai.

This study also assesses the possible influence of Dubai Expo 2020 on important industries such as tourism, commerce, and the digital forum. We want to see if this mammoth event served as an important factor for financial growth in these dimensions

by assessing tourist's opinions and looking into how technology and innovation were used in the Expo, particularly emphasizing how they might contribute to long-term, sustainable economic growth. The marketing plans for Dubai Expo 2020 were also interesting, different, and new. Digital marketing was the most popular way for both Expo 2020 staff and tour companies and travel agents in Dubai to spread the word about their business [7].

Moreover, the study evaluates the influence of Dubai Expo 2020 on the development and accomplishment of local businesses by assessing its effects on them. This study examines the relationship between the rise in visitors' arrivals and the promotional activities of Dubai as a tourist destination. This will be accomplished by observing the association between tourist numbers and the tourism sector of Dubai. The primary objective of this paper is to give a holistic view analysis of the impact of Dubai Expo 2020 on the travel & tourism sector, technological developments, and economic growth of Dubai. This study aims to assess the influence of the Expo on the travel & tourism sector, as well as its volume to energize tourism in Dubai in the upcoming time. This will be achieved by assessing the tourists' views and examining technology's impact.

Dubai's dedication to the advancement of technology is the driving force behind its journey toward being a global leader in innovation. The city not only shows the technological developments through events such as Expo 2020 Dubai and GITEX technology week, but it also attracts a varied audience, which helps to foster collaboration and drives the expansion of tourism. The purpose of this research is to provide significant insights into the junction of technology and tourism by investigating the perspectives of tourists regarding Dubai's technological advances. Not only does gaining an understanding of the influence of these inventions improve our appreciation of Dubai's development, but it also provides vital lessons for other cities that are looking to harness technology to improve their tourism business and build their identity on a global scale. In the forthcoming literature review, additional investigation will be conducted to investigate previously conducted research, with the purpose of providing context and expanding upon the foundation that was established in this introduction.

## LITERATURE REVIEW

New technologies in tourism have completely changed the business, making it more appealing to tourists and making cities more competitive. Studies show that smart technologies can make services better, handle resources better, and be more environmentally friendly. This can attract modern travelers and help cities grow their economies. EXPO 2020 significantly impacted the main economic factors in Dubai, especially the hospitality and tourism industry. This resulted in a significant boost in the tourism industry and an increase in hotel bookings and reservations [8]. Dubai had invested heavily in infrastructure development to support the EXPO 2020, which included the construction of new hotels, restaurants, shopping malls, and transportation facilities, which lead to a positive impact on the hospitality industry [9]. The EXPO 2020 helped in generating thousands of jobs in Dubai; especially in the hospitality and tourism industries, which assisted in reducing the number of jobless people, which leads boosting the economy [10]. EXPO 2020 also motivated global investors keen on the various opportunities Dubai offered. This created new jobs and positively impacted the economy [11].

Smart city initiatives in Dubai enhance the quality of life for both inhabitants and visitors. The government employs state-of-the-art technology to convert data into practical information and enhance the utilization of resources in several sectors such as the economy, government services, transportation, environment, education, and healthcare. Research indicates that smart city projects enhance efficiency and mobility, hence promoting sustainability and inclusivity in urban areas. These efforts contribute to Dubai's technological advancements, urban growth, and tourism

Dubai has been using all efforts to transform its economy from relying on oil, and the EXPO 2020 is a stride in that movement [13]. The mega event assisted in encouraging Dubai as a place for technology, innovation, and trade, which will assist in modifying the economy and lowering its dependence on oil [14]. The influence of EXPO 2020 on economic development is debatable and relies on various parameters. The World Expo, initially planned to take place in Dubai from October 2020 to April 2021, was postponed to 2021 because of the COVID-19 pandemic [15]. However, the pandemic has had a crucial influence on the global economy, including the travel and tourism sector, which could influence the anticipated economic benefits of the EXPO. The organizers of Expo's have used many ways to ensure the health and safety of tourists and participants, such as social distancing protocols, vaccination requirements, and capacity restrictions [16].

One research explores the use of technological applications in tourism events, festivals, and fairs in the UAE after the COVID-19 epidemic. It specifically examines several technical apps and their influence on the growth of tourism. It shows that there is a lack of research in the literature on the extensive use of technology apps for the purpose of sustainable tourism development in combination with events. The study also highlights the potential of technology to promote sustainable tourism development in the UAE after the COVID-19 pandemic by analyzing how tourists are influenced by technology, specifically in their interest and participation in tourism events, festivals, and fairs. The chapter provides valuable insights into the perspective of the UAE, contributing to the knowledge of how technology drives tourism growth and improves visitor experiences in a dynamic and complex global setting [17].

The Dubai Department of Economy and Tourist Annual Visitor Report 2022 serves as a roadmap for understanding Dubai's continued efforts to position itself as a worldwide tourist powerhouse. In addition to reporting essential statistics and trends, the report also acts as a roadmap. This provides significant insights into the elements that are driving Dubai's tourist growth and competitiveness. These insights are provided through extensive analysis of visitor demographics, spending patterns, and market dynamics. Furthermore, the report emphasizes Dubai's commitment to the growth of sustainable tourism by outlining strategic initiatives and investments that are aimed at enhancing the experiences of visitors, boosting cultural interaction, and conserving the environment. As a result, it not only provides information to stakeholders and policymakers, but it also encourages collaboration and innovation within the tourism industry, which contributes to Dubai's continuous success as a prime destination for tourists from all over the world [18].

Many measures were found to be successful in mitigating the influence of the pandemic on the Expo's economic benefits. However, the Expo still positively influenced Dubai's economy, particularly in the long term, via improved investment and business opportunities [19]. The mega event aimed to provide opportunities for

entrepreneurs and businesses to associate with potential partners, display their services, and products, and improve growth in these leading sectors [20]. The mega event displayed the countries, natural beauty, cultural heritage, and modern infrastructure, highlighting Dubai's place as a leading tourism destination [21]. Expo 2020 aimed to assist trade and business opportunities by collaborating with world leaders, entrepreneurs, and investors. The event gave a platform for businesses to display their services and products, link with potential partners, and explore novel markets [22]. The mega event displayed innovative transportation technologies, sustainable travel solutions, and best practices in tourism [23]. Digitalization was one of the prominent parts of The EXPO 2020 Dubai to display the latest innovations and technologies in digitalization, including robotics, artificial intelligence, and virtual reality [24]. The interchange of ideas and innovations can also create new businesses and entrepreneurship, leading to economic growth [25].

A meta-synthesis evaluation of smart tourism publications is presented in this study. The purpose of this review is to give stakeholders a comprehensive understanding of the components, measures, and outcomes that are anticipated from smart tourism locations. In order to provide a contribution to the ongoing conversation on smart tourism destinations, the study classifies articles into categories based on components, measurements, and outputs. This is accomplished by reviewing and synthesizing relevant material from internet databases. In addition to addressing the need to bridge gaps in the study field, the findings provide insights into the development of a new template for smart destinations. Furthermore, the methodology of the study allows for the creation of a framework for understanding how smart destinations are theorized and developed. This framework provides stakeholders with essential assistance for intelligently creating tourism destinations in accordance with smart city objectives [26].

The technology and infrastructure used during the event, such as smart transportation systems, also progressively impacted the local economy by improving efficiency and reducing costs [27]. The EXPO attracted many visitors and tourists, generating revenue for local businesses in the hospitality and service sectors. Technology, such as virtual and augmented reality, enhanced the tourist experience and promoted local attractions [28]. The showcase of new technologies and innovations provided a platform for local businesses to showcase their products and services to a global audience. This attracted international investment and promoted economic growth [29]. There were various AI and robotics services showcased at EXPO 2020 Dubai that were specifically related to tourism and travel. [30]. Companies demonstrated their smart luggage, which uses AI and robotics to navigate airports and hotel lobbies, and even follow their owners around [31]. Several companies showcased their smart translation devices, which use AI to translate languages in real time, making it easier for travelers to communicate in foreign countries [32]. This technology has improved the overall experience of visitors [33]. Dubai applied smart city technology to enhance navigation and transportation for visitors[34].

Another research talks about Technology-driven smart tourist destinations. This now incorporates Sustainable Development Goals (SDGs) into economic, social, and environmental factors. For tourist and inhabitant satisfaction, these sites stress technology, innovation, accessibility, and sustainability. This review examines how major destination components and smart city dimensions relate and emphasizes the need for DMOs to combine them for competitiveness. It also addresses the

digitalization of cultural heritage tourism and the need to use digitization and ICTs to accomplish SDGs in smart tourism locations. Academic articles and studies inform the review and suggest future research [35].

Dubai had funded a 5G network that supported high-speed internet links and improved the use of mobile applications and services. This technology helped to improve the tourist experience by giving reliable and fast connectivity for navigation, communication, and information sharing [36]. The event presented sustainable exhibits and pavilions displaying the latest technology and creativity in sustainable growth [37]. Artificial intelligence (AI) and Robotics were used to improve the visitor experience, giving interactive displays and fittings that react to visitors' preferences and actions. This technology-enhanced safety and security, including using drones for emergency response and surveillance [38]. AI and robotic technology are promising for the travel sector, but humans are still crucial. Technology and human warmth must be used to create unforgettable experiences and ensure future event success [39].

In conclusion, the findings of our research have thrown light on the significant role that technical improvements and important events have in fueling the success of Dubai's tourism industry. As a result of our investigation into a wide range of research studies and publications, we have determined that Dubai's strategic emphasis on technological advancement and its hosting of big events such as Expo 2020 Dubai have made a substantial contribution to the city's tourism business. Dubai has established itself as a major global tourism destination by incorporating cutting-edge technologies, innovative initiatives, and world-class infrastructure. This has resulted in an overall improvement in the quality of the tourist experience available to visitors. Furthermore, big events such as Expo 2020 Dubai have served as drivers for economic development, information sharing, and international collaboration. These events have attracted millions of tourists and left an indelible mark on the tourism landscape of the city. As Dubai continues to make investments in technological innovation and to host big events, the city is well positioned to further cement its position as a prime destination for both tourists and companies alike. For Dubai to continue to retain its momentum in the future, it will be essential for the city to make use of technology, encourage innovation, and continue to uphold its commitment to excellence in tourism administration and promotion.

## **METHODOLOGY**

This study employs a mixed-method approach to examine the impact of recent events on Dubai's travel and tourism sector and economic development. It combines quantitative analysis of tourist surveys with qualitative evaluation of industry reports and economic indicators.

The first is to gauge the effect of Dubai Expo 2020 on the Dubai Tourism Sector, the second is to evaluate the role of Expo 2020 in improving Dubai's economic growth, and the final one is to examine technological intervention in managing Dubai tourism, such as robotics, Artificial intelligence, and digital connectivity in Expo 2020. A cross-sectional survey design was used to gather data from tourists of Expo 2020 in Dubai, UAE. The main aim of the survey was to examine the influence of Expo 2020 on many facets, such as the financial development of Dubai, Local businesses, technological advancements, and digital connectivity of pavilions at the Expo. The random sampling method was used to choose participants from the Expo visitors population. Every

tourist had an equal opportunity to be selected as a participant. This ensures reduced selection effect and representativeness.

The study sample comprises over 300 visitors from 25 countries, such as Russia, China, Germany, France, Sri Lanka, Saudi Arabia, the USA, Sudan, Spain, UAE, Canada, and many others. Participants' selection was based on their presence at Expo 2020. Before the final survey was conducted, an initial questionnaire was applied to almost 200 visitors as a pilot study. A pilot study helps in ensuring the reliability and relevance of the questionnaire. Necessary adjustments were taken based on the analysis and feedback from the pilot study. This entire process helped in finalizing the main questionnaire consisting of 20 questions.

The final questionnaire was distributed to visitors to the Expo. The survey questionnaire was applied electronically or in person. Clear instructions were given to the participants and addressed their queries, if any. Informed consent was taken before the administration of the questionnaire. The survey questionnaire involved many facets and variables, such as the financial development of Dubai, Local businesses, technological advancements, and digital connectivity of pavilions at the Expo. These facets were examined using the Likert scale, closed-ended questions, and (yes/no) responses. After the data collection, the responses were coded. Descriptive statistics such as percentages and frequencies were determined to outline the responses.

## RESULT AND ANALYSIS

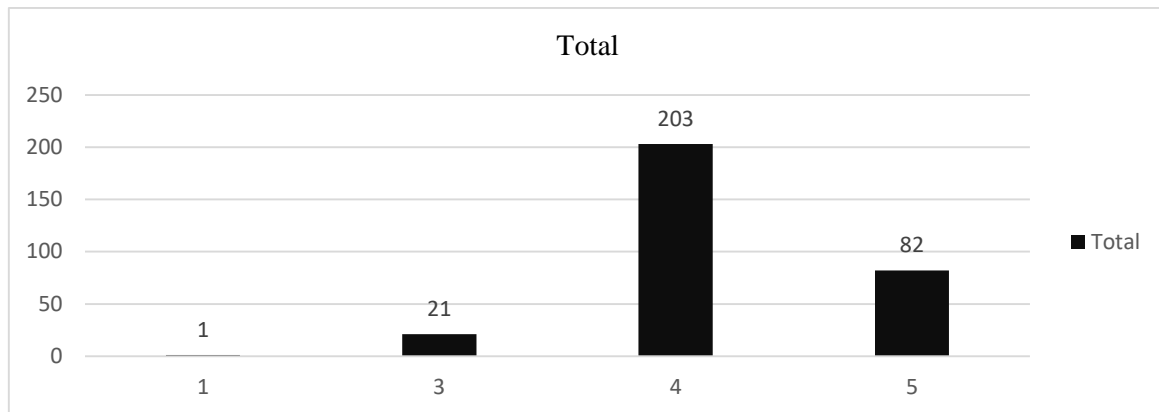
The present investigation examined the impact of Dubai Expo 2020 on the Dubai tourism industry, assessed the role of Expo 2020 in enhancing the economic growth of Dubai, and evaluated the role of technological advancements in driving Dubai tourism. A cross-section research design was used, and data collection was completed from visitors of Expo 2020 in Dubai. The sample size is 307 participants from 25 different countries. Examining the gathered data will give a comprehensive understanding of the influence of Expo 2020 on many facets. The results are analyzed and discussed in this chapter as follows.

### **Objective – 1 Graph 3 & Pivot Table 1: The first objective is to gauge the effect of Dubai Expo 2020 on the Dubai Tourism Sector**

**Table: 1 The effect of Dubai Expo 2020 on the Dubai Tourism Sector,**

| <b>What was the purpose of visiting Dubai Expo 2020?</b> | <b>Count of What was the purpose of visiting Dubai Expo 2020?</b> |
|--|---|
| Any other  | 7   |
| Arts & Culture   | 18  |
| Global Experience  | 28  |
| Technological advancement                                | 6   |
| Travel & Tourism   | 23  |

According to the above pivot table 1, tourists who were primarily looking for international experiences (28 visitors) and travel chances (23 visitors) showed a great deal of interest in Dubai Expo 2020. While technology improvements attracted fewer visitors (6 visitors), arts and culture also attracted attention (18 visitors). Overall, the expo seems to have had a favorable impact on Dubai's tourism industry by providing a variety of attractions that cater to a wide spectrum of interests.



**Graph 1: Potential Impact of Expo 2020 on Dubai (UAE) Tourism:**

Based on the above Graph 1, reflects that the majority of responders (203+82=285) agree or strongly agree that Expo 2020 may affect Dubai's tourism. This suggests optimism about the expo's impact on Dubai tourism. However, 21 respondents were neutral, showing ambiguity or a lack of strong opinion on the expo's possible influence on Dubai's tourism sector.

Expo 2020 is seen by a big part of respondents as having the potential to boost Dubai tourism, although a smaller group is hesitant or ambivalent.

**Objective – 1 Q2 Hypothesis Testing**

- Divided Responses in Agreement Groups i.e. High Agreement and Low Agreement.
- Numerical Responses 4, 5 – High Agreement
- Numerical Responses 3,2,1 – Low Agreement

**Table 2: Hypothesis Testing**

|                              |             |
|------------------------------|-------------|
| High agreement Average score | 4.287719298 |
| Low Agreement Average Score  | 2.869565217 |

**Hypothesis Formulation:**

H0: there is no significant difference in the mean scores between the "High Agreement" and "Low Agreement" groups.

H1: there is a significant difference in the mean scores between the two groups

**Table 3: Results of Hypothesis**

|  |                      |
|--|----------------------|
| T-test p-value (two-tailed two samples equal variance) | 5.72828E-34 (< 0.05) |
| T-test p-value (Two-sample unequal variance)           | 1.19837E-13 (<0.05)  |

The p-value obtained for the test is very small. Hence, there is strong evidence to suggest a significant difference in mean scores between the "High Agreement" and "Low Agreement" groups regarding the impact of Expo 2020 on Dubai's economic growth.

Discussion of the result: The findings of the analysis reveal a significant disparity in the average scores between the "High Agreement" group (mean score: 4.29) and the



"Low Agreement" group (mean score: 2.87) with respect to the possible influence of Expo 2020 on the economic growth of Dubai. The results of the hypothesis testing demonstrate p-values of 5.72828E-34 and 1.19837E-13, which are significantly low. These values provide compelling evidence to reject the null hypothesis. This observation implies that there exists a notable disparity in the average scores between the two cohorts. The results indicate a distinct disparity in perspectives, as individuals who strongly agree anticipate a considerable positive influence of Expo 2020 on Dubai's economic expansion, whereas those in the low agreement category exhibit less optimism or do not perceive the potential impact as substantial.

**Table 4: Objective – 2 Q6- the second is to evaluate the role of Expo 2020 in improving Dubai’s economic growth,**

| Row Labels         | Do you think that sectors such as tourism, trade, travel & digital economy were the key engines of growth of Expo 2020? | % of each |
|--------------------|---|-----------|
| Maybe              | 47  | 15%       |
| No                 | 10  | 3%        |
| Yes                | 250   | 81%       |
| <b>Grand Total</b> | <b>307</b>  |           |

Based on the above table, it is clear that a substantial majority of participants (81%) hold the belief that industries such as tourism, trade, travel, and the digital economy were pivotal in propelling the growth linked to Expo 2020. This suggests a prevailing belief that these industries played a crucial role in driving Dubai's economic expansion during the exhibition.

**Table 5: Objective – 2 Q8 - Expo 2020 will have a positive impact on local businesses.**

| Row Labels         | Count of Do you think that Event Expo 2020 will have a positive impact on local businesses? |
|--------------------|---|
| Agree              | 199   |
| Disagree           | 9   |
| Neutral            | 32  |
| Strongly agree     | 64  |
| Strongly disagree  | 3   |
| <b>Grand Total</b> | <b>307</b>  |

Based on the above table and Pie Chart it is clear that most respondents (263 out of 307) say Expo 2020 will benefit local companies. Skepticism is expressed by 12 out of 307, whereas 32 show neutrality. People are optimistic about the event's benefits to Dubai's local businesses.

The data shows that most respondents were optimistic about Expo 2020's potential benefits to Dubai's local businesses.

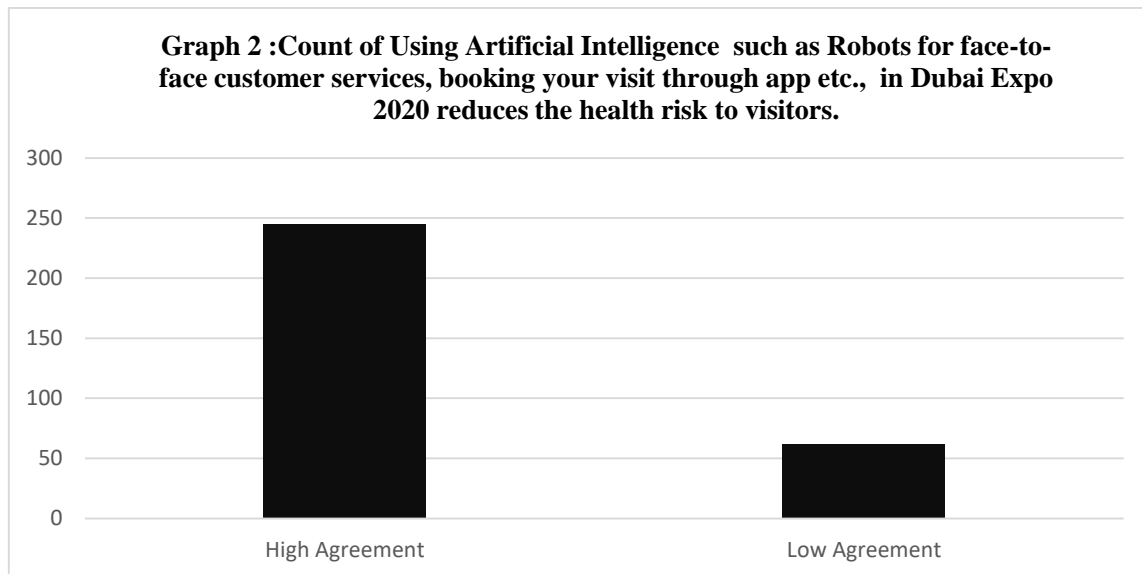
**Objective 3: the final one is to examine technological intervention in managing Dubai tourism, such as robotics, Artificial intelligence, and digital connectivity in Expo 2020**

H0: there is no significant difference in the mean scores between the "High Agreement" and "Low Agreement" groups.

H1: there is a significant difference in the mean scores between the two groups

**Table 6: Objective 3: Examining technological intervention in managing Dubai tourism,**

|              |             |             |
|--------------|-------------|-------------|
| T Test Value | 1.89534E-68 | 1.51156E-31 |
|--------------|-------------|-------------|



The statistical analysis strongly suggests that there is a significant difference in the mean scores between the "Low Agreement" and "High Agreement" groups when it comes to how technology affects the management of tourism in Dubai. The p-values that were found (1.89534E-68 and 1.51156E-31) strongly support rejecting the null hypothesis, which means that there is a clear difference in how the two groups see things. This means that people who say they strongly agree with the idea that technology should play a part in managing tourism in Dubai have very different ideas than people who say they strongly disagree. The above graph also reflects the same.

## CONCLUSION

There is strong evidence to suggest a significant difference in mean scores between the "High Agreement" and "Low Agreement" groups regarding the impact of Technological Intervention in Managing Dubai Tourism

## DISCUSSION

This research paper sheds light on how a major event affected Dubai's tourism and economic development. The results show that many people came to Expo 2020 to experience art, culture, and global variety, underscoring its role as a platform for cultural exchange and global involvement. Visitors also noted Expo 2020's good impact on Dubai's hospitality, tourism, and digital economy, highlighting its role as a catalyst for diversified growth. Expo 2020 was also expected to boost Dubai's tourism and economy, according to most respondents. The results also show that tourists like innovative technologies and digital transformation, stressing the need to use technology to improve visitor experiences and support sustainable growth. The study indicated that participants believed Expo 2020 would enhance regional and local enterprises, tourist numbers, and Dubai's tourism. AI and digital connectivity improved tourists' experiences and boosted Dubai's ambitions as a top destination. Expo 2020 is expected to benefit tourists and small companies, however, attitudes on

technological interventions differ, underscoring the need for nuanced methods to capitalize on potential and handle issues in Dubai's tourism sector.

The utilization of digital innovation is essential in order to fully optimize the advantages of significant events and prolong their impact beyond the duration of the event. By incorporating cutting-edge technologies, significant events held in places such as Dubai have the capacity to generate distinctive and engaging experiences for visitors, resulting in a long-lasting influence on the host city's tourism sector. Research substantiates the idea that digital innovation improves event planning, promotion, and execution, resulting in heightened visitor engagement and satisfaction. In addition, digital technologies allow event organizers to gather and analyze data, offering significant insights into the tastes and habits of attendees. This data can be utilized to customize upcoming events in order to fulfill the changing requirements of participants and improve the overall visitor experience. In addition, digital innovation enables the development of virtual and augmented reality experiences, providing event goers with the opportunity to engage with exhibits and attractions in novel and thrilling manners. These captivating experiences not only draw in people throughout the event duration but also enhance the event's lasting impact by encouraging sustained interest and involvement even after it ends. In general, digital innovation acts as a catalyst for maximizing the advantages of significant events, promoting the expansion of tourism, and creating a long-lasting impact on host destinations.

## CONCLUSION

In a nutshell, the findings of this study highlight the significant significance that large events play in fostering economic growth and establishing Dubai's reputation as a leading tourist destination. The utilization of technology is absolutely necessary in order to improve the experiences of tourists and to shape the tourism landscape of the city. Expo 2020 Dubai emphasizes Dubai's potential for sustainable tourism growth, which is further highlighted by the good impact of events such as Expo 2020 Dubai. On the other hand, due to the dynamic character of the tourism business, it is necessary to adopt flexible strategies in order to make the most of possibilities and triumph over obstacles. It will be essential for Dubai to continue investing in innovation and strategic planning if it wishes to maintain its position as the leader in the tourism industry on a worldwide scale. Expo-based outcomes serve as a testament to the transformative impact of significant events, allowing Dubai to reassert its position as a dynamic and resilient tourism powerhouse that is positioned for continued success.

## References

- 1) Bowdin, G.; McPherson, G.; Flinn, J. Identifying and Analyzing Existing Research Undertaken in the Events Industry: A Literature Review for People; Association for Events Management Education: Leeds, UK, 2006. [Google Scholar]
- 2) Müller, M. What makes an event a mega-event? Definitions and sizes. *Leis. Stud.* 2015, 34, 627–642. [Google Scholar] [CrossRef]
- 3) Chen, Y.; Qu, L.; Spaans, M. Framing the Long-Term Impact of Mega-Event Strategies on the Development of Olympic Host Cities. *Plan. Pract. Res.* 2013, 28, 340–359. [Google Scholar] [CrossRef]
- 4) Tsaour, S.-H.; Yen, C.-H.; Tu, J.-H.; Wang, C.-H.; Liang, Y.-W. Evaluation of the 2010 Taipei International Flora Exposition from the perceptions of host-city residents: A new framework for mega-event legacies measurement. *Leis. Stud.* 2017, 36, 65–88. [Google Scholar] [CrossRef]

- 5) Lamberti, L.; Noci, G.; Guo, J.; Zhu, S. Mega-events as drivers of community participation in developing countries: The case of Shanghai World Expo. *Tour. Manag.* 2011, 32, 1474–1483.
- 6) Corter, Josh. (2022). New data reveals extent of ‘Expo effect’ on Dubai hotels. <https://www.hoteliermiddleeast.com/tourism/expo-effect-dubai-hotels>
- 7) Haneef, S.K. and Ansari, Z. (2019), "Marketing strategies of Expo 2020 Dubai: a comprehensive study", *Worldwide Hospitality and Tourism Themes*, Vol. 11 No. 3, pp. 287-297. <https://doi.org/10.1108/WHATT-11-2018-0071>
- 8) Haneef, S. K., Ansari, Z., & Bhavani, G. (2019). Attractions of Dubai and Expo 2020: An exploratory study. *Worldwide Hospitality and Tourism Themes*.
- 9) Nadkarni, S. (2019). Conclusions: Expo 2020 and its impact on Dubai. *Worldwide Hospitality and Tourism Themes*
- 10) Hardy, T. (2022). Global Business Award, *Global Business Outlook*. Issue 03-October-2021. <https://www.globalbusinessoutlook.com/expo-2020-dubai-a-driver-for-uae-economy/>
- 11) Bhavani, G., & Kukunuru, S. G. (2016). Impact of EXPO 2020 on Dubai Financial Market—An event study on banks, investment and insurance sectors. *International Journal of Financial Research*, 7(2), 163.
- 12) Singh, B. (2015). Smart city-smart life-Dubai Expo 2020. *Middle East Journal of Business*, 10(4), 49-52.
- 13) T. Khan, M. U. H. (2013). UAE an Ideal Country for World EXPO 2020. *Defence Journal*, 16(12).
- 14) Saadi, D. (2016). Economic diversification and Expo 2020 to shield Dubai from oil price rout. <https://www.thenationalnews.com/business/economic-diversification-and-expo-2020-to-shield-dubai-from-oil-price-rout-1.182947>
- 15) Minner, J. S., Zhou, G. Y., & Toy, B. (2022). Global city patterns in the wake of World Expos: A typology and framework for equitable urban development post mega-event. *Land Use Policy*, 119, 106163
- 16) Luković, S., & Stojković, D. (2020). Covid-19 pandemic and global tourism. *Менаџмент у хотелијерству и туризму*, 8(2), 79-87
- 17) Hossain, S.F.A., Ahsan, F.T., Nadi, A.H., Ahmed, M., Neyamah, H. (2022). Exploring the Role of Technology Application in Tourism Events, Festivals and Fairs in the United Arab Emirates: Strategies in the Post Pandemic Period. In: Hassan, A. (eds) *Technology Application in Tourism Fairs, Festivals and Events in Asia*. Springer, Singapore. [https://doi.org/10.1007/978-981-16-8070-0\\_19](https://doi.org/10.1007/978-981-16-8070-0_19)
- 18) Dubai Economy and Tourism. Dubai’s Department Of Economy And Tourism Annual Visitor Report 2022. December, 2022. <https://dubaidet.getbynder.com/m/1aa687c3e4ec2318/original/DET-Annual-Visitor-Report-2022-EN.pdf>
- 19) Rettab, B., Brik, A. B., & Mellahi, K. (2009). A study of management perceptions of the impact of corporate social responsibility on organizational performance in emerging economies: The case of Dubai. *Journal of Business Ethics*, 89, 371-390.
- 20) Haneef, S. K., Ansari, Z., & Bhavani, G. (2019). Attractions of Dubai and Expo 2020: An exploratory study. *Worldwide Hospitality and Tourism Themes*.
- 21) Haneef, S. K. (2015). Role of DSF in the field of active tourism development in Dubai. *European Academic Research*.
- 22) Chishti, S., & Barberis, J. (2016). *The Fintech book: The financial technology handbook for investors, entrepreneurs and visionaries*. John Wiley & Sons.
- 23) Lu, J., Xiao, X., Xu, Z., Wang, C., Zhang, M., & Zhou, Y. (2022). The potential of virtual tourism in the recovery of tourism industry during the COVID-19 pandemic. *Current Issues in Tourism*, 25(3), 441- 457.

- 24) Shafiee, S., Rajabzadeh Ghatari, A., Hasanzadeh, A. and Jahanyan, S. (2021), "Smart tourism destinations: a systematic review", *Tourism Review*, Vol. 76 No. 3, pp. 505-528. <https://doi.org/10.1108/TR-06-2019-0235>
- 25) Lange, S., & Santarius, T. (2020). *Smart green world?: Making digitalization work for sustainability*. Routledge
- 26) Giardina, G. (2019). Expo 2020 and sustainability: Luxury hotel properties challenges and future outlook. *Worldwide Hospitality and Tourism Themes*, 11(3), 314-326.
- 27) Jensen, S. (2018). Policy implications of the UAE's economic diversification strategy: Prioritizing national objectives. *Economic Diversification in the Gulf Region, Volume II: Comparing Global Challenges*, 67-88.
- 28) Jauncey, S., & Nadkarni, S. (2014). Expo 2020: What must Dubai's hospitality and tourism industry do to be ready pre-and post-event?. *Worldwide Hospitality and Tourism Themes*.
- 29) Khan, M. U. H. (2019). Innovative UAE. *Defence Journal*, 23(5), 60.
- 30) Choi, Y., Choi, M., Oh, M., & Kim, S. (2020). Service robots in hotels: understanding the service quality perceptions of human-robot interaction. *Journal of Hospitality Marketing & Management*, 29(6), 613- 635.
- 31) Loke, S. W., Rakotonirainy, A., Loke, S. W., & Rakotonirainy, A. (2021). Automated vehicles, urban robots and drones: Three elements of the automated city. *The Automated City: Internet of Things and Ubiquitous Artificial Intelligence*, 69-108
- 32) Sonuç, N. and Süer, S. (2023), "Smart Tourism Destinations and Digitalization of Cultural Heritage for Sustainability", El Amine Abdelli, M., Sghaier, A., Akbaba, A., Gamoura, S.C. and Mohammadian, H.D. (Ed.) *Smart Cities for Sustainability (Advanced Series in Management, Vol. 32)*, Emerald Publishing Limited, Leeds, pp. 151-168. <https://doi.org/10.1108/S1877-636120230000033010>
- 33) Leung, R. (2022). Development of Information and Communication Technology: From e-Tourism to Smart Tourism. *Handbook of e-Tourism*, 1-33
- 34) Godovykh, M., Baker, C., & Fyall, A. (2022). VR in tourism: A New Call for Virtual Tourism Experience amid and after the COVID-19 Pandemic. *Tourism and Hospitality*, 3(1), 265-275
- 35) Khan, M. S., Woo, M., Nam, K., & Chathoth, P. K. (2017). Smart city and smart tourism: A case of Dubai. *Sustainability*, 9(12), 2279.
- 36) Saeed, N., Bader, A., Al-Naffouri, T. Y., & Alouini, M. S. (2020). When wireless communication responds to COVID-19: Combating the pandemic and saving the economy. *Frontiers in Communications and Networks*, 1, 566853
- 37) Manikas, I., Sundarakani, B., Madmoune, A., & Alvares, R. (2022). Integrated supply chain sustainability for mega-events: An empirical study of Dubai expo 2020. *Event Management*, 26(6), 1409- 1432.
- 38) Akre, V., & Yankova, V. (2019, December). Smart city facilitation framework (SCFF) and the case of Dubai smart city. In *2019 International Conference on Computational Intelligence and Knowledge Economy (ICCIKE)* (pp. 576-580). IEEE.
- 39) Sachin Kumar, Manohar Sajnani, Ashok Chopra. "Analysis of RAISA (Robotics, Artificial Intelligence & Service Automation) and Dubai Tourism", *2023 International Conference on Computational Intelligence and Knowledge Economy (ICCIKE), 2023*