

**THE ECONOMIC IMPACT OF EXPO 2020 DUBAI ON THE UAE  
WAS IT A SUSTAINABLE BOON?**

by

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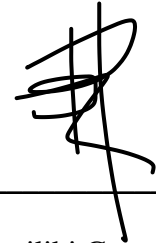
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## **DEDICATION**

THIS DISSERTATION IS DEDICATED TO MY MOM, LATE MRS. BESSY JOHN, AND TO ALL THE EMPLOYEES AND WORKERS OF EXPO 2020 DUBAI, WHO HELPED UAE DELIVER “THE WORLDS GREATEST SHOW”.

## **ACKNOWLEDGEMENTS**

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## **ABSTRACT**

### **THE ECONOMIC IMPACT OF EXPO 2020 DUBAI ON THE UAE, WAS IT A SUSTAINABLE BOON?**

#### **Background**

A mega event attracts significant number of participants, spectators, and media attention from around the world. Countries host mega events to boost economic growth, enhance global image, attract tourism, and foster national pride. These events generate significant infrastructure investments, create job opportunities, and stimulate local economies. Host countries set certain targets to measure the success of the event. This thesis analyses, the long-term economic impact of the Expo 2020 Dubai, on the host country, the United Arab Emirates. Many studies have performed evaluations on the impact, while the event is actually being held or even after the event; however, not much research has been done on the long-term impact on the country especially after the event has been delivered.

#### **Methods**

This study used a mixed methods approach, relying heavily on quantitative data to provide realistic evidence and also incorporated qualitative methods to capture contextual understandings that are equally important for a comprehensive evaluation. The structured interviews for qualitative methodology were conducted with five key stakeholders of Expo 2020 Dubai, to understand their expectations from the event.

## **Results**

The data were analysed using financial planning tools to adjust the forecast based on actual post event achievements. The analyses are important as substantial investments and resources are allocated for such mega events and hence it is critical to study the long-term impact, as these impacts help to understand and allows for a more comprehensive evaluation of the event's effects.

## **Discussion and Conclusion**

The thesis provides an in-depth analysis of the economic impact of Expo 2020 Dubai by examining key performance indicators and adjusting future forecasts based on post-event achievements. It explores the direct and indirect effects on the economy, highlighting contributions to economic growth, diversification, and long-term sustainability. These insights will enable country leaders to make more informed decisions when considering the hosting of future mega events.

The study concludes that incorporating an impact assessment into the planning process of every mega-event is essential. Additionally, establishing strategies for impact equity and implementing mitigation plans to manage potential adverse effects are crucial components for ensuring the overall success and sustainability of such events.

Expo 2020 Dubai has proven to be a sustainable boon, with ongoing benefits for the country. The event has positively impacted the nation's growth and development, continuing to yield economic and social advantages long after it ended. It also has set high expectations for future world expos.

## **KEYWORDS**

Impact of mega events, Sporting events and their impact, Impact of World Expositions, Financial Modelling for Expos, World Fair, Optimizing the potential of megaevents, Expo 2005, Expo 2010, Expo 2015, Expo 2020.

## **LIST OF ABBREVIATIONS**

BIE - Bureau International des Expositions

EXPO - World Expositions

FDI - Foreign Direct Investment

FTE - Full Time Equivalent

GDP - Gross Domestic Product

GVA - Gross Value Add

KPI - Key Performance Indicators

SME - Small and Medium Enterprise

UAE - The United Arab Emirates



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## CHAPTER I: INTRODUCTION

### **1.1 Introduction**

“The term ‘mega-event’ appeared recently in academic studies; however, its first use can be traced to the 37th Congress of the Association Internationale d’Experts Scientifiques du Tourisme in Calgary in 1987 with the theme ‘The Role and Impact of mega-events and Attractions on Regional and National Tourism Development’,” (Muller, 2014). During that time, many scholars had debates on the criteria for an event to be classified as a mega event, however till date a conclusive definition has not be defined. (Jafari, 1988). Across the globe, mega events are being hosted once in two to five years by different countries. These events are held for the development of a sport, like the Olympics, World Cups, Grand Prix and the likes or trade like Mondial de l’Automobile, The Big 5, Expos and the likes. Along with development, there are many financial and economic benefits to the host country holding such events. The host country decides the quantum of investment that is required keeping the long-term benefits insight.

“When was the first mega-event ever held in the world? Over the course of the research, it became evident that mega-events started way back in the 19<sup>th</sup> century, this was driven by the industrial revolution and rise in the modernization of the economy”. (FutureLearn, n.d.) Mega-events were also typically linked to substantial expenditures, extensive infrastructure development and long periods of planning and construction phases and usually involved various stakeholders. Although these events are often planned to deliver both short and long-term advantages for the host country be it for the region or the city, there are significant concerns regarding their ability to achieve the targets. These concerns include costs that exceed the budget, sometimes there could be opposition from local residents, and the generation of long-term debts and financial burdens for the host nations. The first World

Exposition, also known as the Great Exhibition, was held in 1851 in London. “World Expos, officially known as International Registered Exhibitions, are a global gathering of nations dedicated to finding solutions to pressing challenges of our time by offering a journey inside a universal theme through engaging and immersive activities. World Expos welcomes tens of millions of visitors which encourages countries to build extraordinary pavilions and transform the host city for years to come. Organized and facilitated by governments and bringing together countries and international organizations (Official Participants), these major public events are unrivalled in their ability to gather millions of visitors, create new dynamics, and catalyse change in their host cities”. According to the Bureau of International des Expositions “Expos bring the world together in a grand and common project to find solutions to a fundamental challenge facing humanity” as mentioned by the BIE - Bureau International des Expositions.

Expo is the short form of the Word Exposition which means large-scale exhibition. In 2013, the United Arab Emirates had bid to host the Expo and in November 2013, it won the right to host the World Expo in 2020 in Dubai. For the first time, the World Expo was to be hosted in the Middle East, Africa, and South Asia (MEASA) region. Dubai's World Expo, with the theme "Connecting Minds, Creating the Future," reflected the UAE's spirit of partnership and cooperation that has driven its pioneering development and innovation. This theme positioned Expo 2020 Dubai as a catalyst for global collaboration, encouraging participants to unite around common challenges under the sub-themes of Mobility, Sustainability, and Opportunity. The Expo was expected to attract 25 million visits, with 70% international visitors, which would make Dubai Expo 2020 the first nation, where the majority of attendees were from outside the host nation. The dates for the event were initially from October 1, 2021, to March 31, 2022, the event was also to launch the UAE's Golden Jubilee

celebrations and served as a platform to promote a progressive and sustainable vision for the future decades. (Expo 2020, 2022).

Every country that hosts a mega-event has great expectations, like generating revenue, boosting tourism, driving economic growth, to name a few. During the preparation stages of the event, the host country announces certain key KPIs (key performance indicators) that they envisage to achieve from the event. In 2013, the UAE post winning the bid to host the event also announced two main success criteria for the event, among many others, which were to attract 25m visits to the site during the event (Oct 2021 to March 2022) and GVA increase to USD 33.37 billion over a period of 18 years from 2013 to 2031.

Having been in this country for the last 24 years, it was a moment of pride when the UAE won the bid and being in the field of financial planning and analysis, the most appropriate topic to research was to understand the impact, a mega-event like Expo 2020 had on the UAE. These were the two main reasons that were the motivation behind this Dissertation.

According to research that was published by Ernst and Young prior to the event (Expo 2020, 2022), they not only predicted the expected increase in GVA from 2013 to 2020 but also forecasted the GVA growth in UAE beyond the event till 2031. The UAE successfully delivered the event despite the world being in a pandemic, hence it would be interesting to understand how Expo 2020 performed against their set KPIs.

## **1.2 Research Problem**

To measure the success of any event, it is best to track the KPIs of the event that are announced prior to the start of the event. While researching the KPIs, the goals and targeted outcomes from the event are the best place to begin. Whether the main objective is to maximize revenue, or to increase visitation to the event or minimize cost by obtaining more event sponsorships, the targets set will help in gauging the success of the event. The KPIs for every mega-event are usually published for the knowledge of the citizens and tourists to make them part of achieving these targets. Efforts are in full swing till the end of the event to achieve the KPI's. However, it is seen distinctly, that once the event is over, there is no evidence of the results being published against the expectations. The variance analysis on why there are deviations between expectations and results are multiple, however when dissecting the reasons, it should be analysed in the light of the magnitude and complexity of the mega-event itself, this might require adequate approaches and tools. The measure of the success of an event like Expo is no different. The scale and ambition of Expos, in general, make comparison against other mega-events somewhat challenging. The reason is that an Expo is not a typical event and the landscape changes from one Expo to another. Nevertheless, like every event, the country hosting the Expo also have certain KPIs that it anticipates achieving. Though these KPIs and targets are announced before the event, the performance against the targets post-event is not all available for public knowledge.

With the increasing number of events and its significance in the society, the events industry is organically expanding annually. Ensuring visitor satisfaction is crucial for the success of events and becomes the primary goal for every event organizer. Mega-events are expected to have economic, social, and environmental impact on the host country. The event helps to create job opportunities and infrastructure enhancements and attracts FDI (Foreign Direct



Investments). The unique context and timing of this study facilitate discussion surrounding a particular host country and its plans to leverage on hosting a mega-event. The research aims to identify the key performance indicators that were recognized to be part of a success matrix for this event before the start of the event and compare that to the post-event results. The research also aims to analyse the variance and the deviation impact of such variances whether positive or negative. This research will also focus on the impact on the future of the economic growth of the UAE.

Ernst and Young had, in 2018, conducted a total impact study that Expo Dubai 2020 would have on the UAE. It covered the social, economic, and environmental impact on the country. Since winning the bid in 2013, there have been several projections on the visitation numbers, the revenue that will be generated, the amount of funding that will be required for the development. From a financial perspective, the organising team of Expo Dubai 2020, had announced that the event will contribute to approximately 1.5% to the UAE’s annual forecasted GDP (Gross Domestic Product).



Fig 1.1. Expo 2020 Targets  
Source: EY Study 2018

### **1.3 Purpose of Research**

The main purpose of this research is to understand the impact of hosting an event like Expo 2020 on the economy of the UAE. This research aims to analyse the actual success factors against their targets and to ensure that any future forecasts are adjusted in the light of the actuals achieved. The study will also investigate whether the outcomes attained post the event can be completely attributed to the Expo 2020 event alone or if the results achieved were also from other events or contributing factors. This research paper's main focus was to study the long-term impact of Expo 2020 on the host country, the UAE, particularly Dubai. Has it been a sustainable boon as predicted? The Expo 2020 event was expected to make a significant impact on the economy of the UAE as well. When the event targets were set, the world did not anticipate a pandemic, the event was delayed by a year which could enable the world to recover from the pandemic. "Several experts pointed out that 2021, before the Expo event, would be a challenging year for certain critical sectors like hospitality and tourism. (Ethicsplusuae, 2020). However, in 2022, they were heading on the path to recovery, and the Expo would be a crucial factor in aiding this recovery. They also pointed out that the UAE's tourism and hospitality sector was marching ahead and showcasing a solid growth trajectory, supported by economic diversification plans mapped out by the government as well as the new visa reforms introduced to attract talent to the country. Together, these strategies will significantly boost the economy and strengthen the UAE's stance as the number one tourism destination in the world. The gathering of the different nations in the world to showcase innovation will have a positive economic impact across multiple sectors of businesses, from small and medium enterprises (SMEs) to enterprising corporations. The triumphant bid announcement alone drove positive economic perceptions and lifted business confidence in the country". (Ethicsplusuae, 2020)

## **1.4 Significance of the Study**

Studying the economic impact of Expo 2020 on the UAE holds substantial significance for various reasons. The Expo, being a global event of immense scale and influence, has the potential to shape the economic landscape of the host country in numerous ways. Here are some key points highlighting the significance of such a study:

**Economic Stimulus:** The Expo was expected to bring a massive influx of visitors, including tourists, investors, and business delegations. This could lead to a surge in economic activities, such as hospitality, tourism, and trade, thereby stimulating the economy.

**Infrastructure Development:** Hosting an event of this magnitude often requires substantial infrastructure development. Studying the economic impact can shed light on the investments made in infrastructure projects, such as transportation, accommodation, and venue construction, and how these contribute to the long-term growth of the economy.

**Employment Opportunities:** The organization and execution of Expo 2020 create job opportunities across various sectors. This study can explore the employment generated directly by the event and indirectly through associated industries, providing insights into the Labour market dynamics.

**Business Opportunities and Trade Relations:** The Expo serves as a platform for businesses to showcase their products and services on a global stage. Analyzing the economic impact helps identify the trade and business opportunities that arise from the event, fostering international partnerships and collaborations.

**Tourism and Hospitality Industry boost:** The influx of international visitors during the Expo can significantly impact the tourism and hospitality sectors. Understanding how these industries are affected can provide valuable information for future tourism strategies and investments.

**Brand Image and Global Perception:** Hosting a successful Expo enhances the host country's global reputation. A study on the economic impact can delve into how the positive exposure from the event contributes to attracting foreign investments, businesses, and skilled professionals.

**Legacy Effects:** The study can also assess the long-term or legacy effects of Expo 2020. This includes examining whether the investments and developments spurred by the event continue to benefit the economy after the conclusion of the Expo.

**Government Policy Implications:** The findings of the study may influence future government policies and strategies, helping policymakers understand the areas that require continued support or adjustments to maximize the positive economic impacts.

**Data for Future Events:** Analyzing the economic impact provides a wealth of data and insights that can be invaluable for planning and hosting future large-scale events. This knowledge can guide event organizers and governments in optimizing the benefits of such gatherings.

In conclusion, a study on the economic impact of Expo 2020 on the UAE is not just an academic exercise but a practical exploration of how this global event can contribute to the country's economic growth, development, and international standing. It offers a comprehensive understanding of the multifaceted impacts that can inform decision-making and policy formulation for years to come.

### **1.5 Research Purpose and Questions**

Based on the problem statement and the significance of the study, it can be seen clearly that once an event is over, there is no effort to analyse, if the KPIs set for the event have been achieved. The purpose of this research was to address this problem and also to revise the outlook for the economy of the country in terms of the GVA, the employment opportunities,

and the permanent infrastructure investment. The research will also look into the legacy plan of the site. To understand what the plan for legacy before the event start was, has it remained the same till date, now two years post the delivery of the event?

The research was conducted based on a set of questions that would help uncover the true Economic impact of Expo 2020 on the UAE.

The reason for the choice of questions was to get the stakeholders of Expo 2020 to revisit their thought process on understanding the targets set before the event. A total of 20 questions were drafted to help the stakeholders in this process which would be discussed in detail in the methodology section of the thesis.

The main focus was to direct their attention to the three main metrics that have been discussed in this study.

1. The economic impact of Expo 2020 on the UAE and the trajectory of the GVA from the time of winning the bid to the end of event and beyond.
2. The employment opportunities that the Expo 2020 would create pre and post the event.
3. The total amount invested in the permanent infrastructure before the event and the effective use of this post the event.
4. The legacy plan for the Expo 2020 site, has there been a change in strategy from the city called District 2020 before the event started to now being called Expo City Dubai post the event.

The research questions were addressed to a few key personnel within Expo 2020, who would be able to address these questions effectively. The advantage of reaching out to a niche group was their positions held within Expo 2020 from the time before the event to now

during the legacy planning. The few key personnel identified for the survey not only helped the research in a quantitative perspective but also to a large aspect from a qualitative perspective. In a conversation with Mukhtar Safi, the CFO of Expo 2020, and Expo City Dubai, he mentioned how the planning to Expo 2020 under the leadership of Her Excellency, Reem Al Hashimy was always dynamic as whenever there was a challenge, things had to be changed, sometimes overnight. One classic example was the pandemic itself, the event got extended by a year, a lot of things came to stand still but through all these challenges, the team never lost hope and bounced back to revisit what was planned and adjusted the needs and delivered one of the greatest show on earth.

Nadia Verjee, Head of Strategy and Chief of Staff, Expo 2020, and now Executive Director Expo City Dubai, reiterated that the whole leadership team was guided by Her Excellency and the leaders of the country to change directions if somethings were not working out and because nation branding was one also one of the reasons for hosting Expo 2020, there was no limit to the investment that the country was willing to do to deliver the project.

Dr. Tarek Oliveira Shayya, Executive Vice Chairman, Expo 2020 and the Chief of Legacy was mandated with the most difficult task of speaking to the 192 countries and convincing them to participate in the event. He was proudly mentioned that “no other country was able to bring the world together in its true sense, this was the first Expo were every country participated.”

## CHAPTER II: REVIEW OF LITERATURE

### **2.1 Theoretical Framework**

Mega world events, as the word suggests, are major events that are conducted within various periods across the globe. These could be sports, trade, or entertainment related. All mega-world events are expected to change the dynamics of the host country financially, economically, and socially, as evident in sporting mega-events, like the Olympic Games. Events, in general, gained central importance in the development agendas of city and national governments after the 1984 Los Angeles Games demonstrated for the first time that mega-events could generate an economic surplus, (Andranovich et al., 2001: 124). According to Larry Yu et al. (2012, Vol. 3 No. 1, pp. 46-65) “hosting any special mega event like sports events, expositions, or festivals, has been recognized as an important strategy not only for a short-term rise in tourist volumes and positive economic benefits but also for improving a destination’s image and building a destination’s brand for sustainable development”. Numerous studies have extensively observed that sports events have substantial influence on the image and branding of host destinations. (Getz, 1997; Hall, 1992; Jago et al., 2010; Prentice and Andersen, 2003; Ritchie, 1984).

Chalip and Costa (2005) analysed “how sports events have been used by tourism destinations to build their brand; they found that these events had played various roles in destination branding with different commitments, opportunities and risks, including forging partners to co-brand both the special event and the destination, leveraging the special event as an extension of the destination brand, or promoting the special event as unique features of the destination brand”.

Most of the studies that were conducted on the impact of hosting a mega-event on the host country have focused on building nation branding and increasing the tourism sector, while very limited events have concentrated on financial and economic benefits to the country. Expo 2020 Dubai was an event that besides tourism and reputation building, had set its target of increasing GVA, employment opportunities and building a legacy city after the event.

## **2.2 Key Trends and Perspectives of Mega World Events**

Another reason that countries are encouraged to host mega events is to generate a legacy for the host territory (Kaplanidou et al., 2013; Preuss, 2007). Focusing on sports mega-events, Preuss defines “the term ‘legacy’ as referring to “all planned and unplanned, positive and negative, tangible and intangible structures created for and by a sports event that remains longer than the event itself” (Preuss 2007, p. 211). Tangible effects pertain to physical aspects like the facilities constructed for the mega-event, whereas intangible effects encompass non-physical outcomes, such as the image and reputation the event creates for the host location (Cornelissen et al., 2011; Kaplanidou et al., 2013; Preuss, 2007).

“Thus, the term ‘event legacy’ summarizes all the effects of a mega-event. From this perspective, several researchers distinguish legacy from the effects of a mega-event, which they define as referring strictly to the effects directly related to the event” (Preuss, 2007; Tsaur, Yen, Tu, Wang, & Liang; 2017, Deng et al., 2016).

Before every mega-event, economists predict the effects of mega-world events on the host country. This review focuses on various research papers and journals that have been published in the past regarding the impact of world events. The first research on such impact dates to 1992. In “The British Journal of Sociology”, Roche, M., discusses the impact of



tourism driven by various mega-world events. The article discusses that as mega-world events focus on economic impacts; urban tourism impacts are often neglected. “The paper takes the opportunity presented by mega-event analysis to discuss some of the main issues involved in developing a structural sociological and political economic account of tourism events and policies. The focus of the paper on income, employment, and economic modernization impacts means that the cultural impacts of urban tourism were not dealt with in any detail” (Roche M, 1992). The motivation of tourists visiting the host country to be part of the mega events and their roles and responsibilities whilst they are in the country were being analysed by (Roche M, 1992). Assessing the Impact of Mega-Events: A Linkage Model, Current Issues in Tourism”, (Hiller, 1998), “focuses on the fact that mega-events are usually assessed in terms of the economic impact of the event itself with little attention given to the event as part of a broader process that can be investigated longitudinally”.

This dissertation focuses on the link between mega-events and their impact before, during, and after the event. It concludes with the thought that there has to be an impact study for every mega-event.

Researchers further investigated the impact study of mega-sporting events. The first ever 2002 FIFA World Cup finals to take place in Asia was co-hosted by Korea and Japan. As stated by Home and Manzenreiter, (2002) “Drawing on data provided by the national and local organizing committees, football’s world governing body, local and international media accounts and first-hand observations made before, during and after the event, the paper discussed the contrast between discourses that forecast and described the actual impacts of the 2002 World Cup on its host societies”.

Another aspect that researchers have studied in the past was the impact on the quality of life of residents in the host country where a megaevent was held, (Kaplanidou K (Kiki), et al.

2013). “Intercept data were collected from residents in five host cities three months before (March 2010) and eight months after (March 2011) the event (N = 3,789). Results indicate significant differences in perceived impacts before and after the event.” The research clearly indicated that, prior to the event, the quality of life influenced the connections between political, psychological, and social benefit impacts and resident support. However, after the event, the emphasis shifted to economic impacts, which became a key predictor of quality of life. Besides economic and social impacts, there have been researches that studied the development required by the host country to ensure the delivery of the mega-event and in turn, provide the impact that the country was forecasting from such an event. As stated by Matheson (2012), “The developing countries that host mega-events such as the Olympic Games and World Cup invest enormous sums in stadiums and collateral infrastructure projects” (Matheson, 2012). Matheson’s paper also reviewed “various historical and recent mega-events to assess the infrastructure costs, returns on infrastructure investments, and impacts of the events on urban development patterns. It concluded by assessing the long-term impacts on the country driven by these developments” (Matheson, 2012).

Researchers have established that stocks and shares also react to special events. In his research, (Robert Schweitzer, 1989) stated “that stock markets quickly digest all new public information about the firms and transit it rapidly into changes in stock prices”. Financial economists have used event studies and statistical methods to examine how the stock market responds to new information. These analyses focus on the behaviour of stock prices and returns following a significant event. While the effects are noticeable in the short term, they tend to be minimal over the long term

This literature review focuses on prior research done on the long-term impacts of mega-world events on the host country. Most mega-world events discuss the prediction of

potential impact and there is limited evidence of a re-forecast of the long-term impact adjusted based on the actual impact after the closing of any mega-world event. This literature review will in particular focus on the Expos that were held in the 21<sup>st</sup> century and look at the impact study that was done, if any, at that time and also analyse to see if any revisions to predictions were completed after the event was concluded. The literature review also uncovered a long list of KPIs that were used to measure the success of many mega-events, this is provided in Appendix C. This research would also assess the economic objectives, the associated KPI, and relevant lessons learnt from these events.

It will still be too early to assess the long-term impact on the economy; however, this is something that could be picked up for research in five years. This topic is of great relevance in today's time as this is the first time that an Expo is being held in the Middle East, and Dubai in its grandeur is a role model on how to make the impossible possible. There have been many expectations from this event, the world was expecting to see a boom post the event, hence it would be interesting to see how far these expectations have made an influence on the economy and continue to make an impact into the future. This dissertation aims to provide insight into the actual impact.

In the literature that was reviewed earlier, we have seen the impact of many mega-world events on the host country. In this section, the focus is on the Expos that were held in the 21<sup>st</sup> century, beginning in 2005. The three countries before Expo 2020 Dubai, UAE, that hosted the Expo during the mentioned time frame were: 2005 Expo, Aichi, Japan, 2010 Expo, Shanghai, China and 2015 Expo Milan-Rho, Italy.

The London Expo of 1851, the first-ever of the Expositions, showcased Great Britain's industrial dominance, establishing it as the workshop of the world. Additionally, it championed the principles of free trade, peace, and the values of democracy (Daly 1990, 3).

“The Crystal Palace exposition shows that the wealth of the nation is indeed wedded to the power of machinery, manufacturing, and the market, fuelled by the burning of coal. From their inception, world’s fairs have mirrored the rise of the modern industrial nation-states and reflected their specific national imperial policies to promulgate the natural superiority of industrial capitalism to social and political revolution” (Rydell, Findling, and Pelle, 2000, pp. 131–132).

Thus, over the last 170 years, World Expos have provided a platform for great innovations for the countries participating in the event. Some of the innovations that have been showcased in the past were computers, telephones, food like Heinz ketchup, ice creams and television, and most recently the super High-Definition Theatre – commonly known as Ultra HDTV – debuted at Expo 2005 Aichi in Japan. Places like the Crystal Palace, the Eiffel Tower, The Ferris Wheel, The Atomium, Space Needle, etc. remain iconic and historic structures to visit, which were first showcased at various Expos in the past.

It is evident that the World Expos have been a platform for development, be it for the host country or for the countries showcasing their innovations. What were the main reasons behind country’s hosting the Expo and what were the expectations, particularly focusing on the three Expos that were held between 2005 and 2015. Were there comprehensive impact assessments conducted prior to hosting the Expo to gauge the benefits for the host country? Additionally, was there a follow-up on the long-term impact study conducted several years post-event to reassess predictions and ascertain any necessary adjustments?

## **2.3 Critical Review of Expo's 2005 to 2015**

### **2.3.1 Expo 2005, Aichi, Japan**

“In 1998, the Japanese Prefecture of Aichi won the right to host World Expo 2005. The two main objectives were to raise the visibility of this successful but not well-known industrial area of Japan and to enhance its economy” (Sylvie Grenier, 2005). Expo 2005 aimed to fulfil both the objectives, however not in line with their initial plan. Even before construction commenced, organizers had to adapt to the demands of an environmental lobby that significantly altered the initial location and design of the Expo (Sylvie Grenier, 2005). “Expo 2005 was a 6-month event, and every facility was planned and built as a temporary structure. In accordance with the main theme of the Expo, the 3R system, reduce, reuse, and recycle, was considered from the initial stages of the planning, construction, and operation” (Tsunoda et al., 2005).

The main theme of the 2005 Expo held in Aichi, was ‘Nature's Wisdom’, with countries and corporate pavilions under the themes of ecological co-existence, renewable technology, and the wonders of nature. Being the first country that focused on the element of sustainability, the impact study conducted in Japan was based on reuse of the pavilion materials. The main focus during the 6 months from March 2005 to September 2005 are shown below:



Fig 1.2. Theme for Expo 2005  
Source: The Expo 2005

Through the various literature reviews on Expo 2005, it was seen that some researchers were positive about the impact however, there were some negative reviews as well. The theme "Nature's Wisdom" was ironic given Japan's environmental history and the debates surrounding site selection. Post-war Japan rapidly rebuilt its economy by prioritizing economic growth over environmental considerations, resulting in weak planning and environmental controls. During the reconstruction of cities, environmental conservation and green spaces were neglected. Japan is known for extensive capital works projects aimed at controlling nature, such as the routine paving of riverbeds and banks, which gives the impression of a nation battling against nature rather than seeking its wisdom. However, Expo 2005 marked a potential shift in this approach. The event highlighted eco-friendly technologies and demonstrated environmental protection methods through its site planning, operation, and transportation. To reduce any negative impact, pavilions were concentrated in Global Commons instead of being dispersed.

It was very evident that the Expo 2005 held in Aichi, Japan was focused more on creating a sustainable society which would benefit our future generations (Expo 2005). However, there was a lack of clarity regarding the recycling of pavilions and building materials, with an ambitious target to recycle 95% of the steel, wood, and concrete used. However, no detailed recycling plan was established. The challenge was compounded by the fact that buildings are difficult to repurpose unless designed with flexibility in mind. Moreover, Japanese building standards typically mandate the use of new materials, making the recycling of building materials problematic unless these standards are revised. To address this issue, organizers considered auctioning materials on the Internet for international sale. A notable success in this endeavour was the Japanese Government's Nagakute Pavilion, designed as temporary architecture without plans for reconstruction in a different location. This pavilion served as an experimental model for future businesses focused on the reuse and recycling of architectural components. Generally, buildings consist of thousands of elements, including frame members, units, pieces, and materials, emphasizing the complexity of such recycling efforts.

An analysis of the design for Reuse- Case study of World Exposition 2005 Aichi Japan, conducted by (Tsunoda et al., 2005), proved that though 100% of the target of hosting the Expo 2005 may not have been achieved, the country did repurpose some of its pavilions.



Fig 1.3. Nagakute, Japan Government Pavilion  
Source: Expo 2005

There were two auctions conducted in the international market as an attempt to reuse the materials of the pavilion. The average successful bid was 47.4% in the first auction and 100% of woods, kitchen facilities, equipment unit, and electric facilities were successfully auctioned in the second auction.

As part of the reuse target, the Qatar Pavilion was converted to a factory building which was occupied by Nippon Denshi Kogyo Co., Ltd. in Toyoake City.



Fig 1.4. Left: Qatar pavilion after EXPO 2005, Right: Nippon  
Denshi Kogyo  
Source: Expo 2005



The Austria pavilion was converted to a factory building which was occupied by Jin-no Company Ltd., in Toyoake City.



Fig 1.5. Left: Austria pavilion after EXPO 2005, Right: Jin-no Company  
Source: Expo 2005

In the above case, the conventional 3-storied building was later transformed and connected to the original pavilion building (Tsunoda et al., 2005).

Expo 2005, despite its theme and the display of numerous new environmental technologies and material reuse practices, left some doubts about its impact on environmental consciousness. The choice to hold the event on land that was part of Japan's limited green spaces, instead of opting for several available redevelopment sites, suggests that the Expo may have inadvertently contributed to the development pressure on vulnerable natural areas (Sylvie Grenier 2005). While the target of reuse of materials may not have been fully achieved, the Expo did meet its prime objectives like, increased visibility and economic benefits, by creating employment opportunities for more than 20,000 people and injecting USD 30 billion into the local economy. The hosting of the Expo did have many benefits; however, one cannot help but question the rationale behind investing substantial amounts in infrastructure projects in a remote area. While the new infrastructure undoubtedly facilitated future development towards the east of Nagoya, did the Expo serve as a source of national pride for Japan, this decision remains debatable.

### ***Implications of Expo 2005***

In addition to the implications for sustainability and environmental awareness, other significant implications of Expo 2005 were its focus on technology and its advancements. It featured, cutting edge technologies such as robotics and renewable energy solutions and futuristic transportation systems. Moreover, Expo 2005 served as a platform for cultural exchanges. A major concern for any country hosting a mega event like Expo was to ensure that revenues were generated to cover costs. Expo 2005's income was generated from government subsidies, sales of admission tickets, and private-sector contributions. Support from the Government was crucial as preparation for the event started much before the actual event. For the organizer, then, financial management was of utmost importance. It provided with construction subsidies, assistance for developing countries, and other support to enable the expansion of international public relations activities. As a result of the assistance from the Japanese government and thanks to the large number of visitors – a final figure of 22 million visitors against the initial forecast of 15 million, helped in achieving a fairly good balance between the revenues and expenses (Nakamura, 2005). The legacy of Expo 2005 continued to inspire new generations to welcome nature's wisdom, adapt global cooperation and strive for a more sustainable future for humankind.

### **2.3.2 Expo 2010, Shanghai, China**

The Shanghai World Expo, held from May 1 to October 30, 2010, was China's second major event after the 2008 Beijing Olympics. Winning the bid from the BIE made China the first developing country to host a World Expo, providing a significant opportunity to engage in public diplomacy, connect with other nations and global organizations, and highlight China's emergence as an economic power and a responsible nation. With USD 45 billion in public financing, the Shanghai World Expo set new records in venue size, participating

countries and organizations, attendance, and costs, surpassing all previous 40 Expos since the event began in 1851.

Situated along the banks of the Huangpu River, the Shanghai World Expo Park covered a total area of 528 hectares, making it larger than the two previous largest sites: the 508 hectares of the Louisiana Purchase Exposition in 1904 and the 486 hectares of New York's World Fair in 1939 (Groote, 2005). 246 countries and organizations were invited to participate, and 22,925 special events, entertainments, and educational forums served as attractions for visitors (Bureau of Shanghai World Expo Coordination, 2010). The six-month Expo recorded 73.08 million visitors, exceeding the targeted 70 million visitors. This was the only Expo till date that had the maximum number of visitors. Given the population of the country it was an easy target to achieve as the visitors were mainly local residents.

“When describing the Beijing Olympics as a spectacle (Pramod, 2008, p. 118) succinctly summarized the role of mega sport events as spectacle for China: spectacle is the grandeur or public display emerging from the interface between state, society and the market on the one hand and the end product of the various interactions of the global with local dynamics, on the other hand” (Pramod 2008, p. 118). Shanghai World Expo was no less when compared to the Olympics, the collaboration between the government, the civil society, and the market was evident in the massive organizational efforts, substantial financial investments in pavilion construction and infrastructure development both at the Expo Park and throughout the city. Additionally, around two million volunteers were mobilized to work in the Expo Park and the surrounding areas, supported by approximately USD 1.06 billion in sponsorships from private Chinese firms. (Bureau of Shanghai World Expo Coordination, 2010).

The Expo 2010, Shanghai, China, as it was officially known, focused on creating a ‘better city and better life’ through their vision of Expo 2010. Similar to Expo 2005, it aimed to showcase sustainable urban development solutions and promote cultural exchange on a global scale.

The country not only wanted to reap economic benefits but also to leverage from this epic event to build the brand of the country, to showcase the country in a new light to the rest of the world. “Our modern political and cultural ethos has great difficulty in recognizing long-term values”, states Singer, “it is notorious that politicians rarely look beyond the next election [and] economists have been taught to apply a discount rate to all future goods” (Singer, 2000, 91). Unfortunately, Shanghai Expo 2010 demonstrated that politics, economics, and daily practices in China are now deeply intertwined with the revival of capitalism in the third Christian millennium. China has become so embedded in the global capitalist system that it symbolizes the abandonment of a historical alternative and the near eradication of cultural barriers to capital, (David Leiwei Li, 2013). Though considered as the most populous country in the world, there have been studies only on the economic and ecological impact in the short run driven by the hosting of a mega-event.

The Expo featured 190 countries and organizations showcasing innovative urban planning concepts, green technologies, and cultural exhibits. One of the highlights of Expo 2010 was the iconic China Pavilion, shaped like an ancient Chinese crown with traditional architectural elements. Other notable pavilions included the USA Pavilion, which featured a vertical farm, and the UK Pavilion, known for its sea cathedral design. The expo attracted 73 million visitors, making it the most visited world expo. It left a lasting legacy in terms of urban development and sustainability. The site was transformed into an Expo Park featuring

green spaces, cultural facilities, and sustainable infrastructure. The government reportedly spent USD 58 billion on infrastructure and preparation for the event.

According to Goldberger, “Shanghai EXPO 2010 was no exception to the fair’s recent orientation towards environmental protection. In selecting the former British treaty port of Shanghai as the host city, the Bureau International des Expositions (BIE) registered recognition of China’s renewed participation in the universal course of industrial capitalist development initiated by the British Empire and epitomized in the Crystal Palace Exhibition. Shanghai, the latest capitalist success story, was reviving its semi-colonial reputation as ‘the Pearl of the Orient’ and showcasing its staggering skyline with ‘an exuberant version of the Blade Runner aesthetic’ (Goldberger, 2006, 144).

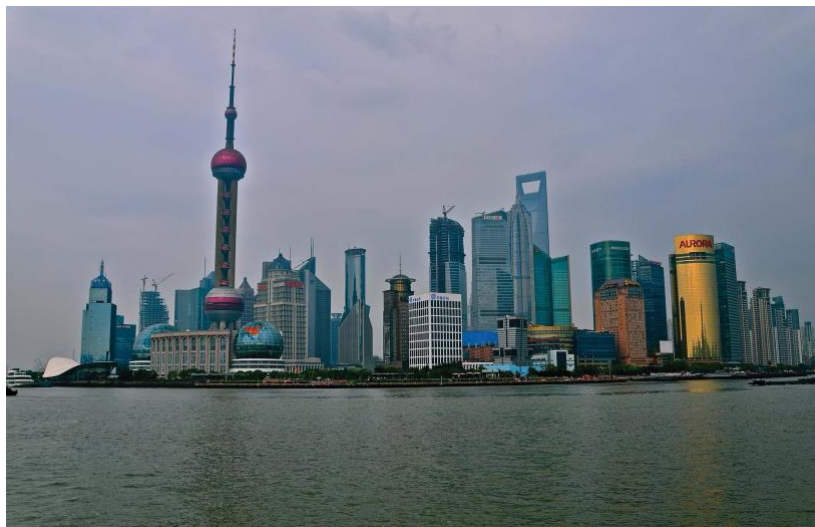


Fig 1.6. New Financial District with the Shanghai TV Tower topping its skyline

Source: Goldberger 2006, 144

The key targets for Expo 2010 were showcasing urban solutions and promoting cultural exchange. However, no financially tangible targets and its long-term impact were studied. The Shanghai Expo signaled that the seeds of global capitalism and its fossil-fueled economy have taken root, flourished, and produced their results in China. It was regarded

as a successful event, promoting the theme of sustainable urban development, and presenting innovative solutions for creating better cities and a better world.

### 2.3.3 Expo 2015, Milan-Rho, Italy

The industrial site, which was the home to Milan Expo 2015, was situated approximately 12 kilometres north of the city's main core and financial district, which has fuelled the Italian economy for generations. The theme of Milan Expo 2015 was ‘Feeding the Planet, Energy for Life’, focusing on sustainable solutions for global food production and consumption. The choice of theme reflects Milan's rich and naturally cultivated products, of which the city is proud, and its orientation towards scientific research aimed at improving worldwide food production.

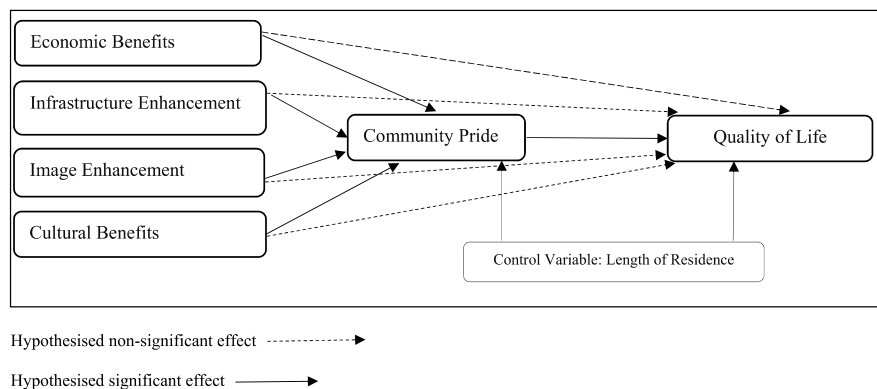


Fig 1.7. The aim of hosting the World Expo in Italy  
Source: 2015, Milan Expo

The Milan Expo 2015 attracted 22 million visitors during its six-month event, from 1st May to 31st October 2015, and has since been partially dismantled. “Its initial design was quite conventional,” Tony Lombardo explained to Bloomberg. “But I am sure Milan is already updating the conceptual and institutional design of MIND, moving away from what has already been done, and a new district including offices and housing accommodation for up to 60,000 people which is entirely on renewable energy and made from recycled materials.”

An additional USD 3.6 billion has been invested on the redevelopment of the site. All the local operations of drugmaker AstraZeneca have been relocated to a space within the massive 16.1 million-square-foot site, and the University of Milan has established its offices there following the event.

Various studies have been conducted on the impact of Milan Expo 2015; however, this literature review focuses on three main studies conducted:

Study (1): Ruggero Sainaghi and Aurelio G. Mauri et al. (2018) examined the impacts of the Milan Expo 2015 on both strong performance and seasonal patterns. Its focus was on the event's influence on the hotel industry without changing seasonal patterns or the reconfiguration of the seasonal periods as a result of the event in the short term.

Study (2): Francesca Magno, Giovanna Dossena (2020), "explored the impact the Expo had on people's quality of life. Specifically, the study focused on the changes in the behaviour of the community and their perceived effects (i.e., economic benefits, infrastructure enhancement, image enhancement, cultural benefits) that affected the residents' overall perceived quality of life (Gursoy & Kendall, 2006; Kim et al., 2015; Magno & Dossena, 2020).

Study (3): Massiani, J. (2015), In his paper, "How Much Will this Event Benefit Our Economy? A Checklist for Economic Impact Assessments with application to Milan Expo 2015," recognized that policymakers, policy advisers, and the general public often perceive events as beneficial to the host city's economy. This belief is frequently reinforced by numerous economic impact studies, typically based on Input and Output models, which generally show significant positive economic effects. However, the study highlights that these economic impact assessments can mislead policymakers when making recommendations.

Other than the studies mentioned above, various other literatures about the Milan Expo 2015 indicate that the impact on Italy has been profound in various aspects, including economic, the cultural, the environmental, and the legacy impact almost ten years post the event.

The Milan Expo 2015 had a significant economic impact on Italy. The event generated a substantial increase in tourists, leading to increased revenue in hotels, restaurants, and transportation services. The construction and development of the infrastructure stimulated the local economy by creating jobs and promoting economic growth in the region. The event also promoted the country as a desirable destination for tourism and business, helping to attract investments and partnerships. The event, besides investment opportunities, also showcased Italy's rich cultural heritage and culinary traditions. Throughout the event, visitors had the opportunity to explore the diversity of Italian cuisine, agriculture, and innovation. The country hosted 140 countries, providing a platform to exchange cultures from different countries. The cultural exchange fostered mutual understanding and appreciation, promoting cooperation and unity worldwide. The event also highlighted the importance of environmental conservation and sustainable practices. The pavilions showcased innovative technologies and solutions that could provide solutions to various global challenges such as climate change, food security, and resource scarcity. Various educational programs were hosted for visitors to adopt more sustainable lifestyles and support environmentally friendly practices. The legacy of the Expo continues to inspire efforts towards acting as agents of sustainability and the environment in Italy and globally. The Expo 2015 in Milan also left a lasting infrastructure legacy. New facilities and infrastructure developed for the Expo, such as exhibition halls, pavilions, public spaces, and transportation systems, have continued to benefit the local community nine years after the event ended. These developments have enhanced the city's capability of hosting future



events, conferences, and exhibitions, contributing to its reputation as a leading hub for business, culture, and innovation.

The event was also a platform to showcase cutting-edge technologies and innovations in the field of food production and sustainability. It helped countries to connect and collaborate on developing new solutions and initiatives to address many challenges. It can be comfortably acknowledged that the event had left a lasting legacy. The event also provided a platform for showcasing the country's strengths and achievements to the world, fostering cooperation and discussions among participating nations. The legacy continues to influence efforts towards sustainability, innovation, and global engagement, shaping the current trajectory of Italy and the world.

Despite the positive benefits, the country never focused on financial gains as a target. Hence, the long-term impact of the event post-event was never analysed or studied.

#### **2.4 Theory of Reasoned Action**

Looking at various literature that has been reviewed during this research, it is evident that numerous impact studies have been conducted pre and post event, however, there has been very rare or no evidence of research on the long-term impacts to the host country, i.e., researchers have not analysed the long-term impact and if there were any adjustments that needed to be done to the expected impact. The short-term impact has always been assessed. The most common success yardstick of any mega-event is the visitor numbers, every Expo has forecasted the number of visitors expected to attend before the start of the event and the actual visitors attended has also been announced post the event. Secondly, host countries usually conduct an economic or financial impact study after the completion of the event, focusing on how the country benefitted from hosting a mega-event, hardly any research has

been done analysing the long-term impact of hosting such events. Even if such research were conducted, there has been no evidence of an adjustment to the long-term forecast derived from the actuals. For example, as a result of winning the bid to host Expo Dubai 2020, UAE had forecasted an increase in GVA of USD 33.37m between 2013 and 2031. It has been 10 years since this forecast was published, now, after the event concluded in March 2022, it is important for an analysis to be done to review if the forecast of USD 33.37m is still achievable by the country at the end of 2031 or having delivered a successful Expo, is there a need for adjusting the forecast for the period 2023 to 2031?

The third aspect of this research focuses on the legacy of the event. All major events have left behind either an innovation or a historical monument as a legacy of the event. According to research done in this literature review, one of the few countries that planned a legacy for their Expo was Aichi, Japan, speaking of recycling and reusing materials that were used to construct the various pavilions. UAE, however, has taken it to another level by announcing a city that would come alive on the site where the event was conducted. Whether the UAE have been able to achieve this legacy plan post-event is one of the most anticipated results of this research work.

## **2.5 Summary**

Through the various literature reviews that were done, it can be concluded that studies on the impact of mega-world events have been conducted for centuries. All mega-events have an impact at various levels and in multiple sectors, i.e. social, environmental, and economic and the investment billions of dollars host countries had to invest to generate any long-term impact. The figure below illustrates what each host country anticipates achieving by hosting a mega event. While some countries aim to accomplish all these goals through any event

they host, others strive to achieve at least some of these objectives as part of their success criteria.

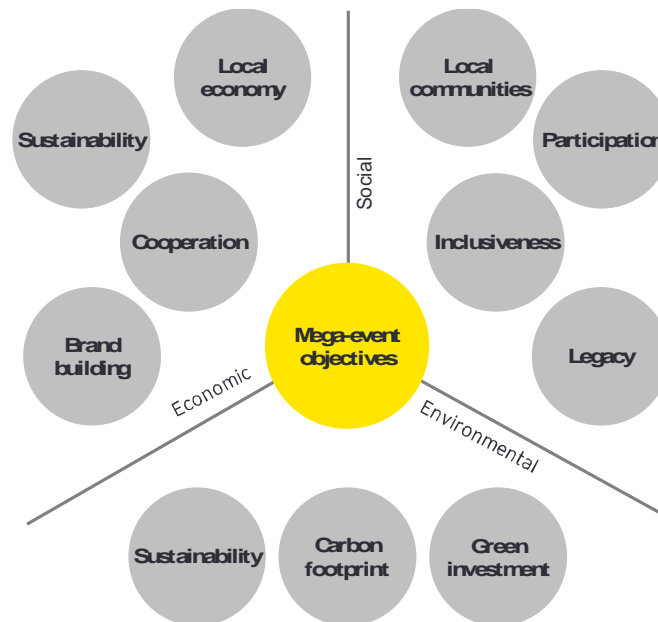


Fig 1.8. Mega events Success Criteria  
Source: EY report 2018

The literature reviews conducted primarily centred on anticipated short-term and medium-term benefits, rare evidence has been found where researchers have studied the long-term impact and also the actual impact viz- a-viz the predicted impact. This dissertation focused on the actual impact, considering, that Expo 2020 has had on the economy of Dubai and will also be developing a financial model to present the revised forecast, incorporating the actuals as of the end of the event and projecting the economic impact in terms of GVA, employment opportunities and the infrastructure investment from 2022 to 2030. It also aims to give a preview to assess if the event was a sustainable boon as the host country organizers had predicted.

## CHAPTER III: METHODOLOGY

### **3.1 Overview of the Research Problem**

Event KPIs are essential for tracking and measuring an event's success. When establishing KPIs, it is crucial to start with the event's goals and desired outcomes. These goals guide the metrics used to determine the event's success. Whether the primary objective is to increase audience engagement, maximize revenue, or secure more event sponsorships, a well-defined list of KPIs helps gauge the event's success. For every mega event, these KPIs are widely published to inform citizens and tourists, encouraging their participation in achieving these targets. Efforts are then in full swing till the end of the event to achieve the KPIs. However, it is distinctly seen, that once the event is over, neither is there evidence of the results being published against all the set targets nor the reasons behind the deviations if any. The variances, however, cannot be attributed to a single factor; instead, they can be linked to the scale and complexity of the mega events, which necessitate appropriate approaches and tools for effective management. The measure of the success of an event like Expo is no exception. The scale and ambition of Expos, in general, make comparison against other mega events somewhat challenging. The reason is that an Expo is not a typical event and the landscape changes from one Expo to another. Nevertheless, like every event the country hosting the Expo also has certain KPIs that it anticipates achieving. Though these KPIs and targets were announced before the event, the actual achievements against all the targets post-event were not always available for public knowledge.

The main purpose of this dissertation is to understand the impact of hosting an event like Expo 2020 on the economy of the UAE. The aim of this dissertation is also to analyse the actuals of the KPI's against their targets and to ensure that any future forecasts be adjusted in the light of the actuals achieved. The study also investigated whether the outcomes

attained after the event can genuinely be attributed to the Expo 2020 event alone or whether there were other events or contributing factors. This dissertation's main focus is to study the long-term impact of Expo 2020 on the host country UAE, in particular Dubai. Has it been a sustainable boon as predicted?

The Expo 2020 event was anticipated to significantly impact the UAE's economy. Experts noted that 2021, prior to the Expo, would pose challenges for some of the UAE's key sectors. However, by 2022, these sectors were on the path to recovery, with the Expo playing a pivotal role in this resurgence. Additionally, the UAE's tourism and hospitality sectors were experiencing strong growth, supported by the government's economic diversification plans and new visa reforms aimed at attracting talent to the country. UAE's strategy of hosting the World Expo would significantly boost the economy and strengthen its stance as the number one tourism destination in the world. The convergence of various nations to showcase innovation positively impacted multiple business sectors, from small and medium enterprises (SMEs) to large corporations. Even the announcement of the successful bid itself boosted economic perceptions and increased business confidence in the country. To measure the impact of the discussed research problem, the methodology that was adopted was not as straightforward as any other research topic, because a study like this one was dependent heavily on secondary research. Since the focus of the research is to measure the long-term impact, primary research, like reaching out to the common citizens of the country, would not provide the required results. The people would only be able to say if he/she enjoyed the event but how this would contribute to the economy of the UAE, particularly Dubai would be a challenging one to address. Hence the research focused on meeting with certain key personnel at the leadership level at the corporate office of Expo 2020, who have

been with the office from the time of the bid to the event and now post the event to strategize the legacy plan of the city.

Nadia Verjee, who joined the team as the head of strategy long before the bid for the World Expo, and later became the Chief of Staff during the event. Now, she serves as the Executive Director of Expo Dubai Group in the legacy structure. She emphasized that the main strategy to win the bid and host the World Expo in Dubai was to bring the world to the country. The goal was to showcase the country's growth trajectory since the 1980s, its future development plans, and how the world could be part of these plans. It was also a chance for Dubai to demonstrate to the world its leading role in many sectors, as well as leave behind a legacy post-Expo that will benefit everyone in the UAE for years to come. It was the first time that the Expo was being held in the region encompassing the Middle East, North Africa, and South Asia.

Mohanaselvan Jayapalan, Head of PMO, Expo 2020, and Head of Operations Expo City Dubai, said that "if we take the history of the UAE, we have grown from nothing to what the world sees today. After the World War 2, many countries used mega events to rebuild their nation and imprint a place in the world."

### **3.2 Operationalization of Theoretical Constructs**

Expo 2020 Dubai significantly contributed to the UAE's ongoing economic growth and local job market. It also supported long-term objectives, including the expansion of SMEs and the development of future skills among young people. This contribution began before the public opening of Expo 2020 Dubai (pre-Expo), continued throughout the public event (during Expo), and persisted after the event concluded (post-Expo). This dissertation focused on three main factors which were the main theoretical constructs relevant to understanding the economic impact of hosting Expo 2020. Each of these operational

constructs was analysed in detail to determine how the study would measure or observe them. For example, the visitation statistics will be based on the datasheet produced by the Expo 2020 analysis team, the GVA growth might be measured using official government statistics, while the employment data could be measured through the Ministry of Human Resource and Emiratization which records the data based on work visas applied for during the analysis period.

Based on the Bureau International des Expositions, BIE, framework, Dubai Expo had to identify theme-driven topics to ensure the country's targets were achieved. The main aim of the event was to showcase the opportunities and culture prevalent in the land, the theme that was finally decided keeping the intentions in mind was “Connecting Minds, Creating the Future”.

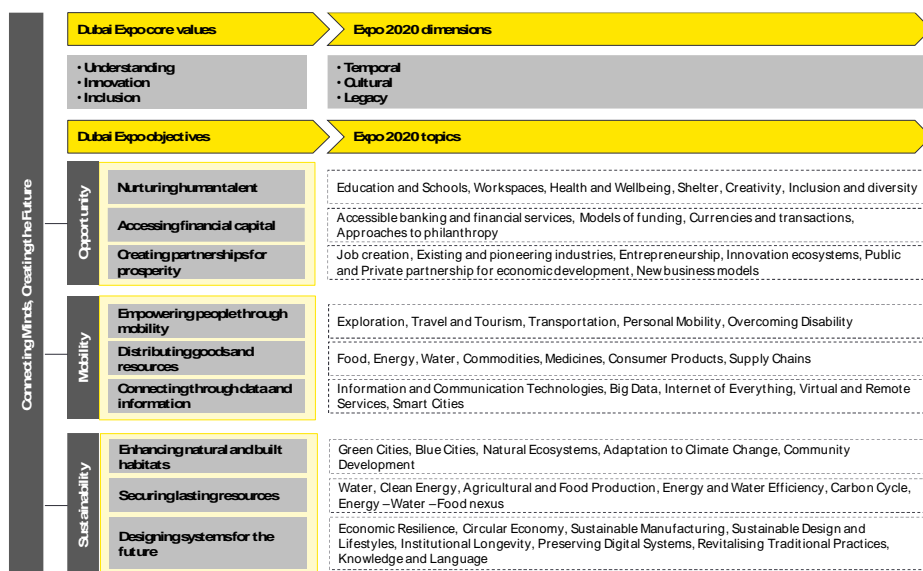


Fig 1.9. Dubai Expo, core values and objectives  
Source: BIE, Dubai Expo, EY analysis

The main theme was then subdivided into three focus themes which would help the country connect the minds and create a future with all the participating countries of the world.

**Opportunity:** Expo 2020 Dubai had set ambitious goals for human development, through the aspiration to achieve progress in the areas of health and well-being, shelter, inclusion, and diversity. It has also highlighted the role of partnerships and access to capital to unlock opportunities and shape a better future.

**Mobility:** Expo 2020 Dubai had highlighted the importance of mobility to unlock the full potential of the increasingly interconnected world, including personal mobility, the efficiency of the movement of goods and services between different parts of the world, and the role of ICT technologies, the information technology department within Expo, in spreading the information and innovation faster than ever before.

**Sustainability:** The theme of Expo 2020 Dubai recognized the need to ensure that future generations will have an opportunity to benefit from the achievements of our civilization. The topics under this sub-theme covered the pressing issues of climate change, environmental degradation, and resource depletion that threaten the quality of our habitats and our economic prosperity.

The Standardized Evaluation Framework was incorporated based on the above theme-driven objectives, in addition to the core values and goals of BIE described in Fig. 8. This would have ensured that the evaluation of Expo 2020 would enable tracking of its success in achieving the important ambitions set out by the Expo theme and would help maximize the long-term benefits of the event.

Analyzing the impact of Expo 2020 Dubai on various economic sectors resulted in the following findings:

**Investment:** The most quoted figure was USD 8 billion which was the amount of money that Dubai had invested in the Expo 2020. However, the invested amount might appear modest compared to the potential revenues the event was projected to generate which were



forecasted as up to four times that of the investment. It's worth noting that between the time the Expo 2020 was announced, back in 2013, and the year 2031, the event was projected to contribute USD 33 billion in GDP to the overall economy.

**Real estate:** Expo 2020 saw a huge boost to government-led projects in Dubai – with improved infrastructure, smart cities, and the legacy of the Expo site itself, which would be transformed once the Expo was complete. The city was to be made into a residential and commercial development with the theme of living and working in the same place, a fifteen-minute accessible city. It is anticipated that property prices will stabilize post-event, driven by the legacy plans for a developed city. These plans aim to foster growth in the property market and mitigate fluctuations. This stability is expected once the millions of visitors who participated in the World Expo decide whether to settle in the UAE or depart after the event.

**Tourism:** Expo 2020 Dubai's target was to attract 25 million visitors. By the time the event started, more than 100,000 new hotel rooms were ready, along with several new luxury hotels. The DTCM (Department of Tourism and Commerce Marketing) used this opportunity to set up several other attractions, like the Dubai Parks, to further boost tourism. The Dubai 2040 Urban Master Plan stated that Expo City Dubai (the Expo site) would become a major hotspot for economic growth. With affordable housing, it would also become a centre for exhibitions and tourism. It was an ambitious vision and may well be a turning point where Dubai's place on the world stage further elevated as it grew as a city. The key here was that Dubai was looking ahead to what all this construction and infrastructure meant for the people of the emirate, and while the Expo itself was only six months in length, this future development would benefit Dubai for years to come. It made

use of a unique chance to build structures that would not only benefit the event but also fit in perfectly with Dubai's overall sustainability plan and boost many sectors.

### **3.3 Research Purpose and Questions**

The primary aim of this dissertation is to analyse the long-term effects of hosting a mega event, such as Expo 2020, on the UAE. UAE has been a country constantly focusing on developing its nation and making a mark globally. The country led by its leadership has made significant progress in the last 20-plus years. Hosting the Expo 2020 was a way of showcasing the progress of the country.

The key research questions that needed to be addressed were as follows:

1. What were the key economic expectations and goals of hosting Expo 2020 in the UAE?
2. How did the UAE government prepare and invest in infrastructure and other resources for Expo 2020 and what was the economic impact of these investments?
3. What was the primary goal for Expo 2020?
4. What was the projected economic impact of Expo 2020 on the UAE prior to the event?
  - a. Increase in GVA by 0.5%
  - b. Increase in GVA by 1.5%
  - c. Increase in GVA by 2.5%
  - d. Increase in GVA by than 3%.

5. How many jobs were expected to be created in the UAE as a result of Expo 2020?
  - a. Less than 50,000 jobs
  - b. Between 50,000 to 100,000 jobs
  - c. Between 100,000 to 200,000 jobs
  - d. More than 200,00 jobs
  
6. What percentage of Expo 2020's infrastructure budget was allocated to long term investments that will benefit the UAE
  - a. Less than 10%
  - b. 10% to 20%
  - c. 20% to 30%
  - d. More than 30%
  
7. What has been the growth in tourism numbers in the UAE post-Expo 2020, compared to pre-expo years?
  - a. Decline
  - b. No significant change
  - c. Moderate increase
  - d. Significant increase.

8. To what extent did Expo 2020 enhance international business relationships and FDI in the UAE?
  - a. No noticeable impact
  - b. Slight increase
  - c. Moderate increase
  - d. Substantial increase
  
9. How did Expo 2020 influence the development of small and medium-sized enterprises in the UAE?
  - a. Negatively, impacted the growth of SMEs.
  - b. No significant impact
  - c. Positively, impacted the growth of SMEs.
  - d. Significantly boosted the growth of SMEs.
  
10. What were the primary economic sectors that benefitted from Expo 2020?
  - a. Oil and gas.
  - b. Construction and Real Estate
  - c. Tourism and Hospitality
  - d. Technology and Innovation

11. Post Expo 2020 what has been the impact on the real estate market in Dubai?
- a. Decline in property values.
  - b. No significant change
  - c. Increase in property values.
  - d. Volatile market conditions
12. What measures has the UAE government taken to ensure the sustainability and legacy of the Expo 2020 site post-event?
- a. No specific measures
  - b. Temporary measures for the immediate post-Expo period
  - c. Long-term measures for continued usage of the site
  - d. Complete redevelopment of the site for alternative uses.
13. What was the primary goal for Expo 2020 as envisioned by the organizers before the event started?
- a. To showcase technological innovation
  - b. To foster international partnerships
  - c. To promote sustainable practices
  - d. To boost the local economy and tourism

14. Before the event what was the expected number of international visitors?
- a. Less than 10 million
  - b. 10 to 15 million
  - c. 15 to 25 million
  - d. More than 25 million
15. Before the event how did the organizers expect Expo 2020 to influence the development of infrastructure in Dubai and UAE?
- a. Minimal Impact on infrastructure
  - b. Some infrastructural improvements
  - c. Major infrastructural advancements
  - d. Pioneering infrastructure projects that set new global standards.
16. Before Expo 2020 what was the expected legacy of the event for future generations in the UAE?
- a. Short-term excitement without lasting impact
  - b. Some memorable highlights for the local population
  - c. Significant long-term benefits for future generations
  - d. A transformative event shaping the future of the UAE and the region

17. What were the main challenges the UAE anticipated in hosting Expo 2020?
- a. Ensuring sustainable legacy post-event.
  - b. Managing increased tourist inflow
  - c. Balancing short-term spending with long-term benefits
  - d. All of the above
18. What indicators were being used to assess the economic impact on the UAE?
- a. GVA growth
  - b. Employment statistics
  - c. Tourism numbers
  - d. All of the above
19. How does the UAE plan to capitalize on the legacy of Expo 2020 for sustained economic growth?
- a. Developing new business districts and innovation units
  - b. Attracting FDI
  - c. Promoting knowledge transfer and research collaborations
  - d. All of the above.
20. Two years post the event, are you satisfied with the way the site has shaped into what was the originally planned legacy plan? If not, why, and what according to you has gone wrong?

Following the discussions with various stakeholders within the Expo and an in-depth analysis of data that was available, the research would like to establish that every mega event might achieve the expected results, however, it has to be seen if the event alone contributed to the economic growth, especially the GVA growth or were there other factors that contributed to the growth? The research would also look at the scenario of the GVA growth in the instance that the event did not happen and with the event to analyse the true contribution of the event and also adjust the country's projections, positive or negative, based on the actuals that were achieved during the event.

### **3.4 Research Design**

The research design adopted for this thesis is twofold: it is based on studies using public information available through various reports published before and after the event, as well as interviews with key personnel involved with the event.

**Longitudinal Study:** This aspect aims to assess the changes in economic indicators before, during, and after Expo 2020, focusing on GVA growth, employment opportunities, and infrastructure investment.

**Before Expo 2020:** Since winning the bid in 2013, there have been significant investments in infrastructure, including the expansion of roads, public transport systems, airports, and the construction of the Expo site itself. The expectancy of Expo 2020 was an increase in Foreign Direct Investment and a spur in the construction, tourism, and service sectors, such as hospitality and retail. However, the oil crash in 2014 and 2015, and the subsequent market fluctuations, had a considerable impact on the UAE's economy, which is heavily dependent on oil revenues (especially Abu Dhabi), despite ongoing diversification efforts.

**During Expo 2020:** The event was expected to attract millions of visitors who would contribute to the service sectors. The actual visitors and their spending patterns were key



indicators of the event's economic impact. The country saw a temporary boost in revenues associated with event ticket sales, sponsorships, and increased consumer spending.

**After Expo 2020:** The immediate impact expected would have been a deceleration in the service sector and construction as demand generated by the event would have subsided. However, it is important to note that the construction industry continued to maintain its growth, due to the legacy use of the Expo site, which has now become Expo City Dubai.

The long-term impact can be truly assessed based on how the UAE, especially Dubai, leverages the international exposure and the networks gained during the event to encourage continued foreign investment and thus diversify its economy. To isolate the effects of Expo 2020, it would be important to look at the economic indicators before and after the event and compare them with the forecasts that do not account for the Expo, which would be analysed in the hypotheses section of the thesis.

**Comparative Analysis:** The main purpose of this thesis is to build my financial knowledge, being able to research and analyse the impacts of certain key events and how they affect the host country. Look behind the scenes for the understanding of the perspective of hosting an event and the benefits anticipated from the event and a post-event analysis to understand if the expected results were achieved.

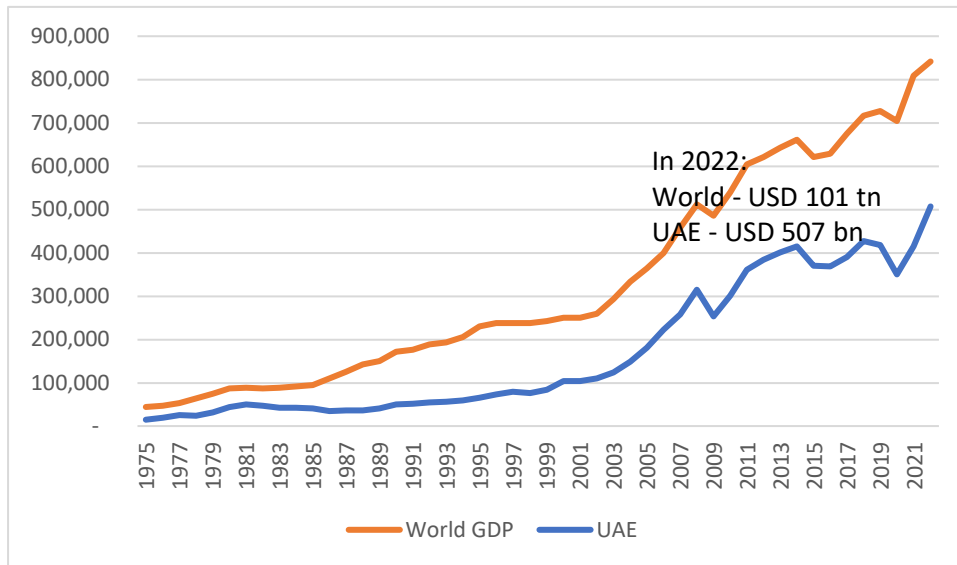


Fig 1.10. UAE GVA in comparison to the World GDP  
 Source: World Development Indicators, last updated on 21/02/2024

A look at the history of Dubai and its trajectory since the 1970's, reflects a strategic approach to economic development. Though the country had significant oil reserves, the leadership constantly pursued diversification, exploring new avenues for revenue generation, aiming to enhance the GVA for the country. The chart in Figure 10, illustrates this trajectory indicating a consistent growth trend aligned with the World GVA. While the nation encountered challenges driven by economic and political factors, the instances of GVA decline, particularly in 2009, 2015, and 2021 can be attributed to the global recessions and the recent pandemic.

UAE's economy, in comparison to countries that did not host a major international event like Expo 2020 during the same period, would not have experienced the same level of economic stimulus. However, it cannot be conclusive, as their economic performance would

depend on domestic policies, global economic conditions, natural resources, and trade relationships, to mention a few.

**Sectoral Analysis:** Expo 2020 Dubai had a significant impact on various sectors of the UAE economy, especially tourism, hospitality and retail, and construction. The study analysis of each sector is below:

**Tourism:** Expo 2020 attracted millions of visitors from around the world to Dubai, which helped boost the tourism sector significantly. The event itself created a surge in tourism demand, with visitors attending the event and exploring the city. This resulted in increased occupancy rates and higher spending on tours, attractions, and dining, adding to the tourism industry in Dubai as a whole.

**Hospitality and Retail:** The hospitality sector experienced a boom, especially during the event, with increased demand for hotel rooms, restaurants, and other hospitality services. Many new hotels and accommodation options were developed to cater to the increase in visitors attending the Expo. The event provided a platform for the hospitality industry to showcase its offerings, leading to increased revenue growth. The retail sector also experienced a boost as increased tourism and visitor numbers led to higher retail sales. Retailers and brands also had the opportunity to showcase their products to a global audience, leading to increased visibility and sales.

**Construction:** With the development of infrastructure, exhibition pavilions, transportation networks, and other facilities provided, the construction industry was indeed the most benefited sector because of the event, thus creating employment opportunities and driving economic growth. The legacy of Expo 2020 also includes new landmark buildings and infrastructure that will continue to benefit the construction industry in the long term.

Expo 2020 stood as a landmark event for the UAE, bringing together nations, businesses, and innovators to showcase their achievements and collaborate on various global challenges. As the Expo unfolded, the economic repercussions on the UAE were far-reaching, influencing many sectors and contributing to the country's growth and development. The research helped to explore the economic impact of Expo 2020 on the UAE and focused on how the event influenced key indicators such as GVA, employment, infrastructure development, and new business opportunities. The event not only boosted tourism by attracting millions of visitors but also enhanced the country's reputation and made the UAE a hub for trade and innovation. Figures 1.11 and 1.12, depicts the focus and targets set apart before the event, this then would be compared to the actuals achieved and the long-term adjustment to the forecast predicted through this research.

**Expo 2020 is expected to deliver value to the UAE economy directly and indirectly**

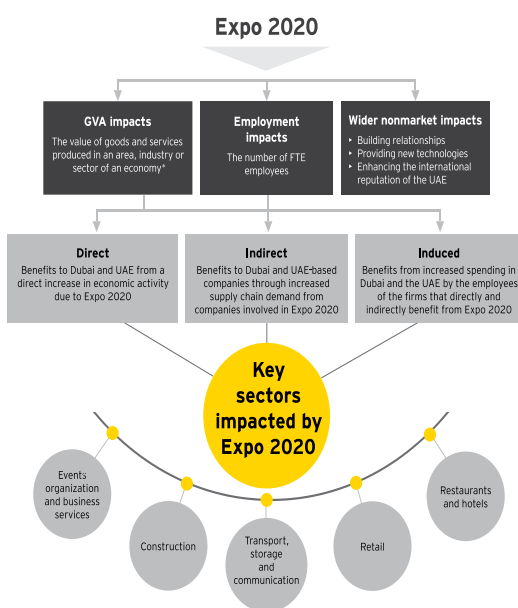


Fig 1.11. Expectations from Expo 2020 Pre-event

Source: EY Impact Study Report, 2018



Fig 1.12. Targets of Expo 2020 Pre-event

“Estimates were based on available data (sources include Expo 2020 organizers, Roads & Transport Authority (RTA), Dubai Municipality (DM), Etisalat, and Dubai Electricity & Water Authority (DEWA)). This included on-site and off-site investments by the Expo 2020 organizers and other investors from 2013–31. Employment estimates are not restricted to employees directly hired by Expo 2020; they also include employees in related sectors. Further, the employment estimates exclude volunteers (expected to be 30,000 volunteers in the During-Expo period). One job-year refers to a year’s employment for one FTE employee. The total foreign investment relate to Expo was estimated to be USD 1.2billion. Note that the Legacy impacts were based on a number of assumptions about the likely economic activities post the event” (EY Impact Study Report, 2018)

### **3.5 Population and Sample Selection**

The credibility of a thesis depends on the research methodology it employs. The chosen research path determines the precision, objectivity, and dependability of the study's findings. By selecting appropriate methodologies and techniques, researchers can ensure that their work meets academic standards and contributes meaningfully to the field. The population and sample size of this study had to be limited for the survey, as the research is primarily based on secondary research due to the data required for the analysis. However, a few key personnel were interviewed to understand their thought process regarding their expectations before and after the event. The sample size, though small, was determined based on the need to capture diverse perspectives and ensure that the findings were significant. The interviewees identified were participants who were involved in strategy and decision-making capacities within the Expo 2020 corporation. The advantage of selecting these participants was that they had been involved with the event from the time before winning

the bid to the post-event legacy plan. Hence, they would be in a better position to guide me through the primary research section. The leadership of the Expo 2020 shortlisted for the interview were from different fields which would then broaden the horizon for the research to understand their perspective for hosting an event like Expo 2020 from area of expertise. The five people who were identified and interviewed for the research were:

1. Her Excellency, Reem Al Hashimy, UAE Minister of State for International Cooperation and CEO, Expo City Dubai Authority
2. Dr. Tarek Oliveira Shayya, Executive Vice Chairman and Chief of Legacy Plan, Expo 2020
3. Mukhtar Safi, Chief Financial Officer, Expo 2020, and Expo City Dubai
4. Nadia Verjee, Head of Strategy and Chief of Staff, Expo 2020 and Executive Director, Expo City Dubai.
5. Mohan Selvan Jayapalan, Head of Project Management Office, Expo 2020, and Head of Operations, Expo City Dubai.

### **3.6 Instrumentation**

When conducting the research, it was crucial to use appropriate instrumentation to gather data and analyse the effect of the event on the country's economy. Some of the instruments used for concluding the analysis were:

**Interviews:** The research developed semi-structured interview questions to be conducted with various stakeholders such as government officials, residents, and visitors to gauge their perceptions of the economic impact of Expo 2020. This helped gather in-depth insights into

the economic effects of Expo 2020. The semi-structured interview process helped explore different perspectives and provided rich qualitative data.

**Secondary Data Analysis:** The research utilized existing economic data and reports from government agencies, industry associations, and research conducted by various assurance corporations to analyse the economic indicators before, during, and after the mega-event. This included analysis of data on GVA growth, employment rates, tourism revenues, and business investments, among other focus areas.

**Case Studies:** The research conducted a case study on SMEs that were directly impacted by Expo 2020. This qualitative research methodology provided detailed insights into how participating in a mega-event like Expo 2020 helped them to increase their visibility and awareness in the country.

**Financial Modelling:** The country had set various KPIs that were to be achieved by hosting a mega event like Expo 2020. It expected the GVA of the country for the period during the event to be approximately USD 6.2 billion. Based on this prediction, the forecast for the period until 2031 estimated the GVA to be USD 33.2 billion. The research used financial Modelling to analyse the data it had collected to understand the impact on the GVA during the event, based on actual data that was available.

The financial modelling methods that were used as follows:

**Time Series Analysis:** Time series analysis is a sequence of data points recorded or measured at successive points in time. The research used this method to collect data based on the predictions that were made before the start of the event and adjusted the long-term predictions based on the actuals that were available after the event.

**Input-Output Model:** This model analyses the interdependencies between different sectors of the economy. It estimates how changes in one sector affect other sectors. The research

used this model to understand how the predicted visitor numbers would contribute to the increase in tourism revenue and consumer spending, which would directly contribute to the GVA.

**Multiplier Model:** This model calculates the multiplier effect of spending on the overall economy. It considers how an initial injection of spending would lead to generating revenue. The research used this model to analyse the total capital that was injected by the country to develop a site capable of generating revenue.

**Dynamic Stochastic General Equilibrium (DSGE) Model:** DSGE models are macroeconomic models that incorporate uncertainty and dynamics to analyse the effects of policy changes or external shocks on the economy. This model was used to study how a pandemic like Covid-19 affected the predictions.

**Monte Carlo Simulation:** The Monte Carlo simulation generates thousands of possible outcomes based on probabilistic inputs, allowing analysts to assess the range of possible results and the likelihood of different scenarios occurring. This model was used to understand the event predictions, apply the actual data collected, and adjust the future predictions, which would help the country make long-term decisions.

**Content Analysis:** The research also analysed various media coverage and official documents and reports related to the event to understand how the event was portrayed in the public domain and its perceived economic impact.

By adopting a combination of the above instrumentation methods, the research gathered comprehensive data to analyse the economic impact of Expo 2020 on the UAE.

### **3.7 Data Collection Procedures**

The data collection for the research was primarily based on secondary research methodology, which involved studying numerous articles and similar research projects to



analyse the impact. Additionally, questionnaires were drafted to interview key senior personnel within the Expo to gather their perspectives on the impact of Expo 2020, as well as their expectations before, during, and after the event.

The research also broke down the GVA forecast and compared it to what was achieved between 2013 and 2022. It provided a revised projection, based on the actuals reported after the event, for the GVA between 2023 and 2031, extending till 2042, considering the changed landscape post the event.

This research utilized both qualitative and quantitative methodologies.

The **qualitative research methodology** involves collecting data through open-ended conversational methods of communication. This approach allows the researcher to comprehend the 'what' and 'why' of the potential audience, obtaining detailed information based on their responses. The primary form of qualitative research methodology adopted for this thesis was personal interviews. These interviews are similar to surveys, but respondents have the opportunity to answer open-ended questions at length. Furthermore, the direction of the conversation can be altered based on the subject's response. This type of research typically provides detailed information regarding the opinions or perspectives of its subjects. Conducting interviews with subject matter experts can also provide critical information to various businesses.

From a qualitative perspective, the research study engaged with key senior leadership personnel of Expo 2020 to comprehend their perspectives and perceptions regarding the event's success. The study sought to understand their expectations before the event commenced and, subsequently, their reflections on the event's greatest achievements after its successful delivery. Additionally, the research aimed to explore their anticipation of the event's legacy.

Key questions posed to these personnel included inquiries about their pre-event expectations, their views on the event's accomplishments, and their vision for its long-term impact. The research also delved into whether the targets set before the event were met organically or if adjustments were necessary due to challenges encountered during the event's execution. By engaging directly with these individuals, the research sought to gain valuable insights into the planning, execution, and outcomes of Expo 2020 from the perspective of those closely involved in its development and implementation to adjust the achievement due to the challenges they faced after the targets were set.

A **quantitative research study** can be described as "the study that entails some mathematical information or has data that can be measured to assist answering the research concern(s) and to meet the objectives" (Saunders et al., 2003, p. 327). Measurable study design interpretations are complex as this condition is mainly used in the recognition of the speculative style that demonstrates the reliant as well as independent variables plan related to the collection of records. In a quantitative method, the researcher mostly makes use of cases for the advancement of knowledge and hires question methods such as experiments as well as accumulates records on instruments that are pre-arranged, yielding analytical data. The transformation of study records right into numbers is performed by the researcher to carry out an analytical computation, thereby making the study results. When the measurable investigation is being used, it is necessary to obtain extra speculation to show the research study conclusion (Saunders et al., 2009).

Hence, the numerical data that has already been collected is presented in the most compact and easy-to-read method to make sure that the reader can easily understand the summary of that data.

This dissertation relied heavily on quantitative research, given its focus on assessing the economic impact of hosting an event like Expo on the host country. While the event undoubtedly instilled a sense of belonging and pride among residents and strengthened the country's global reputation, this study aimed to go beyond the emotional and reputational aspects to delve into the event's economic implications for the UAE.

The quantitative approach adopted in this research involved sourcing data from public repositories such as journals and economic reviews. It also heavily relied on financial reports provided by Expo 2020 at the conclusion of the event to evaluate its success. According to the Expo 2020 leadership, “the total GVA amounted to a record USD 6.58 billion as a result of the event”. A report by Ernst and Young projected “that Dubai's economy could surge to approximately USD 33.4 billion as it geared up to host visitors from around the world. Sectors like events organization, construction, and hospitality were expected to contribute USD 18.7 billion, USD 7.34 billion, and USD 3.09 billion, respectively”. This dissertation aimed to ascertain whether these projections were met. To achieve this goal, financial Modelling approaches discussed in the instrumentation section were utilized to forecast a revised GVA, employment indicators, and infrastructure investment needed to attain the revised forecasts.

In the financial Modelling approach, the study looked at parameters that were considered as KPIs for the success of the event before the start of the event and compared them to the parameters after the event. The purpose of this was to do a variance analysis of the actuals against the budget and analyse the reason for the variances.

The variances could be positive or negative. A negative variance means that the actuals were below the budget which signifies an underachievement of the KPI's and if the variances were positive, then the actuals were above the budget signifying an overachievement. Either

of the variances, depending on the percentage achieved is not considered effective because an underachievement would mean that the targets were not met, this could be driven by various reasons, i.e. unreasonable targets, market conditions, economic downturn, and the likes. An overachievement would mean that the actuals exceeded the targets which could be driven by lower targets set to ensure the event is reflected as a success.

In the planning and forecasting model, the aim was to gather the actuals of the financials after the event adjust that against the initial forecast during the same period and extrapolate the future predictions to see if the forecast at the end of the period was still in line with the initial expectations that were published before the start of the event. The reason this postpartum was of importance was that usually an event is hosted with a lot of anticipation for the development of the economy, however, once the event is delivered the future expectations are neglected. UAE as a country known for its extravagance, is not expected to stop with just one event, like the Expo 2020, hence this research study is aimed at helping the leaders of the country in assessing the decision-making criterions that it could set when it bids for similar mega events in the future.

### **3.8 Data Analysis**

“As the first mega-event to be held in the Middle East, Expo 2020 Dubai had a huge impact on infrastructure worth more than USD 12 billion. Upon winning the bid to host the World Expo 2020, Expo 2020 Dubai became one of the key agendas used to realize the goal of a sustainable economy” (Soldatikhin, 2021). Sheikh Mohammed bin Rashid Al Maktoum regarded the successful execution of Expo 2020 as a major milestone in the UAE's development, emphasizing environmentally sustainable practices and the equitable distribution of resources (Expo 2020, 2019).

Marzouki (2019) contends “that social events play crucial roles in branding countries for various economic activities. Concurrently, the UAE enjoyed massive tourism and hospitality revenue as a result of the marketing strategies and branding of Expo 2020, even in the wake of COVID-19 and its challenges”.

At the same time, according to Ahamed and Cooper (2014), “the expo had significant financial implications for many local and international companies”. Okasha (2020) even asserted “that the development of the expo event elevated the level of entrepreneurship, increasing the number of investors. It made the UAE more appealing to Arab youths than other countries such as the US, Canada, Australia, or even Europe. Such findings indicate that the organization of an event like Expo 2020 had significant implications on the investment patterns alongside their perceptions towards various countries”.

Informal conversations with individuals after the event revealed that visiting Expo 2020 Dubai inspired many students to think about their futures and explore various career options in line with emerging trends. For instance, many individuals agreed that after attending Expo 2020 Dubai, they expanded their career aspirations and became interested in pursuing careers in science, technology, engineering, and mathematics (STEM) fields, particularly in areas such as robotics, space technology, and environmental science. The various data, research papers, and journals studied during this research provided many insights into the actual achievements of the event. Speaking to the leadership also provided enlightenment on why the country chose to host a World Expo compared to other mega-events.

Based on the research, the data collected were then broken down into three core areas, which were the focus of this research from the beginning.

The **visitation numbers**, served as a pivotal catalyst, being the reason for driving tourism, hospitality, and retail spending. Any event acts as a magnet, attracting visitors from far and

wide, thereby injecting vitality into the host country's economy. The tourism and hospitality industries experienced a surge as visitors flocked to the country to attend the event and this increased demand for accommodation, dining, transportation, and other activities.

The effect of this surge also extended to the retail industry as the visitors would buy, merchandise and gifts which amplifies consumer spending. Retailers also used this opportunity to strategically capitalize on the increased demand and thus tailor promotional offerings to cater to the needs of the visitors.

This was one of the main targets that defined the success of the event. The measures that the country adopted to ensure the targets were being achieved, although the country or the entire world was recovering from the pandemic. The below data sheet indicates the total tickets that were purchased during the 6 months and the visitation database which was being maintained by the project management team of Expo 2020.

**VISITATION & SATISFACTION DATA SHEET**

01 Oct 2021 - 28 Feb 2022

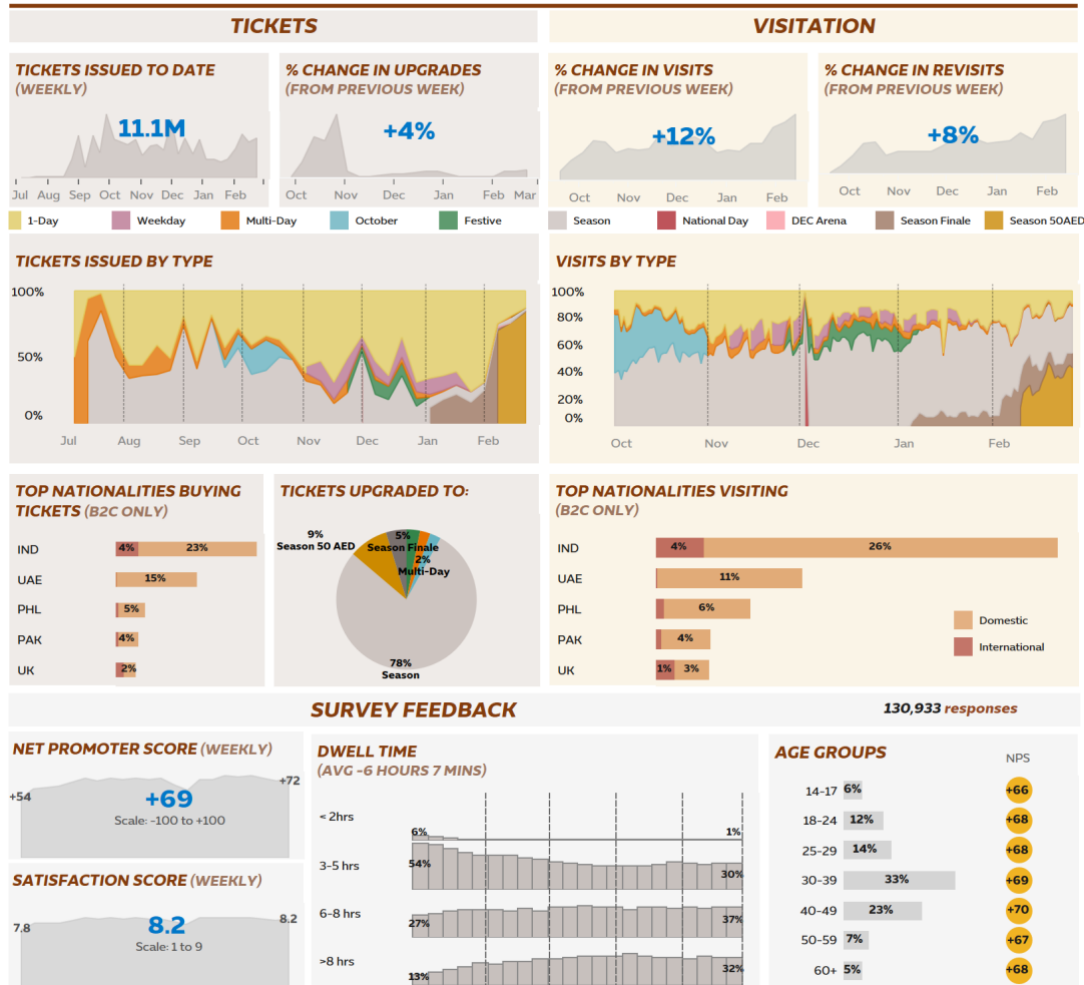


Fig 1.13. Visitor demography

Source: Expo PMO

Dubai was remarkably successful in uniting the world and educating a global audience. It celebrated innovation, promoted progress, and fostered cross-cultural cooperation under its overarching theme of 'Connecting Minds, Creating the Future,' along with its three interconnected subthemes: Opportunity, Mobility, and Sustainability. Over the six months from October 2021 to March 2022, Expo 2020 Dubai welcomed 192 nations, 24.1 million physical visitors, and over 251.2 million virtual visitors. Although the initial target was 25 million physical visitors, achieving 96.4% of this goal was a significant accomplishment for

the UAE. The country's strict measures to ensure a full recovery from the pandemic were commendable. UAE became one of the first countries to operate fully post-pandemic, demonstrating its readiness to host an event like Expo. The leadership's determination and comprehensive measures ensured that Dubai was a safe and secure destination for visitors from around the world.

Another parameter that was used to quantify the economic impact of Expo 2020 was the **FTE (full-time equivalent)** job years that the country set to accomplish prior to the event.

An FTE job-year is defined as full-time work (eight hours a day, five days a week) for one year, for one person. The employment opportunities that were generated by hosting an event like Expo, drove a sense of pride among the people especially the nationals and the expat residents. The event fostered job creation on a significant scale. The magnitude of such events demands a workforce across diverse fields ranging from construction to event management. In preparation for the event, the number of full-time employees that were required especially in the construction sector for developing the required infrastructure was unimaginable, from blue-collar Labour to architects, engineers, and project managers.

Furthermore, closer to the actual event, there was a heightened demand for event-related jobs such as in the field of entertainment, catering, security, and transportation. This surge in demand also led to job creation in other sectors like leisure, hospitality, and tourism, ranging from hotel staff, hospitality professionals, tour guides, and event coordinators.

Also, for smooth operations during the six months, the event itself required an enormous workforce, including event organizers, security personnel, volunteers, and support staff. This increase in employment opportunities not only provided individuals with job options but also stimulated economic growth and left a lasting legacy of social and economic empowerment within the host community.



The target set by the country before the start of the event was to provide 905,200 FTE, including citizens and expat residents.

Key Indicators - FTE	nos			
	Pre Expo Contribution	During Expo Contribution	Post Expo Contribution	Total
Predicted Targets	262,400	94,400	548,300	905,100
Analysis based on the Thesis	266,000	111,000	497,531	874,531
Post Event Report 2023	266,000	111,000	662,000	1,039,000

Table 1.1: FTE target and revised forecast comparisons

Source: EY Report, 2018 and 2022

Predicted Targets Timelines	Post Event Report Timelines	Thesis Study Timelines
Pre-Expo – Nov 2013 to Oct 2020	Pre-Expo – Nov 2013 to Oct 2021	Pre-Expo – Nov 2013 to Oct 2021
During Event – Oct 2020 to March 2021	During Event – Oct 2021 to March 2022	During Event – Oct 2021 to March 2022
Post Expo – April 2021 to Dec 2031	Post Expo – April 2022 to Dec 2042	Post Expo – April 2022 to Dec 2031

It is evident from Table 1.1 that the actual hire of FTEs was 6% higher than the original forecast and this was primarily driven by the increase in scale of the development and the people required during event time. The event time hiring was 18% higher than initial targets which kind of affected the post-event hire where the requirement declined by 9%, decreasing the overall FTE employment hiring by 3% compared to its initial target. However, the post-event research published that the FTE post-event time would be 21% higher than its initial plan and 33% higher than the revised forecast derived through this research. The primary reason for this increase was due to the addition of 11 years to its forecast period after the completion of the event. Thus, the three phases, pre-event, during-event, and post-event, were expected to support approximately 1,039,000 FTE.

In terms of employment, the number of job-years in the UAE from 2013-2042 was 15% higher than the estimated FTE in the pre-event study, which projected 905,200 FTE job-

years from 2013-2031. This translates to an average of roughly 35,600 FTE job-years annually in the UAE.

Expo 2020, contributed to majority of these FTE jobs, the detailed breakdown as follows:

1. FTE job years prior to expo: **266,000** • mostly driven by the construction sector
2. FTE job years during the event: **111,000** • mostly within the restaurants and hotels sector
3. FTE job years after the event: **662,000** • The ongoing events and various unquantifiable benefits from enhanced trade and business relations will continue to drive progress, as Dubai and the UAE elevate their international profile in business and tourism

The visitation numbers and the FTE job creations in the various sectors, especially the construction and hospitality sectors directly contributed to the revenue generation expectations from the event. Maximizing revenue generation and optimizing cost control were the primary drivers that helped achieve the targeted GVA.

This dissertation quantifies the economic growth and productivity impact of the Expo 2020 on the UAE's economy using the parameter of GVA. According to research published by Ernst and Young before the event, “the initial GVA target set for the period 2013 to 2031 was USD 33.3 billion” (Expo 2020).

The study conducted a variance analysis comparing actual GVA with the initial forecasts. Subsequently, the forecasted GVA was adjusted for the post-event period based on the actual data. The adjusted forecast was then compared to the post-event forecasted GVA generated by the expo team to identify the primary reasons for the variance between the two projections.

	in USD Bn			
Key Indicators - GVA	Pre Expo Contribution	During Expo Contribution	Post Expo Contribution	Total
Predicted Targets	10.3	6.2	16.9	33.3
Analysis based on the Thesis	10.6	5.3	15.4	31.3
Post Event Report 2023	10.6	5.3	26.2	42.1

Table 1.2: The GVA reforecast based on the actual data to forecast done post event.  
Source: EY Report (2018 and 2022)

Predicted Targets Timelines	Post Event Report Timelines	Thesis Study Timelines
Pre-Expo – Nov 2013 to Oct 2020	Pre-Expo – Nov 2013 to Oct 2021	Pre-Expo – Nov 2013 to Oct 2021
During Event – Oct 2020 to March 2021	During Event – Oct 2021 to March 2022	During Event – Oct 2021 to March 2022
Post Expo – April 2021 to Dec 2031	Post Expo – April 2022 to Dec 2042	Post Expo – April 2022 to Dec 2031

During the analysis of the data, it is seen, as in table 1.2, that the actual GVA that was achieved up until the end of the event was USD 15.9 billion compared to the predicted USD 16.4 billion, the major reason for the negative variance of USD 0.5 billion was primarily driven by the postponement of the event due to the pandemic resulted in an additional year of spend in preparations for Expo 2020 Dubai, which impacted the economic contribution. However, the forecast based on the actual figures indicated that the pandemic's impact may persist for a few more years after the event. As a result, the GVA at the end of the forecast period is projected to be two billion lower than the pre-event projected GVA. From the initial planning stages to the operation of the public event, Expo 2020 Dubai delivered substantial economic value to Dubai and the UAE, despite the challenges posed by the global pandemic. Expo City Dubai is expected to continue generating economic value for many years to come. The total GVA from 2013 to 2042, encompassing both Expo 2020 Dubai (pre-event and during the event) and Expo City Dubai (post-event), is now projected to be USD 42.2 billion.

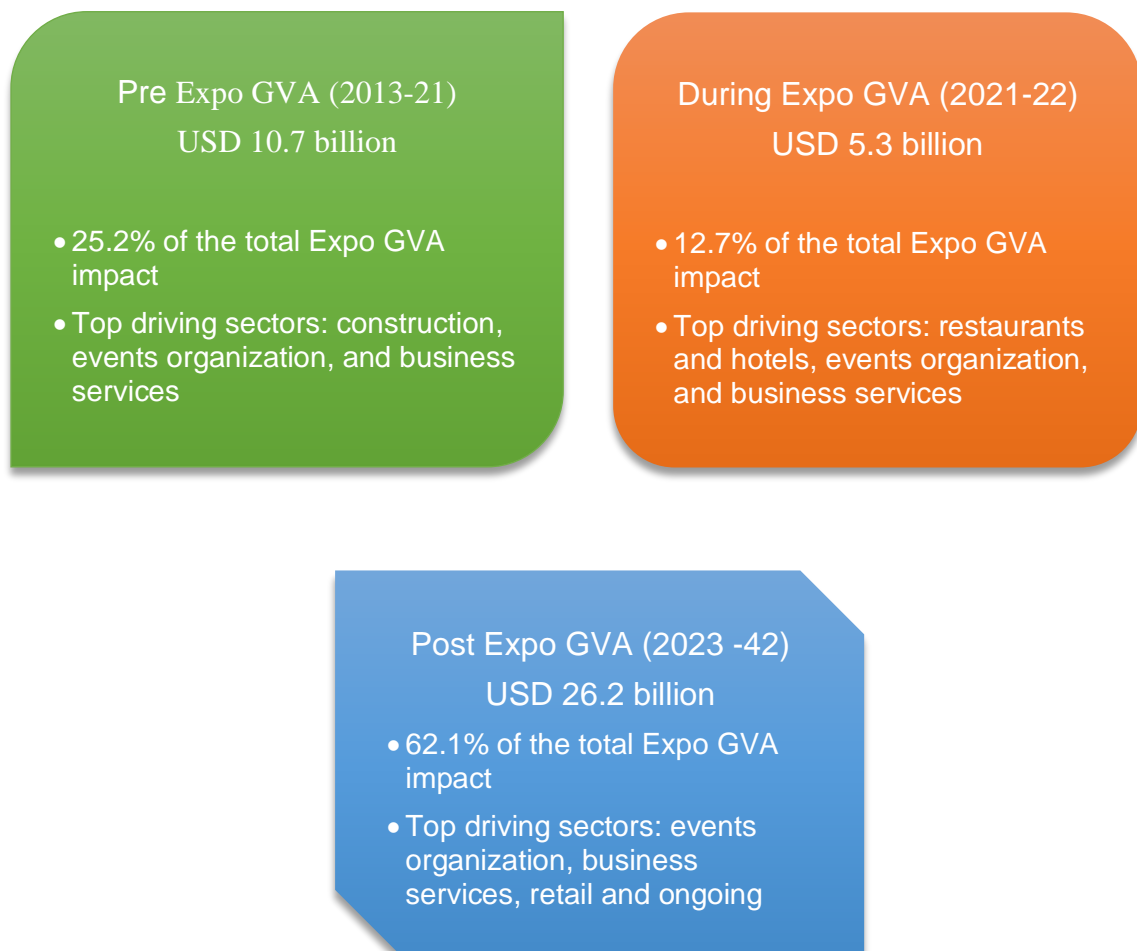
The sectors contributing most towards this outcome are:

1. Business Services and Events: **USD 20.6 billion**
2. Construction: **USD 8.7 billion**
3. Restaurants and hotels: **USD 6.3 billion**

“Despite the worldwide impact of the COVID-19 pandemic, the projected economic impact was 26% higher than the initial set target before the start of the event” (The Economic Impact of Expo 2020 Dubai Technical Report, April 2019). Though the research shows that the impact of the Expo 2020 was much greater than what was forecasted before the event, it needs to be noted that the forecast period of the GVA has now been extended for another 11 years, until 2042, compared to when the initial target was set which was only until 2031. The greater impact now being reported is attributed to various factors that occurred both before and during the Expo, as well as those anticipated to arise from post-Expo activities and legacy initiatives. Based on the revised legacy plan, more strategic assets will be retained within the Expo City Dubai organization’s ownership rather than being sold. This strategy aims to foster extensive new business growth, technology, and innovation, leveraging the success of Expo 2020 Dubai. With advanced legacy planning and implementation, and through events at Expo City Dubai, such as the UN Climate Change Conference of Parties (COP28) in November 2023, alongside enhanced business services, Dubai's rising international profile is expected to further strengthen domestic and international business relations. Consequently, Expo City Dubai is projected to generate significantly higher GVA during the legacy period compared to pre-event projections.

More specifically, the expected GVA impact is expected to be higher because of the latest financial projections for Expo City Dubai that reflected this new business model, and Expo City Dubai is expected to continue to contribute towards the majority of the overall GVA of the country. The primary reason for the increase in the impact is due to the retained assets being leased and contributing to the sustainable rental income and economic activity for a longer duration, most likely, over the operational lifetime of the assets. As mentioned, the legacy analysis period has been extended by 11 years compared to the pre-event analysis to accommodate this new business model, which differs from the asset sales-based model used in earlier projections. In an asset lease-based model, economic value is realized over a longer period as assets become operational and increase activity over time. In contrast, an asset sales-based model captures value added at the point of sale. Consequently, this change in strategy necessitated an adjustment in the modeling approach to accurately reflect Expo City Dubai's anticipated economic contribution. To fully realize this benefit, it is crucial for the legacy of Expo 2020 Dubai to continue contributing value to the broader UAE economy. This will be achieved through investments in planned events, exhibitions, and other ongoing attractions at Expo City Dubai. These attractions are expected to draw visitors, businesses, and tenants from both national and international arenas, thereby creating a more extensive and widespread impact from the legacy.

The analysis done during the research has broken down the GVA by the highest contributing sectors and are summarized as follows:



Source: Expo 2020 financial statements

The legacy of Expo 2020 Dubai is now being realized through the ongoing re-utilization and repurposing of the urban environment into Expo City Dubai. This approach ensures that the permanent infrastructure investment is being used effectively and efficiently.

The financial investments made in hosting the Expo, particularly the development of permanent infrastructure as promised in the original bid, have become vital components of Expo City Dubai. Approximately 80% of the infrastructure built for the Expo will be integrated into Expo City Dubai. This includes iconic attractions such as Al Wasl Plaza, the Garden in the Sky observation tower, and the Surreal water feature. Additionally, several flagship pavilions from the event, including Terra (the Sustainability Pavilion) and Alif (the

Mobility Pavilion), have been retained, with some already reopened to the public. Thematic district pavilions are also being repurposed. This strategic repurposing of structures is anticipated to continue generating benefits through the activities and engagement these assets facilitate. By maintaining and re-utilizing these infrastructures, Expo City Dubai aims to ensure long-term value and impact, drawing visitors, businesses, and tenants both nationally and internationally, thus enhancing the broader UAE economy.

Key Indicators - Infrastructure	in USD Bn			
	Pre Expo Contribution	During Expo Contribution	Post Expo Contribution	Total
Predicted Targets	7.0	-	-	7.0
Analysis based on the Thesis	7.0	-	1.0	8.0
Post Event Report 2023	7.0	-	1.7	8.7

Table 1.3: The infrastructure investment actuals compared to revised forecasts.

Source: Expo 2020 Financial Statements

Predicted Targets Timelines	Post Event Report Timelines	Thesis Study Timelines
Pre-Expo – Nov 2013 to Oct 2020	Pre-Expo – Nov 2013 to Oct 2021	Pre-Expo – Nov 2013 to Oct 2021
During Event – Oct 2020 to March 2021	During Event – Oct 2021 to March 2022	During Event – Oct 2021 to March 2022
Post Expo – April 2021 to Dec 2031	Post Expo – April 2022 to Dec 2042	Post Expo – April 2022 to Dec 2031

Table 1.3 reflects infrastructure investment that were made for hosting the event and it shows that the actuals were in line with the initial plan however the change in strategy of the legacy from an asset lease model to an asset sales model has resulted in an increase of additional investment of USD one billion, a 14% increase compared to original target. However, the research done internally by the Expo team post event predicted 24% higher spend than the original target because of the shift in the legacy plan coupled with the increase in the forecast period by an additional 11 years.

The transformation of Expo 2020 Dubai into Expo City Dubai, along with the subsequent impacts, stems from a strategic plan initiated when the bid to host the event was won in 2013. This strategy was crafted to align with the UAE's future ambitions and goals. The development of Expo City Dubai showcases how it is possible to create a clean, green, and innovation-driven city of the future. This initiative serves as an important example, supporting the implementation of the Dubai 2040 Urban Masterplan and demonstrating how financial investments can generate a lasting sustainable impact. Expo City Dubai not only maintains the legacy of Expo 2020 but also exemplifies the potential for urban environments to be both economically viable and environmentally sustainable. Through careful planning and strategic investment, the transition underscores the UAE's commitment to future-oriented urban development, positioning Expo City Dubai as a model for sustainable growth and innovation on a global scale.

The main reason the above three metrics were considered was that they summarized the total economic impact that the country had set apart to assess the success of the event like Expo 2020, pre- and post-the event. These three factors covered all angles of the economic impact that the country would experience because of hosting the World Expo.

Consequently, the synergetic relationship between mega-events and the economic contributors like job creation, infrastructure development, and revenue generation, foster a positive cycle of growth and prosperity. As a result, communities hosting such events reap the rewards of enhanced economic activity, leaving a lasting legacy long after the event concludes.



### **3.9 Research Design Limitations**

In studying the economic impact of significant events such as Expo 2020, meticulous attention to research design was of utmost importance. However, it was also crucial to acknowledge the inherent limitations that researchers usually encounter throughout such process. These limitations can affect the scope, reliability, and generalizability of the study's findings. Understanding and explicitly discussing these limitations were essential for maintaining the integrity and validity of the research and also help future researchers to find solutions to mitigate these limitations.

In the following section, the paper tried to delve into specific challenges that researchers could potentially face, including but not limited to data availability and accessibility, methodological constraints, external influences, and subjective biases. Each limitation will be examined in detail, accompanied by potential strategies for mitigating its impact on the research outcomes.

**Data Availability and Accessibility:** Access to accurate and thorough data regarding the various economic indicators related to Expo discussed in this paper, such as infrastructure investments visitor spending patterns, and job creation data, may be limited or not fully available.

**Time Constraints:** Conducting a comprehensive analysis on the long-term economic impact of Expo 2020 on the host country, may be constrained by the timeline of the thesis project.

**Data Quality:** The quality of data available in terms of its reliability and accuracy may vary depending on the source of data, which could potentially introduce biases or limitations into the analysis.

**External Factors:** Other external economic factors not related to the Expo, such as changes in the global economy or the ongoing effect of the world recovering from the pandemic, may have influence on the findings and also complicate the study in terms of understanding the effects solely driven by Expo 2020.

**Sample Size:** The interviewees identified as sample population for the interviews, were the senior leadership of the Expo 2020, who have been with Expo 2020 since its inception, continuing till today, so the chances of them providing any negative insights into the impact is impossible. Also, the thesis did not adapt surveys or interviews with the general public as the focus of the study was not to study the visitor behaviour or the general feedback of the visitors to the expo.

**Methodological Challenges:** Identifying appropriate methodologies for analyzing the long-term economic impacts, such as variance analysis, planning, forecasting Modelling, or econometric Modelling, may pose challenges due to the event's unique nature and the complexity of its effects.

**Subjectivity:** The data that have been assessed for measuring the economic impact of an event involves significant subjective judgments and assumptions, particularly when estimating intangible effects such as building the reputation of the country leading to nation branding or investment opportunities that the event may have created for the future.

Besides the above, the other significant limitation faced during the analysis were that the data used to analyse the given impact was based on publicly available data and also on the Ernst and Young pre-event and post event impact study, which was initiated by the Expo team, hence there would be biases and may limit the reports potential to get actual data and analyse the actual impact.

These limitations have been carefully considered in the research methodology, and the potential uncertainties that may have been inherent in estimating the economic impact of a large-scale event like Expo 2020 have been acknowledged.

### **3.10 Conclusion**

Overall, Expo 2020 Dubai is anticipated to continue providing a positive and enduring impact on the UAE's economy through the aforementioned impacts and through ongoing nonquantifiable benefits associated with Expo City Dubai. While this study has not measured the scale of these nonquantifiable impacts, they are expected to have a significant economic influence on the UAE for many years. These impacts include enhancing Dubai and the UAE's international profile as prime locations for investment and business, thereby improving trade relations on a global scale. Relationships developed during the Expo are likely to foster increased economic activity and collaboration between countries. The legacy of Expo 2020 Dubai, through the development and activities of Expo City Dubai, will thus play a crucial role in driving sustained economic growth, innovation, and international engagement, solidifying Dubai's reputation as a leading hub for global business and trade.

## CHAPTER IV: RESULTS

### **4.1 Research Questions**

A qualitative study was employed as one of the methods to analyse the results of the research paper. Twenty questions were formulated to guide interviewees in reflecting on their perspectives regarding the necessity of hosting a mega event like Expo 2020.

The research questions analysed in this study were primarily focused on the financial aspect, as the study was to analyse the economic impact of an event like Expo 2020. The twenty questions that were asked of the senior leadership of Expo were grouped into four main focus areas which helped study the economic indicators contributing to the long-term impact of the event. All the interviewees were asked the same questions to get their perspectives about their expectations from the event before, during, and beyond the event.

#### **4.1.1 Qualitative Research Question 1**

**Q1. The economic impact of Expo 2020 on the UAE and the trajectory of the GVA from the time of winning the bid to the end of the event and beyond.**

Given the historical growth trajectory of the UAE, it's natural that hosting an event like the Expo is aimed primarily at further contributing to the already ascending GVA. When the UAE won the bid for hosting the event, the strategy for bidding was to showcase the country to the world. To build the reputation and focus on nation-building. These measures not only boosted the country's GVA but also increased growth across various sectors including tourism, hospitality, retail, and construction to name a few said Nadia Verjee, the Chief of Staff, Expo 2020. She also mentioned that from the time of winning the bid to the end of the event and now beyond the event, the trajectory of GVA reflected a remarkable upswing.

Investments that were made in infrastructure and other facilities for hosting Expo 2020 stimulated various economic activities, leading to increased productivity and output.

According to Mohanselvan Jayapalan, after World War 2 in 1939, many countries used mega events like World Expos to rebuild their infrastructure for the country. Infrastructure built for sporting events was temporary, however, the infrastructure that the host country invested in prior to an Expo is permanent. He also said that if the history of Dubai was considered then the DWTC (Dubai World Trade Centre) was built, in 1979, with the sole purpose of holding various MICE (meetings, international conferences, and events) and could be compared to other MICE operators in Singapore and Frankfurt. Dubai and UAE were always ambitious in showing the world that the country could compete with any powerhouse. He also added that during the event itself, the influx of visitors, both domestic and international, exhibitors, and business delegations from all over the world had provided a substantial boost to the UAE's economy. Particularly the hospitality sector, witnessed a massive increase in demand, leading to higher revenues for hotels, restaurants, and other related services which directly contributed to the trajectory of the GVA.

During the interview with Mukhtar Safi, it was highlighted that a primary motivation for hosting an event like Expo 2020 was to stimulate economic growth. This approach enables the government to inject funds into the economy more rapidly, achieving in three years what might typically take five to ten years, thereby giving the economy a significant boost.

According to Dr. Tarek Oliveira Shayya, the main reason for hosting a mega event like Expo 2020 was to build the nation's reputation that it had lost post the 2009 financial crisis. UAE wanted to show to the world that it can be a gateway for international investments. It wanted to prove that the UAE was still a soft power country.

“After the financial crisis in 2009, Foreign Direct Investment (FDI) into the UAE saw significant growth between 2010 and 2022. In 2020, FDI inflows amounted to USD 19.88 billion, an 11.24% increase from the previous year. From 2021 to 2022, the UAE continued to experience robust growth in FDI. In 2021, the inflows were \$20.67 billion, showing a 3.94% increase from 2020. The growth persisted into 2022, with FDI inflows reaching \$22.737 billion, a 10% rise from 2021. This was mainly driven by the sentiment in the market that the UAE is a safe place to invest” said Dr. Shayya.

UAE hosting the Expo 2020, not only enhanced the global reputation of the country but also significantly contributed to the economic development, laying a foundation for sustainable growth and progress in the years to come.

#### **4.1.2 Qualitative Research Question 2**

**Q2. The employment opportunities that the Expo 2020 would create pre and post the event.**

Hosting an event like the World Expo in UAE, besides boosting the GVA of the country helped in creating ample job opportunities. Mayank Patel, Country Head Middle East, Adecco a global HR Solutions firm in a media interview said “Expo 2020 had a major impact on Dubai’s economy, and we knew in 2019 that there would be a huge influx of jobs in the region especially within travel tourism, real estate, retail, events and exhibition, technology and software consultancy, marketing and media, engineering, security, logistics, health and safety, procurement and finance and most importantly hospitality,”. He also added that “Dubai already is a business hub for leading industries, especially real estate, hospitality, and technology, but with the completion of Expo 2020, the attractiveness will intensify further,”.

In the interview with Nadia Verjee, she said that no one could have foreseen the pandemic, 2020 had become one of the most challenging years for many businesses due to COVID-19 induced lockdowns and border closures. Many companies were compelled to downsize and lay off employees to survive. As Dubai gradually reopened in 2021, buoyed by a mass vaccination drive, the outlook improved. Numerous hard-hit industries, particularly travel, hospitality, and aviation, began to recover.

The Expo 2020 Dubai, was one of the first major global events to see physical attendance post-pandemic, significantly boosting employment in the travel and tourism sectors. As the event approached, there was confidence that travel demand would surge during this period. Many international visitors combined their Expo visit with short vacations to various leisure hotspots across the region. In the months leading up to the Expo, demand for both leisure and business travel returned to full capacity, revitalizing the industry and creating new job opportunities for a skilled workforce with expertise in travel and hospitality. Employment experts said that Expo 2020 positively impacted the country's Labour market in the short and long term and contributed to reviving demand for jobs across all sectors, particularly in the hotel, hospitality, retail, logistics, and management sectors.

“Events and facilities took centre stage in the most heavily employed industries. The UAE Purchasing Managers Index for July, released by the "IHS Markit" organization, indicated a substantial growth in the UAE's employment rate, the fastest since January 2019”.

Expo 2020, according to the Administrative Director of Human Resources at Bayt.com, “the job site, resulted in positive changes and developments in the country's labour market in the short and long term, as well as increased job opportunities in a variety of sectors, most notably aviation, tourism, and hospitality. The exhibition assisted these industries in

progressively recovering from the impacts of the Corona epidemic and also contributed to the growth of retail, construction, commerce, and other vital sectors”.

During the period from April to June 2021, the research revealed that many jobs website reported a significant increase in online recruitment activities in the UAE, with around 4,000 new job vacancies being advertised. This represents a substantial 25% growth compared to the first quarter of 2021, highlighting a robust recovery in the job market and growing confidence among employers in the region. The surge in job postings reflects an increasing demand for skilled professionals across various industries, driven by economic recovery efforts and strategic initiatives aimed at revitalizing the labor market.

Further data from the website indicates that the heightened recruitment efforts were met with a strong response from job seekers, as evidenced by the submission of over 250,000 job applications within the same timeframe. This influx of applications underscores the competitive nature of the job market, with many individuals actively seeking new employment opportunities. The significant number of job applications also points to a high level of engagement from the workforce, as professionals look to advance their careers and leverage the emerging opportunities in the post-pandemic economic landscape. Overall, these trends suggest a positive outlook for the UAE’s employment sector, with continued growth and development anticipated in the coming months.

During the event time, the influx of over 25 million visitors to the city resulted in an unprecedented surge in the demand for transportation services, significantly increasing the need for drivers. To address this surge, Careem, a prominent car-hiring company, took proactive measures. A spokesperson from Careem mentioned in a media interview that the company collaborated with partner firms to ensure an adequate number of Captains were



available to deliver high-quality service to the Expo attendees. This strategic collaboration was crucial in maintaining efficient and reliable transportation options amidst the heavy influx of visitors.

Additionally, the car rental sector experienced a substantial boost. Soham Shah, the founder of Selfdrive.ae, highlighted the company's efforts to cater to the heightened demand. They expanded their fleet by adding 3,000 to 3,500 new cars specifically to meet the needs arising from the Expo. Shah emphasized that the industry anticipated a high demand for six to nine months, possibly extending up to a year. This expectation was based on the projected influx and the diverse transportation needs of the visitors.

The demand was not limited to car subscriptions alone. Once the Expo commenced, there was a notable rise in the requirement for daily and weekly car rentals as well. This trend reflected the dynamic and flexible transportation preferences of the Expo visitors, who sought convenient and accessible mobility solutions. The car rental companies' readiness and adaptability played a crucial role in accommodating the varying demands, ensuring that visitors had seamless and efficient access to transportation throughout the event.

Moreover, the surge in demand extended beyond events, hospitality, and transportation, as thousands of new positions became available for the management of various country pavilions. With over 200 participants involved, numerous pavilions required personnel to manage and operate them throughout the event. According to Mohanselvan Jayapalan, “the hiring process for Expo 2020 began to gain traction by the end of the first quarter of 2020. This upward trend in recruitment was significantly strengthened by the widespread vaccination of the population and a notable decrease in Covid-19 cases, which collectively accelerated the pace of hiring. If before the event there were opportunities related to construction, event

planning, marketing, and logistics, after the event, it created opportunities related to dismantling temporary infrastructure, analyzing data, and feedback from the event, and transitioning the remaining assets or projects into new initiatives”.

#### **4.1.3 Qualitative Research Question 3**

**Q3. The total amount invested in the permanent infrastructure before the event and the effective use of this post the event.**

Expo 2020 Dubai created a unique platform that facilitated partnerships and opportunities for individuals, businesses of all sizes, international organizations, and government entities from around the globe. This event was instrumental in promoting sustainable and inclusive economic growth and enhancing Dubai's business environment by demonstrating the ease of conducting business in the Emirates.

Dr Tarek Oliveira Shayya said, “over the past 50 years, the UAE has established itself as a pivotal global hub, strategically positioned between the East and West, and the North and South. It has a remarkable history of economic growth, fostering partnerships, creating opportunities, and maximizing business value. As one of the most dynamic and future-oriented economies, the UAE boasts high-quality infrastructure and business-friendly regulations, positioning Dubai as a leading global center for trade, technology, real estate, and tourism. The city offers access to one of the youngest populations in the world and high-growth markets across Africa, the Middle East, Asia, and Europe”.

Expo 2020 Dubai further set Dubai's status as a global business hub by showcasing its strengths to an international audience. Businesses visiting the Expo were able to experience firsthand Dubai’s strategic advantages as a global business nexus and gateway for the

broader region. The event highlighted the UAE’s vibrant and diverse business environment, presenting unique opportunities to establish extensive networks across various geographies and industries within both the public and private sectors.



Fig 1.14. Dubai’s impact on local business driven by Expo 2020  
Source: Expo 2020 Dubai

According to Mohanselvan Jayapalan, from the time that UAE got the chance to host the World Expo, the legacy plan was in place. The strategic team was clear that the huge investment in infrastructure that will shape the look and feel of the country should not be just for six months, and its return should be yielded for at least 20 years to come. The site was identified almost at the end of Dubai 45 minutes from Abu Dhabi, the national capital of the country. In exchange for the billions invested in the event, UAE policymakers anticipate a lasting economic legacy. After the slowdown in trade, tourism, and global travel, driven by the pandemic, staging an event like Expo was a major achievement for the

country. The term "expo effect" has become a staple in economic discussions about Dubai and the UAE, giving rise to a new concept known as Exponomics. Whilst speaking to all the interviewees one of the common factors that all of them mentioned was that for them expo meant investing in a resilient, long-term future for the UAE economy. The capital expenditure for Expo 2020 Dubai was expected to generate significant economic impacts across various key sectors, including construction, transport, storage, and communications, as well as travel, tourism, hospitality, and business services. The additional investments made by Dubai authorities were aimed at fostering economic growth, providing a substantial boost to small businesses and sustainable enterprises. The inauguration of the Dubai Exhibition Centre within Expo City Dubai is poised to elevate the lucrative exhibitions and conference industry, enabling the hosting of large international forums and further enhancing Dubai's economic landscape.

Nadia Verjee, mentioned during her interview that “Expo accelerated the UAE’s efforts to diversify its economy, support the growth of a knowledge economy and smart connectivity, as well as provided a stimulus for cultural and creative life. She also reflected that putting some hard economic and financial figures on those strategic economic policy goals had become more difficult due to the Covid-19 pandemic.”

Adversity often fails to deter ambitious leaders from pursuing their goals. Despite challenges, the country’s leadership was determined to host the event and took every measure to ensure its success. In an interview with Arab News, Nasser Saidi, a regional economics expert and former economy and industry minister of Lebanon, remarked that the projection of 25 million Expo visits might be somewhat overly optimistic given the ongoing pandemic.”, but he recognized that if any country in the world could do it, it would be only

UAE. He also added that Expo 2020 was the first global mega event to be held permitting physical entry to visitors, after the Tokyo Olympics that went ahead without spectators. “Hosting such mega-events is usually found to be a strain on country or city budgets,” Saidi said. However, the sentiment was consensus among “Exponomics” experts that UAE needed to be congratulated for staging the first mega event of the post-pandemic era, with physical visitors, which only enhanced the country’s reputation.

The total spend on the infrastructure pre-event was USD 7 billion, and the permanent infrastructure initially promised in the original Expo 2020 Dubai bid has now become integral to Expo City Dubai. Approximately 80% of the infrastructure developed for the Expo will remain as part of Expo City Dubai. This includes iconic attractions such as Al Wasl Plaza, the Garden in the Sky observation tower, and the Surreal water feature. Additionally, several flagship pavilions from the event, such as Terra (the Sustainability Pavilion) and Alif (the Mobility Pavilion), will be retained, with some already reopened. The thematic district pavilions are also set to be repurposed. This adaptive reuse of structures is anticipated to continue providing benefits through the activities generated by these retained assets.

The transformation of Expo 2020 Dubai into Expo City Dubai and its resultant impacts stem from a strategic plan initiated when the bid to host the event was won in 2013. This strategy was designed to help the UAE achieve its future ambitions and goals. The development of Expo City Dubai exemplifies how to create a clean, green, and innovation-driven city of the future. Moreover, it serves as a critical model to support the delivery of the Dubai 2040 Urban Masterplan and demonstrates how financial investments can lead to a lasting sustainable impact.

According to Her Excellency Reem Al Hashimy, the uniqueness of the event was to achieve a sustainable edge, the country even when it went through a recession in 2009 and then in 2015, never stopped its investment in infrastructure, education, and healthcare as it knows that these will pay off in the long term. The primary goal for hosting an event like Expo 2020 was because it's the only event that gives the host country an opportunity or provides a platform to bring the entire world to one place.

Dr Tarek Oliveira Shayya reiterated that it was the vision of His Highness, Mohammed bin Rashid Al Maktoum to change the stereotyping of the Arab and Muslim countries. He wanted to showcase the UAE and its culture and heritage change the perception of the country and prove that a small country like UAE hosted a mega event like the World Expo. This meant that capital investment was the key and the country never shied away from investing in infrastructure.

#### **4.1.4 Qualitative Research Question 4**

**Q4. The legacy plan for the Expo 2020 site, has there been a change in strategy from the city called District 2020 before the event started to being now called Expo City Dubai post the event.**

From the time UAE won the bid to host a mega event like Expo 2020, the team had put together a legacy plan to repurpose all that was being built for Expo 2020.

During the Legacy period, the Expo site was set to transition into District 2020, a vast, mixed-use development designed to support the UAE's future vision. District 2020 aims to foster sustainable economic development, drive an innovation-oriented economy, and create a conducive business environment for key growth industries such as logistics and transport, travel and tourism, construction and real estate, and education.

More than 80% of the infrastructure built for the Expo was planned to be retained for District 2020, which was envisioned to eventually expand into a city spanning over four million square meters. Confirmed tenants included prominent companies like Siemens and Accenture, reflecting a strong focus on technology and innovation. It is anticipated that a variety of corporations and SMEs will follow suit. The Dubai Exhibition Centre (DEC) is also expected to remain a key facility within the site.

The Expo City Dubai team had put together a 30-year business plan showcasing the development plan and fully operational site, six months post-event. As per the business plan, the transformed site would generate revenue from leasing the existing building which would have been converted into commercial and residential buildings. While studying the pre-event impact the research assumed the economic impact that the new city would add over 10 years from 2021 to 2031, this reflected the time frame for the site to become fully operational.

The economic impact of the Legacy period is primarily anticipated to be fuelled by the development activities and operations within the city, along with the additional effects from the expansion of the DEC (Dubai Exhibition Centre). These included:

- **City Development and Operations:** This includes the construction of new commercial, residential, and hospitality buildings, salaries for employees and contractors, rental income, and maintenance expenses for existing infrastructure.
- **DEC Expansion and Operations:** This encompasses capital and operational expenditures for the DEC (Dubai Exhibition Centre) and visitor spending by delegates attending events at the DEC

On the question of the legacy plan for Expo 2020, Mohanselman reflected that “the original legacy was aimed at Expo 2020 being a global innovation ecosystem and mixed-use community. Being a sustainable and human-centric smart city, it will re-purpose at least 80% of Expo 2020’s-built infrastructure.”

He further mentioned that “post-event, Expo City Dubai continues to uphold the legacy of Expo 2020 Dubai. This is achieved by managing a uniquely designed mixed-use urban environment, actively operating the site's permanent infrastructure, utilizing some of the most iconic attractions from Expo 2020, and delivering various programs and initiatives”.

Expo City Dubai retains 80% of the infrastructure built for Expo 2020, which includes 123 buildings that have achieved LEED (Leadership in Energy and Environmental Design) certification from the US Green Building Council, the most widely recognized green building rating system in the world. Among these, seven buildings are Platinum certified, 105 are Gold, nine are Silver, and two have basic LEED certification.

Mohanselman Jayapalan also stated, "We are making significant progress toward becoming a City of the Future, and I am pleased with the direction in which the legacy of Expo 2020 Dubai is heading."

According to Nadia, “Hosting COP28 one year after Expo 2020 Dubai caused delays in site redevelopment. Also, decisions about the expansion of DEC did too. However, all is on track for the next phase of development to be ready by the end of 2025 when the residential community moves in. It’s a large city, with many stakeholders, and decisions should be timely and considered to be financially viable and long-term. We’re on the road to that.”



According to Mukhtar, he is not satisfied with the legacy plan, he said “the city hosting COP 28 has delayed the whole legacy plan by 12 to 18 months, while COP 28 was a big success which reiterated that the city is also good for hosting other mega-events. However, the delay in the legacy plan has had a significant financial impact. Since the legacy plan is purely linked to real estate development, there were a lot of iterations that needed to be made. Real Estate is a cyclical industry, so the master plan had to be revised multiple times to adapt to new requirements, not only economically but also politically. With Russia and Ukraine, Palestine and Israel, these countries affect the business of the country and hence the dynamics are always changing.”

During the interview with Dr Tarek Oliveira Shayya, he said “The legacy plan is progressing very slowly, and it could have been accelerated much sooner, which could have contributed to a faster Return on Investment. The main reason for the delay could be attributed to the general slowdown by the Expo City Dubai team and also the lack of a proper big-picture view. Having said that the Expo 2020 itself had a lot of positive impact on the UAE, it was timely and helped in building the confidence, and reputation of the country.”

Expo 2020 has served as a platform for showcasing the UAE's innovation and technological advancements, attracting investments, and fostering collaborations that will have long-term benefits for the country's economy. The legacy of Expo 2020 will continue to drive growth through increased trade, investment, and knowledge exchange even after the event concludes.

The legacy period is expected to yield a range of nonquantifiable impacts that, while not measured in this study, are anticipated to have a significant economic influence on the UAE for several years. These impacts include:

1. **Fostering Innovation:** Supporting small- and medium-sized enterprises (SMEs) through initiatives such as Expo Live and other key programs in the UAE.
2. **Enhanced Trade Relations:** Strengthening country-to-country trade relations based on the connections established during the Expo.
3. **Improved Business Relations:** Enhancing firm-to-firm business relations developed through the Expo.
4. **Increased International Profile:** Elevating the global profile of Dubai and the UAE as prime locations for business, work, and investment.
5. **Boosted Tourism Appeal:** Enhancing the international attractiveness of Dubai and the UAE as leading tourist destinations.

#### **4.2 Summary of Findings**

From the beginning of its journey to the execution of the public event, Expo 2020 Dubai has generated substantial economic value for both Dubai and the UAE, despite the challenges posed by the global pandemic. Expo City Dubai is expected to continue delivering economic benefits well into the future.

Nadia Verjee, Head of Strategy and Chief of Staff, said that the event surpassed Dubai's 2016 commitment to allocate at least 20% of its spending to SMEs by awarding USD 1.8 billion in contracts. This amount represented a quarter of the total contract value, with 64% of these contracts awarded to domestic SMEs. The remaining SME suppliers were primarily from the United Kingdom (24%), the United States (16%), France (4%), India (4%), and Australia (4%). This aligns with the UAE's ongoing national SME program, which provides various incentives and benefits to support SME growth and development. It also reflects the UAE's dedication to the two key Expo 2020 Dubai subthemes: Mobility (encouraging the

productive movement of technology towards human progress) and Opportunity (unlocking the potential for economic contribution) among SMEs.

This research study assessed the comprehensive economic impact of Expo 2020 in terms of GVA, job-years of employment, and infrastructure investments aimed at enhancing long-term benefits. The analysis focused on four main indicators set by the UAE to measure the benefits of hosting Expo 2020: the visitation numbers, gross value added, the full-time employment rate, and infrastructure investments. Data were sourced from the Expo 2020 report (Expo 2020) providing access to actual figures achieved before and during the event and after the event completion.

The actual data that were available and then used to forecast the GVA, FTE, and infrastructure spending after the event. The reforecast thus prepared was compared to the original targets set to see the deviation and also compare it to the final reports that have been recently published, with the revised forecast, on the Expo website.

Due to the global pandemic at its peak in 2020 and the subsequent restrictions on international travel, the leadership had to pivot the visitation strategy for the Expo from an initial goal of 70% international visitors and 30% domestic to a revised plan of 30% international visits and 70% domestic visitors. Consequently, the team was charged with identifying effective methods to attract residents of the UAE to attend the Expo. Once the Expo started, it became a family destination for six months, this drove the visitation numbers and at the end of six months, the total visitors to the event were 24.1 million visitors, a 96% achievement of its target. The UAE was the only country that would have been capable of turning around challenges into opportunities.

During a discussion with Mohanselvan Jayapalan, on the higher GVA reported post the event, one of the points he emphasized was that the final report published considered only select key outcomes within an industry, for example, the data on increased tourism and international traveller numbers relied solely on information provided by Emirates Airlines. Notably, data from other international airlines were not included, which could have potentially resulted in understating the achieved parameters.

According to the Dubai Tourism Statistics 2024, “Dubai’s tourism scene is truly a global affair, with visitors pouring in from all corners of the world. The reasons could be many, such as the emirate’s sunny landscapes, towering skyscrapers, renowned shopping, and entertainment offerings, however, it was the hosting of an event like Expo 2020 that provided the platform to showcase to the world, the country’s landscape, and offerings”.

According to Mukhtar Safi, the post-expo impact was expected to be greater than what was projected before the event. The anticipated increase in impact was primarily attributed to a shift in the legacy strategy. This revised approach requires retaining a greater number of strategic assets within the ownership of Expo City Dubai organization, as opposed to their sale. However, the strategy also shifted focus from a residential development lease model to a residential development sale model which was also one of the major drivers for the increased GVA and the infrastructure investment. The legacy strategy was crafted to encourage broader and novel business growth, technology advancements, and innovation, building on the success of Expo 2020 Dubai.

The Expo 2020’s impact was reflected in various economic sectors, which helped with a double-digit growth rate between 2021-22, and potential business opportunities were

offered in hospitality, transport and logistics, education, arts, entertainment & recreation. This was possible only because Dubai has been a well-diversified economy.

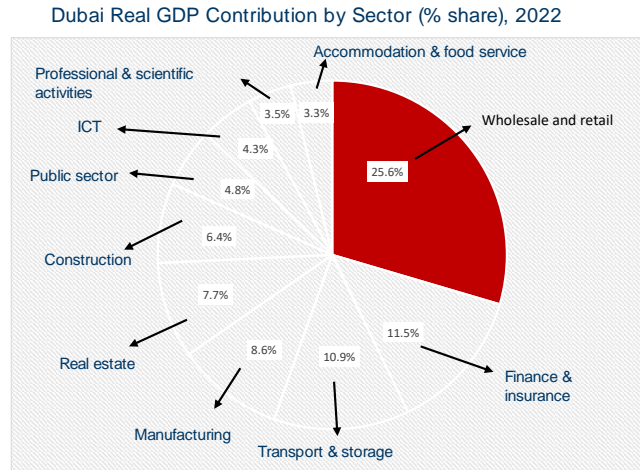


Fig 1.15. Dubai’s Real GDP Contribution % by Sector  
Source: Dubai Chamber of Commerce Statistics Info

Over the past 50 years, the UAE has ascended to global prominence as a strategic cross-continental gateway, positioned between the East and West, and the North and South. It boasts a proven track record of sustaining economic growth, facilitating partnerships, creating opportunities, and maximizing business value. Looking ahead, there is immense excitement about the opportunities Dubai and the UAE can unlock in the next 50 years, playing a crucial role in driving the emirate’s economic growth and reinforcing its status as a global trade hub.

As one of the most dynamic and future-oriented economies, supported by high-quality infrastructure and business-friendly regulations, Dubai has emerged as a global center for trade, technology, real estate, and tourism. The city offers access to one of the world’s

youngest populations and high-growth markets across Africa, the Middle East, Asia, and Europe.

Expo 2020 Dubai has further solidified the emirate's position as a global business center by showcasing the best of Dubai to the world. Businesses visiting the event experienced firsthand Dubai's value proposition as a global nexus and gateway for conducting business across the wider region. The event highlighted the UAE's rich and diverse business environment, providing unique opportunities to form extensive networks across geographies and industries in both the public and private sectors. Over the six-month-long event, companies from Dubai and around the world had the chance to meet, interact, and collaborate in one of the fastest-growing cities globally.

Beyond its economic impact, hosting a mega event like Expo 2020 Dubai also had significant social and environmental impacts. Expo 2020 Dubai was designed to be an unforgettable and impactful experience for the millions of visitors who attended. Visitors were immersed in stunning exhibits and events, deeply engaging with content that enhanced their understanding of the main theme, 'Connecting Minds, Creating the Future,' and the subthemes of Opportunity, Mobility, and Sustainability. The event profoundly impacted stakeholders, who reported a range of social benefits, including a shift in mindset, increased inspiration to take positive action, knowledge exchange, cultural awareness, and heightened innovation.

During the research for this paper, it became evident that Expo 2020 Dubai aimed to achieve eight objectives with significant social impacts. The study highlighted that the activities of Expo 2020 Dubai were aligned with its commitments, anticipated social outcomes, and

selected indicators that could support the measurement and monitoring of its social impacts before, during, and after the event

The thesis would like to list the eight objectives that it discovered during its impact study research.

1. Embedding a lasting positive impression on global and local visitors
2. Facilitating global conversations to generate new perspectives for Sustainable Development
3. Inspiring the next generation to explore, create and learn.
4. Establishing best practices for mega-event planning and community engagement
5. Accelerating innovation and supporting start-ups and SMEs to scale and create solutions that make the world a better place.
6. Working together to advance worker welfare standards.
7. Offering unique opportunities to unlock the potential of volunteers and employees.
8. Creating a blueprint for a city of the future that carries forward Expo 2020 Dubai's legacy of sustainability, innovation, education, and entertainment.

Expo 2020's transformation into Expo City Dubai represents a significant legacy in urban development, emphasizing human-centric design and sustainable mobility. The city prioritizes pedestrians and various eco-friendly transportation options such as bicycles, scooters, and electric buggies, all seamlessly integrated with public transport networks. This approach aims to reduce reliance on traditional personal vehicles. Smart technologies, coupled with abundant outdoor spaces like parks, running, and cycling paths, will foster an

active lifestyle and community connectivity. As a "15-minute city," Expo City Dubai ensures that essential services, including educational and healthcare facilities, are within a short walking or cycling distance.

Expo City Dubai aspires to be a dynamic ecosystem supporting businesses of all sizes across various industries, with a strong emphasis on sustainability, innovation, education, and entertainment. This initiative continues the mission of Expo 2020 Dubai by supporting innovative businesses that contribute to long-term economic and social advancements both locally and globally. The city aims to create a vibrant urban community offering rich experiences, exhibitions, and a mix of purpose-driven tenants and residents. It will remain a destination for diverse visitors, particularly the youth, promoting a more sustainable future.

From its inception, Expo 2020 Dubai focused on minimizing its environmental footprint and becoming one of the most sustainable Expos in history. Its sustainability strategy was structured around four main objectives: creating a legacy of sustainable infrastructure and advanced sustainability practices, spurring sustainability initiatives within Dubai and the UAE, raising public awareness and societal engagement in sustainable living principles, and developing scalable, sustainable solutions to extend benefits across the broader economy

### **4.3 Conclusion**

Her Excellency Reem Al Hashimy, UAE Minister of State for International Cooperation and CEO, of Expo City Dubai Authority, said: "From the outset, we were committed to hosting a World Expo that would achieve long-lasting economic, social, and environmental benefits for the UAE, the region and the world, with positive impacts extending well beyond



the six months of the event. Despite the challenges of a global pandemic, we have delivered on that promise.”

She also added that “for 170 years, World Expos have provided a platform to showcase the innovations that shape the world. Expo 2020 Dubai has continued this tradition by sharing the latest ideas and technology from around the globe. There were a number of factors that made Expo 2020 Dubai one of the most important in exposition history. It marked the first time a Middle Eastern destination has hosted a World Expo, signifying a major milestone for the region. For the first time, the event took place in hybrid form, with both in-person and online sessions – the latter of which enabled participation from a much wider audience than ever before.

As a renowned global meeting place, Dubai has been immensely proud to host this international event, which ran for six months from October 2021 through to March 2022. Dubai has one of the world’s most dynamic and future-focused economies, and Expo 2020 Dubai has had an extraordinary impact on development.

After a one-year delay due to the pandemic, Expo 2020 Dubai opened its doors on October 1, 2021, and we achieved more than we could have ever dreamed. The event saw 192 nations showcase cultural experiences and inspiring innovations. In the first five months, more than 28,000 events were staged; over 16 million in-person visitors and 150 million virtual visits were recorded; and over 13,000 heads of state and ministers attended.

Expo 2020 Dubai has shown that only through collaboration and connectivity can we overcome the most pressing global challenges. Under the theme of “Connecting Minds, Creating the Future”, and the three subthemes of “Opportunity”, “Mobility” and “Sustainability”, Expo 2020 Dubai has allowed the world to rekindle connections and reminded humanity that being together matters. Indeed, Expo 2020 Dubai has provided a

launch pad for the global collaboration we need most right now – a chance for people to convene in a spirit of optimism, hope, and shared purpose to exchange new ideas and perspectives. Coinciding with the UAE’s 50th anniversary in 2021, Expo 2020 Dubai has served to spark innovations that will kick-start another 50 years of progress, contributing to continued prosperity, and enabling growth in the region and beyond”.

Dimitri S. Kerkentzes, Secretary General of the BIE, said: “Rooted in a shared vision for a socially and environmentally conscious future, Expo 2020 Dubai and its legacy district Expo City Dubai constitute an indisputable platform for sustainable development in the UAE and further afield. The 182-day event surpassed all expectations as an extraordinary experience for visitors and participants, and its legacy is set to continue creating new opportunities for growth in the years to come.”

Rob Moody, Partner – Transactions & Corporate Finance, EY, said: “As the first World Expo to be held in the Middle East, Africa, and South Asia (MEASA) region, Expo 2020 Dubai has yielded substantial and wide-ranging long-term economic, social and environmental benefits for the UAE and communities around the world. Expo City Dubai is forecast to deliver additional growth and development and is set to support the more immediate strategic priorities and the wider future ambitions identified by the UAE.”

Expo 2020 Dubai, themed “Connecting Minds, Creating the Future,” brought together 192 countries and attracted 24.1 million visitors from October 1, 2021, to March 31, 2022. Its legacy, Expo City Dubai, has become a new, innovative, eco-friendly, human-centered neighborhood in Dubai, serving as a model for future urban development.

World Expos, or International Registered Exhibitions, are significant global events that bring nations together to tackle universal challenges. These events occur every five years,

last up to six months, and provide an immersive journey into the chosen theme through various engaging activities. They attract tens of millions of visitors, feature spectacular national pavilions, and leave a lasting impact on the host city.

The next World Expo is scheduled for 2025 in Osaka, Kansai, Japan, with the theme “Designing Future Society for Our Lives.” Following that, the World Expo in 2030 will take place in the Kingdom of Saudi Arabia, selected by the BIE Member States during their 173rd General Assembly in November 2023.

## CHAPTER V: DISCUSSION

### **5.1 Discussion of Results**

The World Expo 2020 was a huge success in all aspects and the country has already seen gains and continues to reap the benefits of hosting the event. The impact of Expo 2020 on the UAE is multifaceted, encompassing significant economic, social, infrastructural, and international benefits. By analyzing these areas, it became clear that the Expo has played a crucial role in shaping the future trajectory of the UAE, promoting sustainable growth, cultural exchange, and global integration.

The results of the study and the experience during the research can sum up the whole impact study into the following categories:

#### **5.1.1 Economic Growth: Short- and Long-Term Economic Boost**

- The Expo attracted millions of visitors, significantly boosting the tourism sector. This influx increased hotel occupancy rates, restaurant revenues, and retail sales.
- The event created numerous temporary and permanent jobs across a variety of sectors, including construction, hospitality, and event management.
- Local small and medium enterprises (SMEs) benefited from increased demand and business opportunities, promoting entrepreneurial growth.
- Expo 2020 showcased the UAE as a global investment hub, potentially attracting FDI in various sectors such as real estate, technology, and finance.
- The event highlighted the UAE's initiatives to reduce its reliance on oil and diversify its economy, showcasing advancements in technology, renewable energy, and innovation.

### **5.1.2 Social and Cultural Benefits**

- The Expo facilitated cultural exchange by hosting participants from over 190 countries, promoting a deeper understanding and appreciation of different cultures.
- The event included numerous cultural programs, art exhibitions, and performances, enriching the UAE's cultural landscape.
- The Expo engaged thousands of volunteers, fostering a sense of community and national pride.
- Various educational initiatives and workshops provided learning opportunities for students and young professionals, encouraging skill development and innovation.

### **5.1.3 Infrastructure Development Benefits**

Infrastructure development during the event contributed to the carbon footprint significantly by adopting sustainable solutions and urban development.

- The Expo site, now rebranded as Expo City Dubai, is being repurposed into a mixed-use community with residential, commercial, and recreational facilities, contributing to urban development.
- Significant investments in transportation infrastructure, including metro expansions and road improvements, enhanced connectivity within Dubai and the UAE.
- The Expo site featured numerous sustainable buildings and environmentally friendly practices, setting a benchmark for future developments.
- The emphasis on renewable energy solutions during the Expo supported the UAE's sustainability goals and highlighted the potential for green technology adoption.

During my interview with Mohanselman, he stated that “The primary goal for Expo 2020 was bringing the world together and educating a global audience, celebrating innovation,

promoting progress, and fostering cooperation across cultures with its overarching theme of ‘Connecting Minds, Creating the Future’ and its three interconnected subthemes: Opportunity, Mobility, and Sustainability. To raise awareness of global challenges, to have meaningful conversations, to inspire significant action on its theme and subthemes, to engage meaningfully with youth and communities and **to position the UAE and the Arab World in the global stage of nations.**”

#### **5.1.4 Legacy Development Benefits**

This meant that besides economic impact they were also looking at **gaining an international reputation** and this would have been possible through global positioning and building the legacy in the following ways:

- UAE able to host a world-class event like Expo 2020 enhanced the UAE’s global image, demonstrating its capability to organize large-scale international events and its commitment to global collaboration.
- The event facilitated a platform for strengthening diplomatic ties and international cooperation, potentially leading to future collaborations and partnerships.
- The Expo’s focus on innovation and technology positioned the UAE as a leader in these fields, attracting tech companies and startups to the region.
- The cultural and artistic contributions of the Expo leave a lasting legacy, enriching the UAE’s cultural heritage and promoting ongoing cultural activities.

### **5.1.5 Overall Benefits of Hosting Expo 2020**



Fig 1.16: UAE & Dubai Key Economic Indicators

Source: UN Human Development Index Report 2023/2024

Following Expo 2020, as at the end of 2022, the size of Dubai's economy stood at USD 112.9 billion. This constituted about 26% of UAE GDP, making Dubai the second biggest economy after Abu Dhabi (68%). Due to the resilience of the Dubai economy, the post-pandemic recovery (2021-22) of economic activity averaged 5.1% on an annual basis, as compared to major economies like the USA and Euro area which respectively averaged 3.9% and 4.7%.

The impact of Expo 2020 unfolded in three distinct phases, encompassing both on-site and off-site activities. During the Pre-Expo period, construction activity was the primary driver of Expo-related endeavours. This includes:

On-site activities encompassed site preparation and the development of facilities and infrastructure, driven by investments from Expo 2020 organizers and other infrastructure providers. This also included on-site investments by participating countries for their pavilions.

Off-site activities involved investments by third parties that were accelerated due to Expo 2020. Most of these activities were related to infrastructure investments by entities such as the RTA (Roads & Transport Authority), DEWA (Dubai Electricity & Water Authority), Etisalat, and DM (Dubai Municipality).

The GVA in the country at the end of the event was USD 10.6 billion. 68% of the total GVA impact was felt in the construction sector. Other sectors in the Dubai and UAE economy that also felt a significant impact included events organization and business services and transport, storage, and communication.

Approximately 20% of the spend on-site was directed toward the SME sector — the equivalent of USD 1.3 billion.

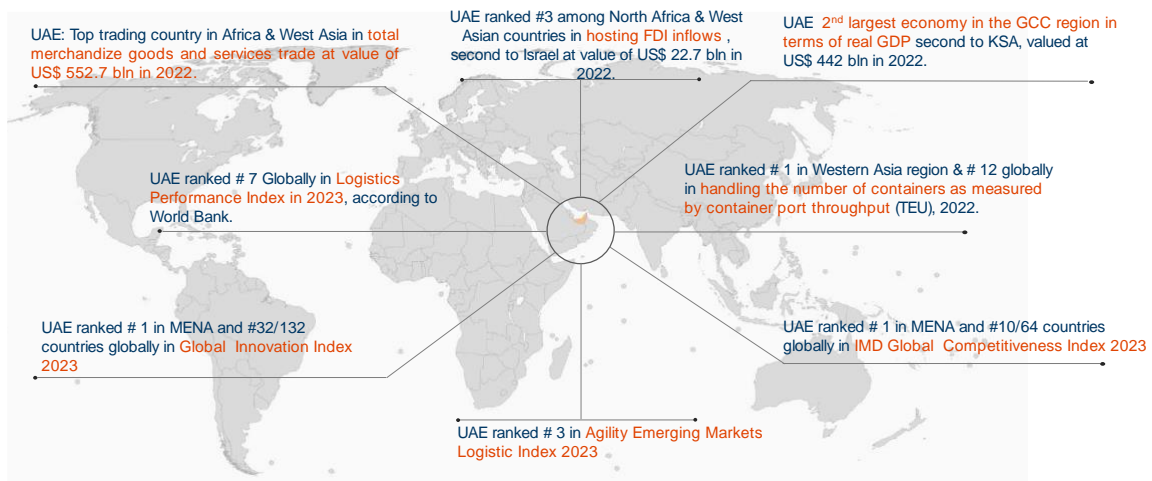


Fig 1.17. Global Competitiveness

Source: Dubai Chamber Economic Research

During the research study, post-event, whilst reviewing the Dubai Chamber of Commerce report showed that UAE ranked as the top trading country in Africa and West Asia. It is clear from figures 16 and 17 that UAE being more central has more access to countries



around the world and the fact that access is easy helps investors to look at Dubai as the next big investment hub.



Fig 1.18. Global Connectivity  
Sources: Dubai Airports, Emirates, Arabian Business, DP World



Fig 1.19. UAE trade agreements  
Source: Dubai Chambers based on MoE/CEPA

The various trade agreements that have been signed between UAE and other countries, continue to help the trajectory of UAE’s growth and its ability to attract FDI into the country. This will contribute to UAE’s targeted GVA that it has anticipated to achieve by the end of 2042, in line with the agenda of the Dubai Economic - D33 and Urban Development Plan of 2040.

The Dubai Economic Agenda (D33) is an enterprising roadmap to the future that strengthens, Dubai's status as the world's most successful economic model.

The key goals and objectives are:

- ▶ Achieve economic targets of USD 10 trillion by 2033
- ▶ Increase the Dubai Economy by double
- ▶ Solidify Dubai's status as one of the top three global cities
- ▶ Double foreign trade to reach USD 7 trillion, adding 400 cities as key trading partners
- ▶ Attract USD 16 billion annually in FDI to achieve a total of USD 175 billion in 10 years.
- ▶ Increase private sector investment to reach USD 271 billion by 2033
- ▶ Launch of "Sandbox Dubai"
- ▶ Launch of Dubai Unified License
- ▶ Elevate the city's reputation as the premier destination for major international companies and investments
- ▶ Launch of Dubai's Traders Project
- ▶ Launch of Dubai Economic Corridors 2033 initiative to strengthen trade relations with the Global South Countries.

## CHAPTER VI: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

### **6.1 Summary and Implications**

Overall, the impact of Expo 2020 on the UAE has been significant, with positive economic, social, and cultural benefits. While the event was delayed and scaled back due to the COVID-19 pandemic, it still had a significant impact on the country and its future. It is evident from the study that the country not only achieved its targets that were set but also went above and beyond and has readjusted its plans to be in line with the urban development plan for 2040.

The current research was based on the actualization of GVA, employment rate, and the use of permanent infrastructure investment as of the end of 2023, however, the forecast period before the event covered 2013 to 2031 and the revised forecast period has been extended by another 11 years from 2013 to 2042, driven by the change in strategy of the legacy of the site, from an asset lease model to an asset sales model. The major reason for the change in strategy was to increase the inflow of cash to fund the ongoing development of the site and also to cover the funding that was provided by the Government of UAE to develop the site before the event. This change in strategy would ensure preserving the resources of the Government and not eating into its reserves for the future development of the city.

It was also good to understand the growth trajectory of the UAE, in the three areas that the study was conducted, i.e. GDP / GVA, FTE employment, and infrastructure development, if UAE did not host the World Expo 2020. Evaluating employment opportunities and infrastructure development due to Expo 2020 was challenging due to insufficient data. Therefore, the analysis focused on calculating GDP growth excluding the Expo's impact, which indirectly reflects job creation and infrastructure spending. Figure 1.20 illustrates the UAE's GDP growth rates over the past eight years. Since 2017, the GDP growth trajectory

has been influenced by accelerated infrastructure development in preparation for Expo 2020. This trend continued until 2020 when the global pandemic disrupted economies worldwide. Despite this setback, the UAE's economy recovered after Expo 2020, resulting in substantial GDP growth in 2021 and 2022.

Hosting Expo 2020 played a pivotal role in the UAE's economic recovery, leading to year-on-year GDP growth rates of 19% and 22%, respectively. The event not only showcased the UAE's resilience but also highlighted the positive impact of such large-scale events on economic development. By fostering infrastructure projects and creating employment opportunities, Expo 2020 contributed significantly to the nation's GDP growth. The analysis highlighted the importance of Expo 2020 in stimulating economic activity, demonstrating its role in achieving remarkable growth rates and facilitating a swift recovery post-pandemic.

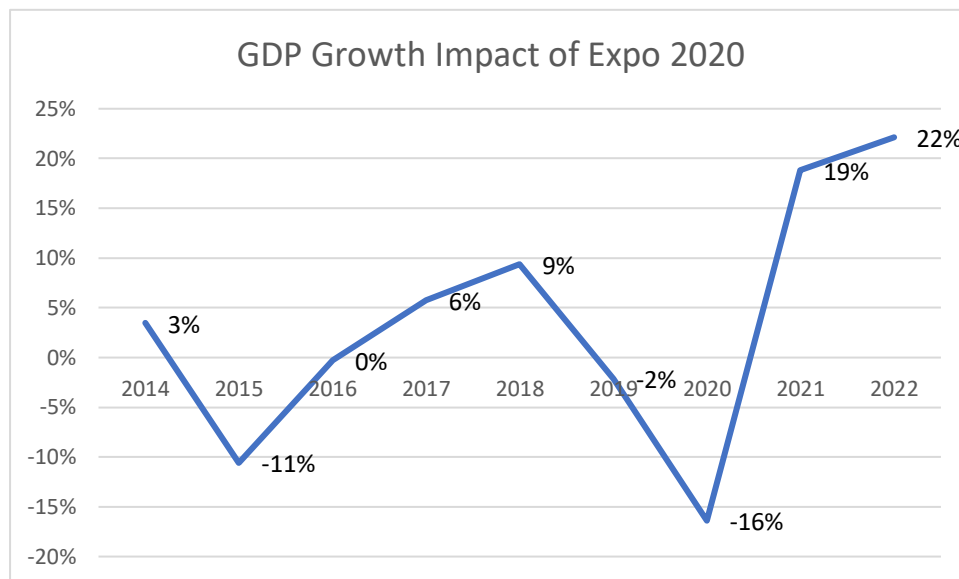


Fig 1.20. GDP Historical Growth Trajectory with the impact of Expo 2020

Source: Dubai Statistics Info

Research indicates that Expo 2020 made a significant contribution of USD 15.6 billion to the GDP. When this figure is adjusted to match historical GDP data and the average GDP growth rate from 2006 to 2013 is factored in, the impact of the Expo becomes clear. The growth trajectory without the event would have been markedly different. The adjusted figures, as shown in figure 1.21, demonstrate the substantial economic boost provided by Expo 2020, which would not have been achieved otherwise. The event accelerated economic growth, highlighting a sharp contrast in the GDP trajectory if the Expo had not occurred.

Expo 2020's influence on the economy underscores its importance in stimulating economic activity and accelerating growth. By fast-tracking investments and economic activities that might have otherwise taken years, the Expo created immediate economic benefits. This analysis reveals how such large-scale events can serve as catalysts for economic development, providing a concentrated period of growth and investment. The data illustrates the significant positive impact on the GDP, which would have followed a slower growth path without the Expo. Therefore, the event's role in boosting the economy is clear, showcasing the potential benefits of hosting such international exhibitions.

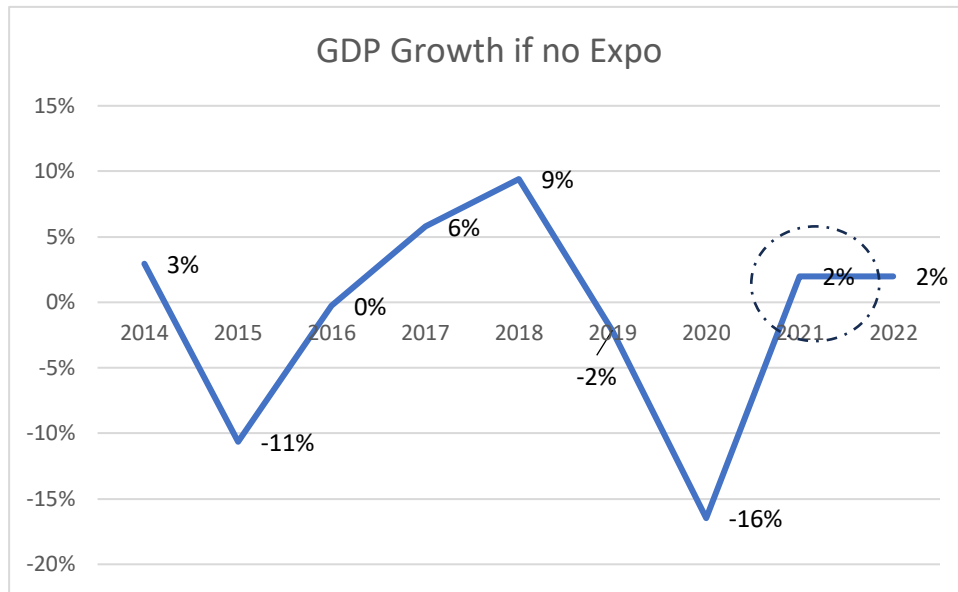


Fig 1.21. UAE GDP Growth trajectory without Expo.

Source: Dubai Statistics Info

Without Expo 2020, the growth rate for 2020 would have followed similar trends as in previous years, adjusted for external factors like oil prices and global economic conditions. Using the formulae provided below, we can derive the GDP of 2021 without Expo 2020.  $GDP_{2021} = GDP_{2020} * (1 + \text{growth rate})$ . The growth trend assumed was the average growth trend between 2006 and 2016, which was 7%. Assuming that all other factors remained constant, calculating the GDP at the average growth rate of the country, then the GDP in 2021 would have been USD 354 billion, 17% lower than the actual 2021 GDP including the impact of Expo 2020. The primary reason for this is the slow recovery that the country would have gone through post-Covid 19. The actual reported GDP of UAE at the end of 2021 was USD 415 billion.

As of the end of 2022, the GDP with the impact of Expo 2020 was USD 507 billion and if Expo hadn't happened, it would have been USD 361 billion. This simplified analysis shows that without hosting Expo 2020, the UAE's GDP might have been lower by approximately

61 billion USD in 2021. However, for a more precise analysis, detailed economic models, and data on specific impacts of the Expo would be necessary.

## **6.2 Recommendations for Future Research**

Future research should concentrate on several key areas to offer readers a comprehensive understanding of the effects of mega-events. It should also examine the sustainability of the economic impact generated by these events and their legacies. Additionally, researchers should investigate how the investments made for such mega-events continue to benefit the economy over time. A similar study conducted five or ten years from now is necessary to fully comprehend the long-term impact and identify any potential negative consequences. Moreover, researchers could also study the social and cultural impacts of such mega events on the UAE, including effects on local markets, employment opportunities, and the quality of life for residents. An understanding of how these mega events influence the well-being of the society would be crucial for policymakers and other stakeholders in the country. Lastly, a comparative analysis with the next Expo which is to be held in Osaka, Japan in 2025, could provide valuable insights. By addressing these research areas, future studies can contribute significantly to the knowledge base for countries to understand the impact of hosting such mega events.

### **6.3 Conclusion**

In conclusion, the economic impact of Expo 2020 and its subsequent transformation into Expo City Dubai has been a multifaceted phenomenon with both immediate and long-lasting implications for the UAE. The event served as an international platform for the UAE to highlight its cultural richness, innovative capabilities, and commitment to sustainable development under the theme of "Connecting Minds, Creating the Future." The substantial investments made in permanent infrastructure, technology, and human capital prior to the Expo have had significant ripple effects on the UAE's economy, stimulating growth, diversification, and international collaboration, and attracting numerous SMEs to invest in the country.

The direct economic impact of Expo 2020 was evident in the surge in tourism and the hospitality and retail sectors, with millions of visitors contributing to the local economy. This influx of visitors boosted related industries, from retail to transportation, showcasing the UAE's capacity to host global events on an unprecedented scale. Furthermore, the Expo catalysed increased FDI, successfully positioning the UAE as a thriving business hub in the Middle East.

The legacy of Expo City Dubai, as a purpose-built urban development, extends the economic benefits well beyond the six months of the event. The transformation of the Expo site into a fully integrated city underscores the UAE's commitment to leveraging the infrastructure developed for the Expo to create a sustainable and diversified economic environment. Expo City Dubai is set to become a hub for innovation, education, and clean technology, building on the themes and partnerships established during the Expo.



The development of Expo City Dubai is expected to contribute significantly to the UAE's Vision 2021 and Centennial Plan 2071, aiming to transition to a knowledge-based economy, reduce dependence on oil, and promote sustainable development. The city is envisioned to be a model for future urban developments, embodying the principles of sustainability and innovation. This aligns with the UAE's broader economic strategy of attracting high-tech industries, fostering entrepreneurship, and developing a highly skilled workforce.

Additionally, the site will continue to facilitate international cooperation, as many countries that participated in the Expo maintain a presence in Expo City Dubai. This ongoing collaboration is likely to stimulate the creation of international business opportunities, joint ventures, and research initiatives, thereby enhancing the UAE's global standing and economic prosperity.

The socio-economic benefits of the Expo and its legacy extend to cultural exchange and soft power. By promoting global dialogue and showcasing the UAE's cultural heritage, the event has enhanced the country's international reputation, potentially leading to an increase in cultural tourism and a stronger presence in international affairs.

In evaluating the economic impact of Expo 2020 and the legacy of Expo City Dubai, it is essential to consider both the quantifiable outcomes, such as job creation, GVA growth, and FDI, as well as the less tangible but equally significant effects on the UAE's global image and soft power. While the full extent of the Expo's legacy will unfold over the coming years, it is evident that the event has initiated transformative processes that will continue to shape the UAE's economic landscape.

The success of Expo City Dubai will depend on a sustained focus on innovation, sustainability, and strategic planning. As the UAE continues to navigate the challenges of the post-oil era, the foundations laid by Expo 2020 and the ongoing development of Expo City Dubai will undoubtedly play a critical role in the nation's economic trajectory. The event has left a tangible imprint on Dubai's urban fabric and redefined the UAE's economic aspirations and its role on the global stage.

Conducting this research has significantly enhanced my knowledge, not only in financial models used to understand economic impacts but also in the rich cultural heritage and ambitious plans for the country's future. The dedication and passion exhibited by the leadership to drive progress in this nation are unparalleled. Witnessing their efforts to transform barren desert lands into thriving metropolitan cities has been inspiring. Their remarkable ability to achieve the fastest recovery from the pandemic showcases their resilience and strategic planning. Moreover, their success in transitioning from an oil-dependent economy to a diverse and vibrant tourist destination is truly commendable. The commitment to sustainable development and innovation is evident in every aspect of their work, setting a global benchmark for excellence. This experience has provided me with a deeper appreciation for the intricate balance between economic growth and cultural preservation. The nation's vision for the future is not only ambitious but also inclusive, aiming to create opportunities for all its citizens. I am genuinely impressed by the progress made and I am excited to see how their continued efforts will shape the future. This research has been a profound learning journey, broadening my perspective on what is possible with visionary leadership and unwavering dedication.

As Dhirubhai Ambani once said, "For those who dare to dream, there is a whole world to win." This quote encapsulates the spirit of the nation's leadership and their relentless pursuit of progress and innovation (Ambani, n.d.).

Hosting a mega event like Expo 2020 was not only a sustainable boon for the country but has also set high expectations for future world expos. It will be fascinating to observe the targets and plans for the next World Expo, which will be held in Osaka, Japan, in 2025.

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## APPENDIX A

### **Interview Consent Form**

Research project title: THE ECONOMIC IMPACT OF EXPO 2020 ON THE UAE, WAS IT A SUSTAINABLE BOON?

Research investigator: Deepa Varghese

Research Participants name:

The interview will take (Max 30 minutes). We don't anticipate that there are any risks associated with your participation, but you have the right to stop the interview or withdraw from the research at any time.

Thank you for agreeing to be interviewed as part of the above research project. Ethical procedures for academic research require that interviewees explicitly agree to being interviewed and how the information contained in their interview will be used. This consent form is necessary for us to ensure that you understand the purpose of your involvement and that you agree to the conditions of your participation. Would you therefore read the accompanying information sheet and then sign this form to certify that you approve the following:

- the interview might be recorded, and if recorded, a transcript will be produced.
- you will be sent the transcript and given the opportunity to correct any factual errors.
- the transcript of the interview will be analyzed by Deepa Varghese as research investigator.
- any summary interview content, or direct quotations from the interview, that are made available through academic publication or other academic outlets will be anonymized so that you cannot be identified, and care will be taken to ensure that other information in the interview that could identify yourself is not revealed.
- the actual recording will be (destroyed post the thesis submission)
- any variation of the conditions above will only occur with your further approval.
- Or a quotation agreement could be incorporated into the interview agreement

Quotation Agreement

I also understand that my words may be quoted directly. With regards to being quoted, please initial next to any of the statements that you agree with:

	I wish to review the notes, transcripts, or other data collected during the research pertaining to my participation.
	I agree to be quoted directly.
	I agree to be quoted directly if my name is not published and a made-up name (pseudonym) is used.
	I agree that the researchers may publish documents that contain quotations by me.

By signing this form, I agree that.

1. I am voluntarily taking part in this project. I understand that I don't have to take part, and I can stop the interview at any time.
2. The transcribed interview or extracts from it may be used as described above.
3. I have read the Information sheet.
4. I don't expect to receive any benefit or payment for my participation.
5. I can request a copy of the transcript of my interview and may make edits I feel necessary to ensure the effectiveness of any agreement made about confidentiality.
6. I have been able to ask any questions I might have, and I understand that I am free to contact the researcher with any questions I may have in the future.

\_\_\_\_\_  
**Printed Name**

\_\_\_\_\_  
**Participants Signature**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Researchers Signature**

\_\_\_\_\_  
**Date**

### Contact Information

This research has been reviewed and approved by the Edinburgh University Research Ethics Board. If you have any further questions or concerns about this study, please contact:

Name of researcher – Deepa Varghese

Tel: +971504204109

E-mail: [deepa.varghese@ssbm.ch](mailto:deepa.varghese@ssbm.ch)

You can also contact Deepa Varghese's supervisor:

- Name of researcher supervisor – Josip Burusic

- E-mail: [Josip.burusic@ssbm.ch](mailto:Josip.burusic@ssbm.ch)

### **What if I have concerns about this research?**

If you are worried about this research, or if you are concerned about how, it is being conducted, you can contact SSBM by email at [contact@ssbm.ch](mailto:contact@ssbm.ch).

## APPENDIX B

### **Methodology and Time Series Analysis Data**

The economic impact assessment has measured the impact of Expo 2020 Dubai on gross value added (GVA) and employment in the Dubai economy. GVA is a measure of the value of goods and services in an economy and is similar to gross domestic product (GDP), whilst ‘employment’ shows the jobs created and supported by Expo 2020 Dubai.

The methodology used to measure these impacts is based on the Input-Output (IO) model of an economy. This model measures three distinct types of impacts:

Direct impacts: economic activity directly created by Expo 2020 Dubai

Indirect impacts: economic activity supported by Expo 2020 Dubai related local suppliers

Induced impacts: economic activity supported by Expo 2020 Dubai-related employee spending

The direct, indirect, and induced impacts are then summed to obtain the total impact of the Expo, across the pre-Expo, during Expo, and post-Expo periods. Both GVA and employment are measured across direct, indirect, and induced impacts.

GVA can be measured using income, expenditure, and production approaches. In simple terms, this means GVA can measure the money earned in an economy, the money spent in an economy, or it can measure the value of goods and services produced in an economy. In this study, GVA has been measured using the income approach — i.e., the money earned in the UAE economy because of the Expo 2020 Dubai. To measure the money earned across direct, indirect, and induced impacts, an ‘Input-Output’ (IO) table-based approach has been used: an IO table shows how each sector in an economy both relies on inputs from other sectors and also provides outputs to other sectors — these linkages are quantified by ‘multipliers’, which, in simple terms, shows how activity in one sector ‘multiplies’ through

the rest of the economy because of the linkages mentioned above. As an IO table for the UAE is not publicly available, the Kuwait IO table has been used as a proxy, with minor adjustments to reflect specific characteristics of the UAE economy.

The IO approach is a sectoral-based approach and some of the key sectors impacted by Expo 2020 Dubai include:

- Events organization
- Business services
- Construction, transport, storage and communication
- Retail
- Restaurants and hotels

### Employment

Employment is calculated using ‘labour productivities’, which are ratios in economics that measure the average economic output per employee in different sectors in an economy (for example, in the construction sector, labour productivity shows how much output the average construction worker helps to produce). These ratios have been calculated using publicly available UAE macroeconomic data. These labour productivities help to show the additional employment supported by Expo 2020 Dubai-related activities by quantifying the jobs that are required because of the GVA impact in different sectors in the economy (construction, retail, hospitality etc.). Employment is measured in job-years — where a job year is one full-time employee working for a year.

The below table shows a snapshot of how the data collected was used to work on the reforecasts based on time series analysis.

Prior to Expo 2020	Pre-Expo contribution (November 2013 to October 2020)	During -Expo contribution (October 2020 to April 2021)	Post -Expo contribution (May 2021 to December 2031)	Total	
	37.7 GVA	22.7 GVA	62.2 GVA	122.6	
	8.0 Direct	11.2 Direct	34.2 Direct	53.4 Direct	
	20.6 Indirect	7 Indirect	14.7 Indirect	42.3 Indirect	
	9.1 Induced	4.5 Induced	13.2 Induced	26.8 Induced	
	<b>37.7 Total</b>	<b>22.7 Total</b>	<b>62.1 Total</b>	<b>122.5 Total</b>	
	Top sectors by total GVA*				
	25.7 Construction	0 Construction	0 Construction		
	0 Restaurants and hotels	8.9 Restaurants and hotels	4.5 Restaurants and hotels and Retail	39.1 Restaurants and hotels and Retail	
	7 Events organization and business services	7.7 Events organization and business services	54.2 Events organization and business services	68.9 Events organization and business services	
	2.2 Transport, storage and communication	2.6 Transport, storage and communication	Transport, storage and communication	4.8 Transport, storage and communication	
	2.8 Others	3.5 Others	3.4 Others	9.7 Others	
	37.7	22.7	62.1	122.5	
	262,400 FTE	94,400 FTE	548,300 FTE	905,100 FTE	
Reforecast	Pre-Expo contribution (November 2013 to October 2021)	During -Expo contribution (October 2021 to April 2022)	Post -Expo contribution (May 2022 to December 2031)		
	39.1 GVA	19.6 GVA	56.4 GVA	115.1	
	8.3 Direct	9.7 Direct	31.1 Direct	49.1 Direct	
	21.4 Indirect	6.0 Indirect	13.4 Indirect	40.8 Indirect	
	9.4 Induced	3.9 Induced	12.0 Induced	25.3 Induced	
	<b>39.1 Total</b>	<b>19.6 Total</b>	<b>56.4 Total</b>	<b>115.1 Total</b>	
	Top sectors by total GVA*	Top sectors by total GVA*			
	25.7 Construction	0 Construction	3.6 Construction	29.3 Construction	
	0 Restaurants and hotels	8.9 Restaurants and hotels	8.3 Restaurants and hotels and Retail	17.2 Restaurants and hotels and Retail	
	7 Events organization and business services	7.7 Events organization and business services	35.7 Events organization and business services	50.4 Events organization and business services	
	2.2 Transport, storage and communication	2.6 Transport, storage and communication	4.5 Transport, storage and communication	9.3 Transport, storage and communication	
	4.2 Others	0.4 Others	4.3 Others	8.9 Others	
	<b>39.1</b>	<b>19.6</b>	<b>56.4</b>	<b>115.1</b>	
	266,000 FTE	111,000 FTE	497,531 FTE	874,531 FTE	
Post Expo 2020	Pre-Expo contribution (November 2013 to October 2021)	During -Expo contribution (October 2021 to April 2022)	Post -Expo contribution (May 2022 to December 2042)		
	39.1 GVA	19.6 GVA	96.2 GVA		
	8.3 Direct	9.7 Direct	53.0 Direct	70.9 Direct	
	21.4 Indirect	6.0 Indirect	22.8 Indirect	50.2 Indirect	
	9.4 Induced	3.9 Induced	20.4 Induced	33.8 Induced	
	<b>39.1 Total</b>	<b>19.6 Total</b>	<b>96.2 Total</b>	<b>154.9 Total</b>	
	Top sectors by total GVA*				
	25.7 Construction	0 Construction	6.2 Construction	31.9 Construction	
	0 Restaurants and hotels	8.9 Restaurants and hotels	14.2 Restaurants and hotels and Retail	23.1 Restaurants and hotels and Retail	
	7 Events organization and business services	7.7 Events organization and business services	60.8 Events organization and business services	75.5 Events organization and business services	
	2.2 Transport, storage and communication	2.6 Transport, storage and communication	7.6 Transport, storage and communication	12.4 Transport, storage and communication	
	4.2 Others	0.4 Others	7.4 Others	12.0 Others	
	<b>39.1</b>	<b>19.6</b>	<b>96.2</b>	<b>154.9</b>	
	266,000 FTE	111,000 FTE	662,000 FTE	1,039,000 FTE	

## APPENDIX C

### History of World Expos

**Table 1**  
History of world expos.

Edition	City	Dates	Theme	Visitors	Participating Countries
1851	London	01/05/1851–11/10/1851	Industry of all Nations	6,039,195	25
1855	Paris	15/05/1855–15/11/1855	Agriculture, Industry and Fine Arts	5,162,330	27
1862	London	01/05/1862–01/11/1862	Industry and Art	6,096,617	39
1867	Paris	01/04/1867–03/11/1867	Agriculture, Industry and Fine Arts	15,000,000	42
1873	Vienna	01/05/1873–31/10/1873	Culture and Education	7,255,000	35
1876	Philadelphia	10/05/1876–10/11/1876	Arts, Manufactures and Products of the Soil and Mine	10,000,000	35
1878	Paris	20/05/1878–10/11/1878	New Technologies	16,156,626	35
1880	Melbourne	01/10/1880–30/04/1881	Arts, Manufactures and Agricultural and Industrial Products of all Nations	1,330,000	33
1888	Barcelona	08/04/1888–10/12/1888	Fine and Industrial Art	2,300,000	30
1889	Paris	05/05/1889–31/10/1889	Celebration of the Centenary of the French Revolution	32,250,297	35
1893	Chicago	01/05/1893–03/10/1893	Fourth Centenary of the Discovery of America	27,500,000	19
1897	Brussels	10/05/1897–08/11/1897	Modern Life	6,000,000	27
1900	Paris	15/04/1900–12/11/1900	19th Century: An Overview	50,860,801	40
1904	Saint Louis	30/04/1904–01/12/1904	Celebration of the Acquisition of Territory Louisiana, April 30 1803	19,694,855	60
1905	Liege	27/04/1905–06/11/1905	Commemoration of the 75th Anniversary of National Independence	7,000,000	35
1906	Milan	28/04/1906–11/11/1906	Transportation	N.A.	40
1910	Brussels	23/04/1910–07/11/1910	Works of Art and Science, Agricultural and Industrial Products of All Nations	13,000,000	26
1913	Ghent	26/04/1913–03/11/1913	Peace, Industry and Art	9,503,419	24
1915	San Francisco	20/02/1915–04/12/1915	Celebrating the Opening of the Panama Canal	18,876,438	24
1929	Barcelona	20/05/1929–15/01/1930	Industry, Art and Sport	5,800,000	29
1933	Chicago	27/05/1933–12/11/1933	The Independence Among Industry and Scientific Research	38,872,000	21
		01/06/1934–31/10/1934			
1935	Brussels	27/04/1935–06/11/1935	Transport	20,000,000	35
1937	Paris	25/05/1937–25/11/1937	Arts and Technics in Modern Life	31,040,955	45
1939	New York	30/04/1939–31/10/1939	Building the World of Tomorrow	N.A.	54
		11/05/1940–27/10/1940			
1949	Port-au-Prince	08/12/1949–08/06/1950	The Festival of Peace	250,000	15
1958	Brussels	17/04/1958–19/10/1958	A World View: A New Humanism	41,454,412	39
1962	Seattle	21/04/1962–21/10/1962	Man in the Space Age	9,000,000	49
1967	Montreal	28/04/1967–29/10/1967	Man and his World	50,306,648	62
1970	Osaka	15/03/1970–13/09/1970	Progress and Harmony for Mankind	64,218,770	78
1992	Seville	20/04/1992–12/10/1992	The Age of Discovery	41,814,571	108
2000	Hannover	01/06/2000–31/10/2000	Man - Nature - Technology	18,100,000	155
2010	Shanghai	01/05/2010–31/10/2010	Better City, Better Life	73,085,000	246
2015	Milan	01/05/2015–31/10/2015	Feeding the Planet, Energy for Life	21,500,000	145



## APPENDIX D

### **KPI's of Expos**

A detailed list of economic objectives from the literature review of recent mega-events matched to KPIs that were used to measure their performance.

Examples of economic objectives and KPIs

Economic objectives	KPIs
Foster international cooperation	<ul style="list-style-type: none"> <li>• Number of partnerships, groups, and programs created</li> <li>• Number of international meetings held as part of the event</li> <li>• Increased membership in existing cooperation bodies</li> <li>• Information exchanged</li> </ul>
Promote innovation	<ul style="list-style-type: none"> <li>• Value of funds for innovation activities</li> <li>• Investment in research and development (R&amp;D)</li> <li>• Number of scientific publications</li> <li>• Number of new high value-added jobs created</li> <li>• Quantitative / qualitative measures of inspiration and changed perspectives</li> </ul>
Accelerate economic growth	<ul style="list-style-type: none"> <li>• Gross domestic product (GDP)</li> <li>• Gross regional value added</li> <li>• Retail sales</li> <li>• Legacy evidence regarding infrastructure and skills</li> </ul>
Increase trade and investment	<ul style="list-style-type: none"> <li>• Capital expenditure</li> <li>• Foreign direct investment</li> <li>• Quantitative / qualitative measures of local investment intentions</li> </ul>
Increase employment	<ul style="list-style-type: none"> <li>• Number of jobs supported before, during, and after the event</li> <li>• Increase in consumption expenditure from jobs created</li> <li>• Quantitative / qualitative indications on impacts on skills</li> </ul>
Support local economy	<ul style="list-style-type: none"> <li>• Number of local companies supplying the event</li> <li>• Share of contract value awarded to local businesses</li> <li>• Number of permanent jobs created locally / in the event area</li> </ul>

Economic objectives	KPIs
	<ul style="list-style-type: none"> <li>Quantitative / qualitative measures skills impacts</li> <li>Legacy reporting on regeneration</li> </ul>
Develop skills	<ul style="list-style-type: none"> <li>Number of people who completed training</li> <li>Number of qualifications awarded</li> <li>Number of schools and students involved in learning activities</li> <li>Number of volunteers and volunteering hours</li> <li>Number and capacity of new permanent training facilities built</li> <li>Quantitative / qualitative measures of impacts on skills</li> </ul>
Improve sustainable infrastructure	<ul style="list-style-type: none"> <li>Investment into infrastructure, including transport (roads, aviation, railway), medical, housing, power generation, border controls, etc.</li> <li>Number of new facilities upgraded or built</li> <li>New permanent venues built</li> <li>Investment into local infrastructure</li> <li>Roll-out of ICT infrastructure, including fiber optic cable</li> <li>Legacy reporting on regeneration and use of event assets</li> </ul>
Promote national brand	<ul style="list-style-type: none"> <li>Number of attendees</li> <li>Size of the global and national audience reached by the event</li> <li>Social media coverage</li> <li>Online internet coverage, e.g. number of webpage views</li> <li>Advertising value</li> <li>Awareness and perception of a country as a tourism destination</li> <li>Brand rankings and indices, e.g. Nation Brands Index (NBI)</li> <li>Quantitative / qualitative measures of changed perspectives on nation</li> </ul>
Attract further events	<ul style="list-style-type: none"> <li>Number of events attracted because of hosting the main event, e.g. using mega-event's infrastructure, and their economic impact</li> <li>Legacy evidence on event hosting skills and potential future use of event assets</li> </ul>
Develop tourism industry	<ul style="list-style-type: none"> <li>Number of national and international visitors</li> </ul>

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	<ul style="list-style-type: none"> <li>• Number of first -time visitors</li> <li>• Visitor expenditure</li> <li>• Hotel occupancy rate</li> <li>• Number of jobs in the local tourism industry</li> <li>• Quantitative / qualitative measures of visitor perspectives, intention to return and recommend</li> </ul>
Improve event's commercial performance	<ul style="list-style-type: none"> <li>• Participation</li> <li>• Revenue of event organizers</li> <li>• Tickets sales</li> <li>• Sponsorship contributions</li> </ul>
Support small and medium enterprises (SMEs)	<ul style="list-style-type: none"> <li>• Share of supplies from SMEs</li> <li>• Partnerships or other links established with larger businesses or other organizations</li> <li>• Quantitative / qualitative measures of business perspectives on benefits of the event</li> </ul>
Ensure economic sustainability of the event	<ul style="list-style-type: none"> <li>• Certification and sustainability standards, e.g. ISO 20121, BREEAM</li> <li>• Quantitative / qualitative measures of event impact on inspiration and changed perspectives</li> </ul>
Reduce poverty	<ul style="list-style-type: none"> <li>• Earnings of low-income households</li> <li>• Quantitative / qualitative measures of inspiration, skills impacts and employability</li> <li>• Legacy evidence of regeneration</li> </ul>
Increase government tax revenue	<ul style="list-style-type: none"> <li>• Tax receipts generated before, during, and after the event</li> </ul>

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