

Virtual Tourism in the Peri-and-Post COVID-19 Era: Understanding How Experiential Media Are Utilized in the Making of “Qatar 2022”

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Abstract

In this study, we examine how and the degree to which Experiential Media (EM) are utilized to promote travel, sports, and, more broadly, cultural tourism in EM contents produced in the buildup to the 22nd FIFA World Cup to be hosted by Qatar in 2022, the first Arab nation to host the World Cup. Three YouTube channels were considered for this study, namely: *Road To 2022*, *Al Jazeera Contrast*, and *Qatar Airways*. Using a virtual reality head-mounted display and the model of EM framework, we found that all of the nine productions featured limited use of the six qualities of EM. We identified three broad thematic categories: 1) FIFA stadium and travel, 2) use of cutting-edge technology, and 3) Qatar's history and traditions, and many sub-themes pertaining to travel, lifestyle, and more. We provide practical and managerial implications of EM contents for the tourism industry, sports tourism, and destination marketing.

Keywords

Augmented Reality, Virtual Reality, Experiential Media, Extended Reality, Mixed Reality, Sports Tourism, Cultural Tourism, Virtual Tourism, Qatar 2022, COVID-19

1. Introduction

Immersive storytelling is transforming international tourism and how countries promote their national identity. This study looks at how Qatar is using immersive storytelling in the form of Experiential Media (EM) to communicate and promote its role as host of FIFA World Cup 2022. EM refers to communication

platforms or technical interfaces such as Augmented Reality (AR), Virtual Reality (VR), Mixed Reality (MR), Extended Reality (XR), and 360° videos that enable users to make practical contact or experience with phenomena virtually. This study particularly focuses on VR as a sub-category of EM. “VR is the use of computer modeling and simulation that enables a person to interact with an artificial three-dimensional (3-D) visual or other sensory environments. VR applications immerse the user in a computer-generated environment that simulates reality through the use of interactive devices, which send and receive information and are worn as goggles, headsets, gloves, or bodysuits” (Lowood, 2021). In the present study, we examine what qualities of EM are utilized and how and the extent to which EM are employed to promote travel, sports, and, more broadly, cultural tourism in the EM content produced by the Road To 2022, AJ Contrast, and Qatar Airways in the buildup to the 22nd edition of the FIFA World Cup (21 November to 18 December 2022), to be hosted by Qatar, the first Arab nation to host the World Cup.

Similar to the Olympics, the FIFA World Cup has a worldwide viewership. Jackman (2018) writes, “No sporting events captivate a global audience like the World Cup and Olympics. Roughly half of the world’s population tunes in to see at least a part of each spectacle.” Some estimates show that a total of USD 47 billion was spent on the last five World Cups, including the 2018 FIFA World Cup held in Russia (Valustrat, 2018), including around 11.8 billion USD for the construction and preparation for the Russia 2018 FIFA World Cup (Sheetz, 2018). The expenditure includes stadium development, infrastructure costs, and spending to facilitate tourism. An estimated 3.572 billion fans watched Russia 2018 on TV and online streaming platforms (Clinch, 2018).

Similarly, 3.6 billion people watched the 2016 Summer Olympics Games in Rio de Janeiro (Statista, 2021). A spectacle such as the FIFA World Cup provides an opportunity for the host country to showcase its uniqueness, culture, and tradition and invite worldwide attention, including both tourists and investors, which leads to recognition and development of the country (Real, 2013). “This leads to an increase in activity and employment in the engineering, procurement, and construction sector related to infrastructure spending, along with increased employment and spending in the tourism sector resulting from the inflow of tourists into the country, as well as an increase in consumer spending during the event” (Valustrat, 2018). Thus, mega-sporting events like FIFA World Cup are major catalysts for a broad spectrum of economic and social impacts, including infrastructure development, nation branding, and advancements in tourism (Kaplanidou et al., 2013).

Considering the vast capabilities such mega-sporting events provide, host nations adopt various storytelling techniques and tools to present the country’s rich culture, heritage, traditions, brand image, and so on, including immersive experiences for a worldwide audience. The use of media tools in telling such stories also includes newer forms of media, popularly known as “experiential media” (EM) (Pavlik, 2018). Unlike traditional and other static media tools, EM

provides an opportunity for the user/audience to experience the story in a first-person perspective and heightens the sense of “presence” (Jin, 2011). Considering the potential of EM in presenting stories related to such mega-sporting events, in this study, we set out to explore the territory of immersive storytelling in the context of Qatar as the host of FIFA World Cup 2022.

2. Review of Literature

In the early 1990s, the use of VR was limited to six classes of potential applications, i.e., medical visualization, maintenance and repair, annotation, robot path planning, entertainment, and military aircraft navigation and targeting (Azuma, 1997). Fast forward to 2021, a growing body of research indicates that EM technologies such as AR, VR, and 360° videos are diffusing rapidly and widely around the world, thereby transforming user experience, practices related to sports, tourism, and hospitality management.

2.1. VR Applications and Implications for Tourism

An increasing number of scholarly works relating to tourism management show the use of EM, particularly VR. In the tourism context, Hobson and Williams (1995) situate VR as an “interactive digital-generated medium” that has the potential to enable the users to create simulated experiences of unreal environments using a head-mounted display (HMD). Studies have further explored this interactive nature of VR with respect to tourism, including how the technology can reduce tourists’ perceived anxiety or risk with an unfamiliar destination. For example, Lee and Oh (2007) found that a hotel website with VR functions could lead to a reduction in users’ anxiety about travel. Similarly, Kim et al. (2018), in their study exploring consumer behavior in VR tourism, found that 1) consumers’ intention to visit places shown in VR tourism was influenced by their attachment to VR, and 2) the cognitive response had a stronger influence than the affective response on the intention to visit a destination promoted in VR.

In terms of the VR applications and implications for tourism, Guttentag (2010) highlights that 1) planning and management, 2) marketing, 3) entertainment, 4) education, 5) accessibility, and 6) heritage preservation are six areas of tourism in which VR may prove particularly valuable. In their study, Loureiro et al. (2020) conducted a full-text analysis of 56 journal papers and 325 conference proceedings related to VR and AR in the tourism context spanning over 20 years of research. The researchers found ten core topics in the journal papers, including atmospherics design, smart cities and cultural heritage, seminal and trend papers, location-based information and image quality, mobile uses for sustainable tourism, tourism destination marketing, TAM, experiential and telepresence, case study applications, augmented reality; and eleven core topics in conference proceedings including virtual communities, tourism destination marketing, mixed reality museums, location-based information systems, atmospherics design, 3D digitalization, augmented reality, image quality, experiential and telepresence, cultural heritage, case study application. Bec et al. (2021), considering the dete-

rioration of attractions, landmarks, artifacts, and destinations, which is a critical issue facing tourism worldwide, introduce the concept of Second Chance Tourism and the role of innovative preservation methods such as VR and MR. Vishwakarma et al. (2020), in the study exploring travelers' intention to adopt VR, utilized a value-based adoption model (VAM) to examine the responses of 208 Indian tourists and showed the importance of perceived immersion and perceived physical risk as to the two most vital indicators of benefits and sacrifice, respectively. Bec et al.'s (2019) study on the management of immersive heritage tourism experiences showed the potential of AR and VR in creating memorable tourism experiences for heritage tourism and proposed a conceptual model of heritage preservation for managing heritage in digital tourism experiences. Lee et al.'s (2020) study showed that the VR content quality, system quality, and vividness positively influence customers' attitude and telepresence, leading to their positive behavioral intention to visit the destination.

Using VR experiences as triggers for the development of wine tourism and considering the relevance of Portugal's Douro Valley to the country's wine tourism segment, Martins et al. (2017) developed a theoretical model that supports the implementation of multisensory virtual wine tourism experiences. In a study on the impact of innovation and gratification on authentic experience, subjective well-being, and behavioral intention in tourism VR, Kim et al. (2020) tested a theoretical framework based on the diffusion of innovations and uses and gratifications theories to explain why people participate in VR tourism. The researcher's highlight that the authentic experience and subjective well-being are affected by simplicity, benefit, and compatibility, which are the attributes of diffusion of innovations theory, as well as informativeness, social interactivity, and playfulness, which are the attributes of uses and gratifications theory.

Cranmer et al. (2020) explored the perceived value of AR for the tourism industry from the perspective of tourism experts. Using a qualitative and exploratory approach involving fifteen interviews with tourism experts, the researchers identified five value dimensions, including: 1) marketing, 2) economic, 3) tourist, 4) epistemic, and 5) organizational. These findings provide important implications for strategy development, AR implementation, and tourist experience design. Tussyadiah et al. (2018) identified several positive consequences of the sense of presence in VR experiences relating to tourism, based on the two experimental studies conducted in Hong Kong in the United Kingdom. The researchers found that: 1) feelings of being in the virtual environment (i.e., telepresence) increase enjoyment of VR experiences; 2) the heightened feelings of being there result in stronger liking and preference in the destination, and; 3) positive attitude change leads to a higher level of visitation intention. These findings speak to the efficacy of VR in inducing positive Second Chance Tourism (Bec et al., 2021) experiences.

2.2. VR Tourism and COVID-19

The pandemic has led to a great reduction in actual travel and the rise of virtual

travel in its place, leading to the growth of VR tourism. Exploring the facets of VR use in tourism as a result of the COVID-19 pandemic, [Schiopu et al. \(2021\)](#) used an extended TAM model to demonstrate that intention to use VR in tourism increased under the COVID-19 condition. [Schiopu et al.'s \(2021\)](#) findings show that the intention to use VR in tourism was influenced by the perceived ease of use, perceived usefulness, and perceived substitutability of VR, all mediated by people's interest in VR use in tourism. In their study, [Itani & Hollebeek \(2021\)](#) explored visitors' VR versus in-person attraction site tour-related behavioral intentions during and post-COVID-19. Itani et al.'s findings highlight that social distancing due to COVID-19 boosts visitors' demand for VR tours and found that once an effective COVID-19 treatment or vaccine is available, social distancing will not have a lasting effect on consumers' future tour purchase intentions. Itani et al.'s findings also show that post-the pandemic consumers will consider both in-person and VR-based attraction site tours, thereby countering arguments that social distancing's effect on tourism is here to stay after the pandemic.

[El-Said and Aziz \(2021\)](#), in their study on virtual tours' role in tourism recovery post-COVID-19, gathered data from 401 respondents who experienced at least one of the virtual tours simulating Egyptian heritage sites and showed that both TAM and protective action decision model (PADM) models are effective in predicting user's intention to adopt virtual tours and the adoption intention has a positive impact on the tendency to visit the actual site. The researchers also provide practical implications for site managers to consider when opting for virtual tours as a promotional tool or as an alternative during health crises like COVID-19.

[Zeng et al. \(2020\)](#) examined the direct and interaction effects of both the quality and quantity of online reviews and VR on consumers' hotel booking. [Zeng et al. \(2020\)](#) found that the influence of online reviews on behavioral intention was weakened when VR was applied. Zeng et al. concluded that the online reviews and VR had a significant combined effect on behavioral intention, with greater synergy than online reviews alone. The findings provide insights for travel and tourism managers to enhance marketing communication effects by proper use of VR to complement online reviews. [Chiao et al. \(2018\)](#) examined the usability of an online virtual tour-guiding platform for cultural tourism education. Based on the Unified Theory of Acceptance and Use of Technology (UTAUT) model, the researchers conducted a study of students from a technological university in Taiwan and found the results indicating learning effectiveness and technology acceptance within the education system.

In a study of VR presence as a preamble of tourism experience and the role of mental imagery, [Bogicevic et al. \(2019\)](#) examined how VR can deliver integrated tourist experiences prior to actual stays at a hotel. Using a lab-coordinated experiment with three hotel previews that differ in their level of interactivity (images vs. 360° tours vs. VR tours), the researchers found that a VR preview induces higher elaboration of mental imagery about the experience and a stronger sense

of presence compared to both the 360° preview and images preview, thereby translating into an enhanced brand experience. The study also shows that VR is substantial in prompting tourists to “daydream” about lodging offers prior to experiencing them at the destination’s premises.

A majority of scholarly work provides deeper insights on how users interact with and react to such immersive experiences, the potential impact of VR on the tourism industry, and the efficacy of VR use in tourism, particularly in light of the COVID-19 pandemic. However, limited scholarly work is available in terms of a qualitative analysis of the immersive contents themselves—specifically, 1) to what extent immersive contents utilize EM qualities and 2) what themes EM content productions feature regarding sports and cultural tourism. The current study addresses this gap in the literature by exploring EM content productions about the FIFA World Cup, a mega-sporting event commencing in 2022 in Qatar. To this end, the present study seeks to answer the following three research questions (RQs): *RQ1: To what degree do the immersive content productions related to Qatar 2022 (posted on the Road To 2022, AJ Contrast, and Qatar Airways YouTube channels), deploy Experiential Media (EM) qualities? RQ2: What are the prominent themes showcased by such EM contents in the context of sports and cultural tourism? RQ3: What are the various themes showcased by the Road To 2022 compared to EM contents posted on AJ Contrast and Qatar Airways YouTube channel about Qatar in general?*

3. Methodology

This study utilizes a qualitative content analysis to obtain a nuanced understanding of how Qatar is utilizing immersive storytelling based on EM in the promotion of the hosting of FIFA 2022. This method involves identifying selected immersive storytelling content produced in advance of the tournament and posted online and then assessing each immersive content production in terms of the extent to which the six qualities of EM are present. This qualitative investigation seeks to understand how EM content produced by the *Road To 2022*, *AJ Contrast*, and *Qatar Airways* in light of “Qatar 2022” utilize EM qualities. For this interpretive research (i.e., narrative and descriptive), we examine nine different 360° videos from three YouTube channels: 1) the *Road To 2022*, the official YouTube Channel of Qatar’s FIFA World Cup 2022; 2) *Al Jazeera Contrast* or *AJ Contrast*, a Digital division of Al Jazeera Media Network funded by Qatari Government; and 3) *Qatar Airways*, a Qatari government-owned flag carrier. We chose these three platforms (sports, media, and travel) because they represent Qatar’s interests and the nation’s attempts to use EM in the dynamic process of nation branding and destination marketing. All the nine 360° videos (henceforth called EM content throughout this paper) on YouTube VR application were experienced through an Oculus Quest 2, VR Head-Mounted Display (HMD) for a truly immersive VR experience (where the HMD provides a stereoscopic 360° view along with 3D surround sound and comes with haptics controllers to experience the EM content). However, these EM content can be viewed on any smart-

phone or laptop without an HMD on a YouTube website or mobile application (where the user has to manually scroll the rectangular window of the YouTube viewer either on a smartphone, tablet, or computer to see different parts of the 360° scene).

A three-step methodology was employed in the current content analysis. Step 1 is identifying the EM contents produced with regard to Qatar 2022. Step 2 is to experience/observe such EM contents. Step 3 is to identify prominent themes that are manifested in EM contents identified for this study. This methodology was designed for the present study to analyze the EM content posted on the Road To 2022, AJ Contrast and Qatar Airways YouTube platforms. We conducted Steps 1 and 2, identifying and experiencing the EM contents, during October 2021.

4. Findings

4.1. Identifying the EM Contents for the Content Analysis (Step 1)

Road to 2022 YouTube Channel: The Road To 2022, YouTube Channel was created in the year 2015 after Qatar was announced as the host country for FIFA 2022 in the year 2010 (PBS New Hour, 2010). As of October 30, 2021, the Road To 2022 channel had about 256 K subscribers and 97,985,825 total views on the channel. The search for total videos on the channel yielded a result of 459 videos of which five were EM content productions, as shown in Table 1. Of the five EM content productions, two were identical in terms of visuals and duration, hence a total of four EM content productions were considered for this study from the Road To 2022 YouTube channel.

AJ Contrast YouTube Channel: Al Jazeera Contrast or AJ Contrast YouTube Channel was started in 2017 to use cutting-edge technologies to amplify stories of unrepresented communities hit hardest by conflict and inequality. As of October 30, 2021, AJ Contrast YouTube Channel had about 2.74 K subscribers and 745,858 total views on the channel. The search for total videos on the channel yielded a result of 127 videos, of which 88 were EM content productions. Of the

Table 1. List of EM content productions identified from “Road To 2022” YouTube Channel. The data below is as of October 30, 2021.

Road To 2022 (256 K Subscribers)—EM contents						
Title	Month & Year	Length	Views	Likes	Dislikes	
Lusail Stadium 360° Experience—Qatar 2022	Dec, 2018	4:18 mins	2,874,450	18 K	5.4 K	
Explore Ahmad Bin Ali Stadium in 360°—Qatar 2022	Dec, 2020	1:21 mins	237,109	2 K	746	
Education City Stadium in 360°—Qatar 2022	Jun, 2020	1:50 mins	32,099	549	59	
Al Janoub Stadium in 360°—Qatar 2022	May, 2019	1:00 mins	1,235,903	7.9 K	2.3 K	

88 that were immersive EM content productions, only two were related to Qatar and Qatar 2022, as shown in **Table 2**, and the remaining EM content productions focused on news/topics from around the world. Of the two EM content productions, one (Pearls of the Past) was in both Arabic and English language, hence the English version of the same in terms of visuals and time duration was considered for the study.

Qatar Airways YouTube Channel: Qatar Airways YouTube channel was launched in the year 2006. As of October 30, 2021, Qatar Airways YouTube Channel had about 270 K subscribers and 98,449,675 total views on the channel. The search for total videos on the channel yielded a result of 689 videos, of which three were EM contents, as shown in **Table 3**.

4.2. Experience/Observe EM Content (Step 2)

Pavlik's (2018) model of EM focuses on six primary qualities of digital media environments: 1) interactivity, 2) immersion, 3) multi-sensory presentation, 4) algorithm and data, 5) first-person perspective, and 6) natural user interface. This model provides a framework to understand how EM transforms the role of the audience to a more active user who experiences stories as a participant rather than an audience member who tends to passively watch, listen, or read the narrative from a third-person's perspective. EM enables the user to experience the medium and participate or engage in a story or content itself as a virtual phenomenon.

Table 2. List of EM content identified from “AJ Contrast” YouTube Channel. The data below is as of October 30, 2021.

AJ Contrast (2.73 K Subscribers)—EM contents						
Title	Month & Year	Length	Views	Likes	Dislikes	
Camel Racing in Doha, Qatar in 360° Video	Dec, 2018	2:28 mins	2,156	21	3	
Pearls of the Past	Feb, 2019	6:27 mins	218	9	0	

Table 3. List of EM content productions identified from “Qatar Airways YouTube Channel”. The data below is as of October 30, 2021.

Qatar Airways (270 K Subscribers)—EM contents						
Title	Month & Year	Length	Views	Likes	Dislikes	
360° Tour of Doha's Hamad International Airport—Qatar Airways	Aug, 2016	2:57 mins	345,423	1.5 K	142	
Take a 360° Tour of Qsuite—Qatar Airways New Business Class	Mar, 2017	1:58 mins	374,619	1.1 K	84	
360°: Dinner in the Sky—Qatar Airways at QIFF 2016	Mar, 2016	1:08 mins	16,573	104	9	

Critical to understanding the nature of immersion is what developers call the degrees of freedom (DoF) within the immersive environment. Omnidirectional, or 360° video, has three DoF, allowing the user to look in any direction, up/down, left/right, and forward/back. While this can give the user a sense of being enveloped in a virtual space or a 360° image or video of reality or animation, the user cannot move about in a three-dimensional (3D) space. Users can “move about in the virtual environment only if the content developer has encoded movements, such as by moving the camera or programming movement. Such immersive content offers a step toward fully immersive VR. However, for a more fully immersive VR experience, the content developer must encode six DoF” (Pavlik, 2020: p. 7). Six DoF allow the user to look about and move about, traveling forward/backward, up/down and left/right. Such ability to move can give the user a much more complete sense of immersion and presence in VR. We experienced each EM content twice as part of the methodology, i.e., first to identify EM qualities and second to identify themes/topics the EM content covers. A detailed memo of the experience/observation was made for each EM content identified for the study.

4.3. Analysis of the Themes (Step 3)

Based on the observations recorded from the EM contents, and notes from the memos, we identified dominant themes highlighted by such EM content. In this step, we also identified different themes covered by the Road To 2022 compared to that of contents posted on AJ Contrast and Qatar Airways YouTube channels.

4.4. Analysis of EM Content

Road To 2020 YouTube Channel

Below are the observations from four EM contents identified from “Road To 2022” YouTube Channel:

Lusail Stadium 360° Experience—Qatar 2022. Lusail Iconic Stadium or Lusail National Stadium is a stadium under construction in Lusail, a city in Qatar. The stadium is one of the host sites for the 2022 FIFA World Cup. This EM content involves a virtually created artistic impression of the Lusail Stadium and some real footage of people in Qatar. The opening of the EM content welcomes the user to take a journey to be one of the first to see what a best fan day experience would be. The user also gets to experience both the aerial perspective and a perspective from the stadium seating area filled with spectators.

In terms of the EM qualities this EM content utilizes, we found the storyline to be from the first-person perspective as if the user is inside the stadium, which features traditional Middle East architecture. The EM content also features state of the art technology on display inside the stadium, including the opportunity to take Holographic selfies with the football players; a virtual mirror where the fans can try their favorite football team’s jersey and purchase the same and use of smartphone technology to enter the stadium or place food from the spectators seating area inside the Lusail National Stadium, as shown in **Figure 1**.

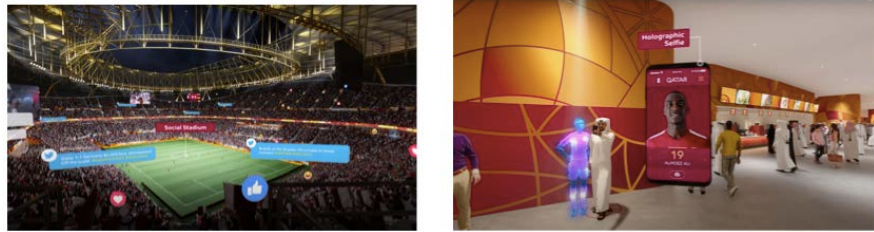


Figure 1. Screenshots from the Lusail Stadium EM content.

In terms of immersion, we observed: though the actual content is a 360° video with 3 DoF the sudden movement of the visuals from the birds-eye-view to the stadium makes one feel being dropped from the air, thereby giving a feeling of 6 DoF. We felt a similar experience of 6 DoF inside the stadium arena, where the drone camera tracked players and then panned towards the crowd cheering and sending real-time Tweets and Likes in an ultimate football arena that has an electric atmosphere, thus showing how Qatar is building technology to show fans Tweets and social interaction in new and immersive ways.

In terms of the duration, this EM content is among the longest (4:18 mins). The use of a first-person narrative storyline and the wide array of visual creativity made it a memorable virtual experience. This EM content was also the most viewed (2,874,450 views) and with most user comments (1523 comments) as of October 30, 2021, compared to the other nine EM content productions considered for this study. The ultimate immersive experience that heightened the sense of “presence” as if we were present in the arena was when the camera started moving from the field towards the audience in the stadium. The 360° view fire-work visuals and sound of the large gathering of the crowd gave us a sense of presence or being part of the celebration.

Explore Ahmad Bin Ali Stadium in 360°—Qatar 2022. Ahmed bin Ali Stadium is a multi-purpose stadium built in the year 2003 in Al Rayyan city in Qatar. As shown in **Figure 2**, this EM content, which is only 1:21 minute long uses a first-person narrative, where the user is given a grand tour of the stadium. This EM content mostly gives a ground-level perspective as if the user is standing in front of the stadium (exploring the stadium façade) and having a quick look inside the stadium, including players’ locker rooms, indoor warm-up space, and the spectators seating area. The ending of the EM content uses a time-lapse visual that transitions from day to night and shows the illuminated stadium at night. Throughout the immersive experience, we observed real visuals of the stadium, unlike Lusail stadium’s immersive content, which was created artistically for a visual representation of the stadium on matchday. Only 3 DoF was observed throughout the immersive experience. The EM content had a total of 237,109 views and 66 comments as of October 30, 2021.

Education City Stadium in 360°—Qatar 2022. As shown in **Figure 3**, Education City Stadium is a football stadium built in the year 2020 as a quarter-final venue for the upcoming FIFA World Cup 2022. The stadium is located in Al

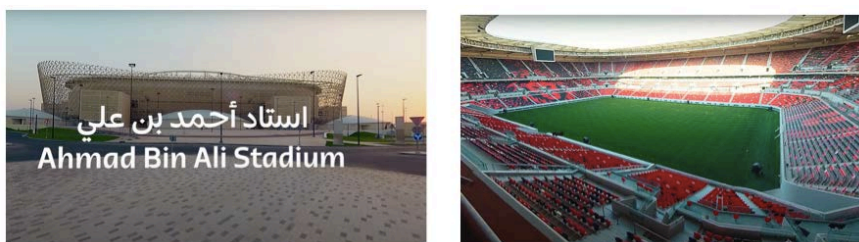


Figure 2. Screenshots from the Ahmad Bin Ali Stadium EM content.

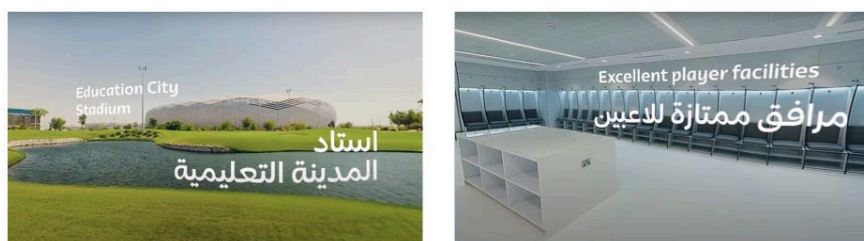


Figure 3. Screenshots from the Education City Stadium EM content.

Rayyan city in Qatar. Similar to the Ahmed bin Ali Stadium, this EM content, which is only 1:50 minutes in duration, offers the user an opportunity to explore the stadium (both inside the stadium and outdoor) from the first-person point of view. The EM content highlights the richness of the stadium design inspired by Islamic architecture, including how the façade glistens in the sunlight. The EM content takes the user indoors, showing how the new stadium features a unique sporting hub and wide-open space for exclusive hospitality for VIPs on matchday. The EM content transitions from the green pitch to the new green spaces created around the education city stadium. The EM content also gives the user a quick look at the facilities offered for the players. Only 3 DoF were observed in this immersive content. Overall, the EM content utilized real stadium footage with no artistically created visuals or representation of the stadium on the matchday. The EM content lacked ambient sound and visuals of people, which in turn hindered the overall sense of presence. Meanwhile, the EM content had a total of 32,099 views and 52 comments as of October 30, 2021.

Al Janoub Stadium in 360°—Qatar 2022. As shown in **Figure 4**, Al-Janoub Stadium, formerly known as Al-Wakrah Stadium, is a football stadium built in the year 2019 in Al-Wakrah city in Qatar. Similar to the Ahmed bin Ali Stadium and Education City Stadium, this EM content, which is a minute-long in duration, also uses a first-person narrative, where the user is given a grand tour of the stadium, including both indoor and outdoor tour at the ground level (i.e., human-eye level). This EM content involves a 360° pan for each location, thereby causing forced movement. Unlike the previous EM content productions, the Al-Janoub Stadium EM content opens with Al-Wakrah's largest green space, highlighting that most of Qatar's geographical area is a flat, low-lying desert. The EM content also shows the running and cycling tracks outside the stadium arena. The content does highlight the stadium architecture, which is designed by



Figure 4. Screenshots from the Al-Janoub Stadium EM content.

Zaha Hadid architects. The content shows how Qatar laid a green pitch in a record time, including growing grass in Qatar rather than importing it. The user also gets to experience how the stadium is ready to host the world's best football teams. Only 3 DoF was observed in this immersive content. This EM content overall utilized real footage of the stadium with no artistically created visuals or representation of the stadium on the matchday and lacked the use of ambience sound, which is a key “ingredient” for a fully immersive experience. Meanwhile, the EM content had a total of 1,235,903 views and 272 comments as of October 30, 2021.

AJ Contrast YouTube Channel

Below are the observations from two EM content identified from AJ Contrast YouTube Channel:

Camel Racing in Doha, Qatar in 360° Video. As shown in **Figure 5**, this EM content features the most expensive sport in Qatar, i.e., camel racing, which uses both traditional sporting practices and modern technology. This 2:28 minutes long content invites a user to experience camels racing in the desert track specially created for this sport in Doha, Qatar. The story uses both first-person perspective and third-person perspective narrative. In the opening of the content, the user gets to experience a 360° view of the racetrack and camels racing for a prize that includes a golden sword, money, and luxury cars. The user gets to share a car with a Qatari national who also happens to own a camel and narrates the story and history behind camel racing. The Qatari national takes the user on a ride alongside the racetrack, where the camels are racing. We experienced the story from the car window perspective and as crowd members inside the race, where the user was also invited through this immersive experience to see how advanced technology like robot jockeys are used for camel racing. The use of Arabian background music with ambience sound, including the desert sounds and sounds from the racetrack, added to the overall EM content experience and heightened the sense of presence. Only 3 DoF was observed in this immersive content. Despite the truly immersive experience offered by the EM content, we observed 2156 views and two comments on the video as of October 30, 2021. Though this content features traditional Qatari sport, the EM content does not include any information or visuals about Qatar as the host of FIFA World Cup 2022.

Pearls of the Past. As shown in **Figure 6**, this 6:27 minutes duration which is the longest among the nine EM content productions considered for this study, is

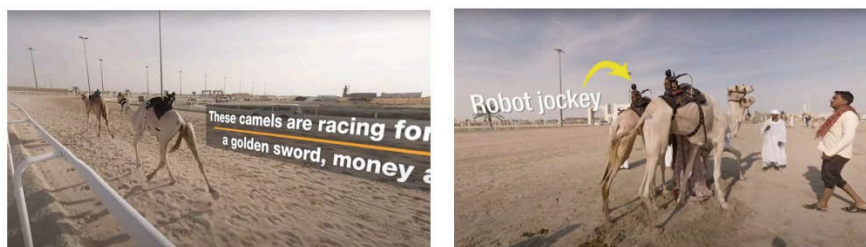


Figure 5. Screenshots from the Camel Racing in Doha EM content.

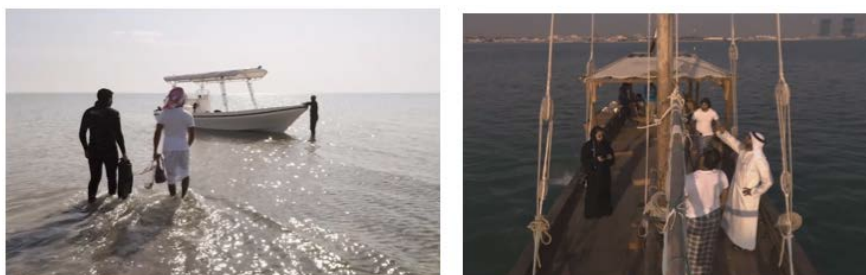


Figure 6. Screenshots from the pearls of the past EM content.

from the third-person perspective, where the story tracks two vastly different generations of Qatari nationals as they deep dive into Qatar's ancient pearling industry and the brought together by the past. The story begins with a poem in Arabic, which translates to, "Those without a past are without a present", this poem is used in the background while the user experiences Qatar skyscrapers and traditional boats on the Indian ocean. The story highlights how the discovery of oil in the 1940s led to the economic awakening in Qatar began while also transforming people's lives and, by 2018, became the world's wealthiest country with 2.7 million inhabitants. The EM content later invites the user to families of two yet vastly different generations of Qatari nationals who still practice in Qatar's pearling industry (which was the primary source of revenue for Qatar before oil was discovered). The user gets an opportunity to be in their living space, meet their family members, and also hear their stories told in Arabic with closed captions in English. The truly immersive experience we observed was when the two Qatari nationals venture into the ocean in search of pearls, where one Qatari national is seen practicing the traditional diving method and the other using a modern diving method to find pearls. The experience on board the sailboat and the experience underwater made the user feel the sense of presence, but mostly from the third-person perspective as an observer on the boat. The use of Arabian background music with ambiance sound, including the sounds of the wind on the sailboat, etc., added to the overall immersive experience. Only 3 DoF were observed in this immersive content. Despite the truly immersive experience offered by EM content, we observed only 180 views and 0 comments on the video as of October 30, 2021. This immersive content does not mention or include any information or visuals about Qatar as the host of FIFA World Cup 2022.

Qatar Airways YouTube Channel

Below are the findings for the three EM content productions identified from Qatar Airways YouTube Channel:

360° Tour of Doha's Hamad International Airport—Qatar Airways. As shown in **Figure 7**, Hamad International Airport, formerly known as Doha International Airport, is the only international airport located in Doha, the capital of Qatar. This 2:58 minutes long EM content is a first-person narrative in style, where the Qatar Airways staff welcomes the user and gives a guided tour of Hamad International Airport. The journey starts from the check-in hall and the staff asks the user to take a look upwards to admire the beauty of the artistic design of the roof of the international airport, which is inspired by the Waves of the Arabian Gulf. The staff later takes the user inside to the departure terminal, where Qatar museums have installed 20 tons weighing statue of a bear with a lamp made of cast bronze. The immersive experience made us feel like taking a selfie in this most photographed landmark tourist destination inside the Hamad International Airport. While experiencing the virtual journey featuring the business class lounge, we observed the Qatar Airways staff talking to the user directly with gestures, thereby creating a true sense of presence. The staff later takes the user on tour inside another lounge inspired by the Museum of Islamic Arts in Doha, Qatar. While the overall content only utilized 3 DoF, we observed the use of real footage and featuring real people inside the Hamad International Airport made the immersive experience feel like a real visit to the International Airport. However, we observed the lack of ambiance sound, which would have truly heightened the sense of presence if included. The content does not include any information or visuals about Qatar as the host of FIFA World Cup 2022. Meanwhile, the EM content had a total of 345,423 views and 102 comments as of October 30, 2021.

Take a 360° Tour of Qsuite—Qatar Airways New Business Class. As shown in **Figure 8**, this 1:09 minute duration EM content takes the user on an immersive journey into the business class of Qatar Airways. The EM content is in first-person perspective, and the user is given a tour of the airline's Q-Suite (i.e., new business class). In the opening of the content, the camera slowly moves to form the aisle toward the window seat of the plane, where a monitor is seen showing a welcome video, and the narration in the background gives info on a wide range of compatibility to digital devices provided by the airlines, along with each seat that includes ambient adjustable mood lighting. The content includes

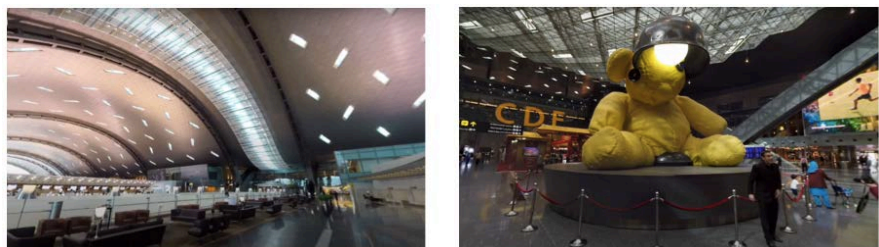


Figure 7. Screenshots from the Hamad International Airport EM content.

an artistically created visual representation of many features offered by the business class for a more extended flight journey. While the overall content only utilized 3 DOF, we observed a lack of ambiance sound and visual representation of passengers, which, if included, would have truly heightened the sense of presence.

Similar to Hamad International Airport, this Qatar Airways Q-Suite EM content does not mention or include any information or visuals about Qatar as a host of FIFA World Cup 2022. Meanwhile, the EM content had a total of 374,619 views and 94 comments as of October 30, 2021.

360°: *Dinner In The Sky—Qatar Airways at QIFF 2016*. As shown in **Figure 9**, this 1:09 minute EM content takes the user on an immersive journey to the Dinner in the Sky, a 22 seat Sky Table suspended 40 meters in the air in Doha, Qatar. The content uses a series of 360° photographs stitched together to create an immersive experience. The story is in third-person perspective, where people are having food, while the Sky Table offers a panoramic view of Doha, Qatar's capital. We observed latency in terms of one 360° photo to another; hence, we did not feel the sense of presence and the immersive qualities offered by EM. The content was also not interactive, though it did include 3DOF similar to other immersive content but lacked ambiance sound despite featuring real location and people. We also observed that the content tries to show how the Sky Table suspended in the air makes a slow descent but fails to create an immersive experience of the same.

This EM content does not mention or include any information or visuals about Qatar as the host of FIFA World Cup 2022. Meanwhile, the EM content had a total of 16,573 views and five comments as of October 30, 2021.

Themes identified from observations and memos are presented in **Table 4**.

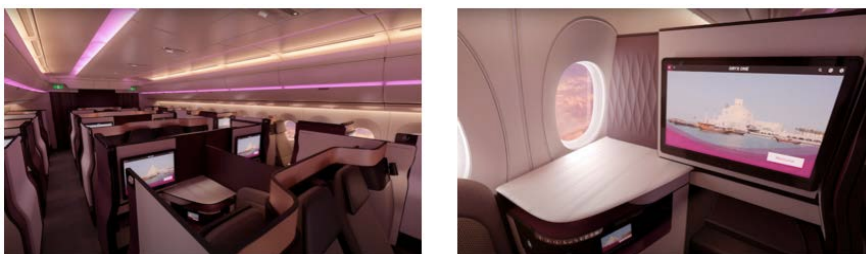


Figure 8. Screenshots from the Hamad International Airport EM content.

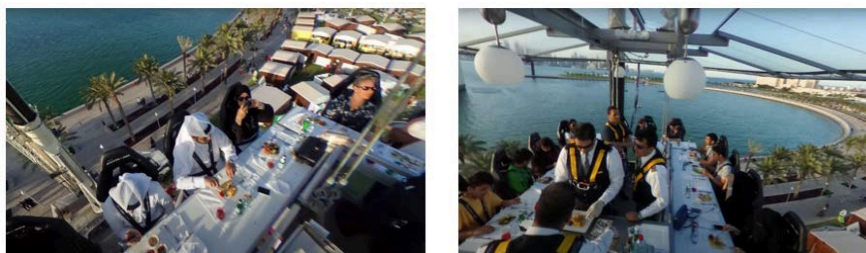


Figure 9. Screenshots from the Dinner in the Sky immersive experience.

4.5. Findings from the Analysis of Themes

The analysis of the themes as shown in **Table 4** and **Table 5**, the Road To 2022 EM content productions predominantly focuses on the stadium design that is futuristic and inspired by traditional Middle Eastern art. The themes resonated with the adoption of state-of-the-art technology in the stadium for a unique matchday experience during the FIFA World Cup 2022.

The themes from AJ Contrast predominantly focus on the traditional sports and lifestyle of Qatar. Some important themes include camel racing and pearl diving. The themes also included a wide range of topics, including robot jockeys, the discovery of oil, luxury housing, and lifestyle and luxury cars.

Table 4. Overall themes (grouped under 3 categories i.e., FIFA Stadium and Travel, Qatar History & Traditions, Technology) identified by observations and memos from all the nine EM content from Road to 2020, AJ Contrast and Qatar Airways YouTube Channels.

FIFA Stadium & Travel	Cutting-Edge Technology	Qatar History, Cultural Heritage & Traditions
Stadium Design, Futuristic Design, Player Facilities, Stadium Seating Capacity, Green Pitch, Hospitality, Green Spaces, Inclusive Environment, Luxury, Travel, Business Class, Space and Comfort, Tourism, Services and Features, Gym, Spa, Hotels, Restaurants	e-Ticketing, Virtual Shopping, e-food order service, Immersive, Holographic, Social Stadium, Wireless Technology, Live Player Data, Live Translation, Sporting Hub and Innovative Media, Lighting and Wireless technology, Racetrack, Robot Jockey, Innovative Suite, State of the Art Aviation Hub	Islamic Architecture, Façade Inspired by Traditional Middle Eastern Art, Traditional Lifestyle, Traditional Education, Traditional Entertainment, Camel Racing, Traditional Sports, Arabian Peninsula, Traditional Trade, Waves of the Arabian Gulf, Global Travelers, Museum of Islamic Arts, Poverty, Oil, Traditional Celebrations, Discovery of Oil, Economic Awakening, Change in Lifestyle, Wealthiest Country in the World, Traditional Houses Built of Gravel, Clay and Wood, Luxurious Housing, Pearl diving, Pearl Trading, Traditional Income, Gulf to India, Persia and Europe, Traditional Qataris, Modern diving, Younger Generations, Customs and Traditions, Heritage of the Sea.

Table 5. Different themes covered by the Road To 2022 compared to that of EM content posted on AJ Contrast and Qatar Airways YouTube channels.

Road To 2022	AJ Contrast	Qatar Airways
Infrastructure features, such as stadium design and Islamic Architecture; retail elements, such as e-ticketing; immersive and interactive features; player information, such as Live Player Data.	Traditional Qatari sports and culture, including Camel Racing, pearl diving; Qatar History; Accommodations in Qatar, including Luxury housing.	Features on airlines, including luxury seating and services (e.g., gourmet cuisine), and State of the Art Aviation Hub; Design Inspired by Museum of Islamic Arts; Duty-Free shopping.

The themes from Qatar Airways predominantly focus on luxury and long-distance travel. Other important themes focused on Hotels, Spa, Dining in Qatar and the state-of-the-art airports and their design inspired by the waves of the Arabian Gulf.

5. Discussion

5.1. Key Findings

This study is based on empirical observations from nine EM content productions identified from three Qatari based YouTube platforms, including: 1) the Road To 2022, the official YouTube Channel of Qatar's FIFA World Cup 2022; 2) Al Jazeera Contrast or AJ Contrast, a Digital division of Al Jazeera Media Network owned by Qatari Government; and 3) Qatar Airways, a Qatari government-owned flag carrier. This examination helps reveal the extent to which and how EM content productions utilize EM qualities and what themes such EM content productions feature, given Qatar as the host country of the upcoming FIFA World Cup in 2022. The study reveals three broad themes, namely FIFA stadium and travel, use of technology, and Qatar's history and traditions.

All of the EM content productions utilized only 3 DoF (i.e., the user can look about but not move about). The majority of the content productions lacked utilizing all of the six qualities of EM: 1) interactivity, 2) immersion, 3) multi-sensory presentation, 4) algorithm and data, 5) first-person perspective, and 6) natural user interface (Pavlik, 2018). Most used only limited interactivity, immersion, sight and sound (with limited haptics), and first-person perspective.

With regard to multisensory engagement utilized in all the nine EM content productions, since we experienced the content on Oculus Quest 2 HMD, the process of viewing the EM content involved the use of haptics-enabled controllers to pause, play, forward, rewind, etc., where the controllers made vibrations (i.e., send haptic feedback every time the controller buttons were triggered). The fact that Quest 2 has inbuilt speakers with 3D sound enhanced the overall immersive experience with a sense of multisensory engagement. This might not be an immersive experience for those who experience this EM content on smartphones or laptops. Overall, we observed that there was zero latency (i.e., no delay) in consumption of all the nine EM content productions. However, the observation showed no use of other sensory modalities such as gaze (eye-gaze-based interaction) or voice commands as use of natural user interface in all the nine EM content productions.

The findings from the analysis of themes show that Qatar could feature more content about its other traditional sports (which were not covered in the nine EM content productions), such as Arabian horse racing and falconry (Al Shaqab, 2021; Gulf Times, 2019). Qatar also has been the host to many other international sports, including basketball, cricket, golf, handball, motor racing, powerboating, etc., and these could be presented via EM platforms. With Qatar being the host of FIFA World Cup 2022 and the fact that it invites nearly half the

world's population, we contend there is an opportunity for Qatar to more fully utilize EM potential and use immersive platforms in order to also showcase its stories both about hosting and competing in past sporting events. The analysis of themes also showed that Qatar could present stories of its athletes through immersive VR experiences.

5.2. Theoretical Contributions and Managerial Implications

While a majority of the scholarly work outlined in our review of literature provides a deeper understanding (respondents' data analyzed using theoretical frameworks offered by various models such as TAM, VAM, PADM, UTAUT, etc.) on how users/travelers intend to adopt VR for virtual tourism to create memorable travel experiences, our research contributes to the literature on sports tourism, by adding theoretical discussions of the role EM play in the dynamic process of nation branding and destination marketing. Our research also provides practical and managerial implications for the tourism industry, sports tourism, and destination marketing. Using the experiential media (EM) model, we were able to take a qualitative content analysis approach to understand how and to what extent immersive content productions utilize experiential media qualities and highlight popular themes from such immersive content produced in a build-up to the mega-sporting event FIFA commencing in 2022 in Qatar.

While leisurely camel riding on the vast deserts is one of the popular tourism features in Qatar, considering the novelty of the COVID-19 pandemic and the fact that the World Health Organization (WHO, 2019) has issued warnings on dromedary camels, or Arabian camels as a major reservoir host for the Middle East Respiratory Syndrome Coronavirus (MERS-CoV), we propose a VR-based camel riding as an alternative tourism product. We would also like to highlight the marketing implications of "VR-based selfies/groupies with the football stars" and "football star locker rooms" in relation to athletic celebrity endorsement in sports marketing. In terms of the use of EM as a tool for "nation branding", we would like to highlight the observations from Lusail National Stadium where the EM content puts the user in a first-person perspective—as if the user is walking inside the stadium and exploring the architectural marvel where the stadium has a futuristic design, and yet it is inspired by the work of traditional Middle Eastern artisans; observing people taking a Holographic selfie with their favorite Football Player; and how individuals could try a football jersey of their favorite team on a virtual mirror for virtual shopping placed inside the stadium, shows not only how Qatar is building the most technologically advanced stadiums in the world to host FIFA World Cup 2022, but how EM can be used a tool to create and promote a distinct self-image and international recognition that serves Qatar's interest.

In view of the Qatar 2022 FIFA World Cup and the potential for VR tourism, we would also like to highlight findings from another study (Pavlik et al., 2021) that examined the usage of AR and VR in Qatar. The results of a nationally rep-

representative survey conducted in Qatar in the year 2020 provide clear evidence that Qataris and expatriate professionals alike have some awareness of and engagement with EM platforms, in particular AR and VR. The study also showed significant interest in and use of the EM (both AR and VR), and findings also show there has been an increase in EM use overall since the onset of the COVID-19 pandemic. In view of the above findings, we would also like to highlight the importance of inclusion of EM experiences on Qatar's popular travel destinations (as part of the Qatar 2022 narrative) such as Souq Waqif marketplace in Doha, Doha Corniche waterfront, EM experience on The Pearl-Qatar in Doha, an artificial island spanning nearly four-square kilometers, etc., all in line with COVID-19 and travel restrictions and considering EM's potential to take tourists on a virtual journey.

5.3. Theoretical Contributions and Managerial Implications *Limitations and Suggestions for Future Research*

Several limitations of the current research need to be discussed to provide directions for this line of future research. First, data triangulation through supplementary quantitative data collection (surveys and experiments among virtual tourists, actual tourists, and global consumers) will help replicate the current findings using multiple methodologies. Second, more sophisticated measures of the viewers' different types of feelings of presence (Jin, 2011) via self-report surveys and experiments will boost theoretical contributions of our work to the literature on presence. Furthermore, systematic examination of self-presence (the extent to which the virtual self is experienced as the actual self), social presence (the extent to which users feel as if they were actually co-present with virtual others, such as football stars in the relevant context of Qatar 2022), physical presence (the extent to which virtual objects were experienced as actual objects, such as virtual sportswear and products in sports marketing), and spatial presence (the extent to which consumers feel as if they were transported to the virtual space, such as Hamad International Airport and various football stadiums, in preparation for their visit to the host country) via self-report surveys will provide managerial implications for sports tourism and destination marketing. Also, measures of audiences' perception and evaluation of Qatar as a nation brand (e.g., brand personality and brand image) and consequent intention to visit/revisit Qatar before, during, and after the FIFA World Cup 2022 will empower us to test formal hypotheses about the relationship between VR/AR/MR and user experience (UX) outcomes in the relevant context of nation branding and destination marketing. Data collection among visitors to Qatar during the actual event "Qatar 2022" will provide valuable insights on real consumer experiences, virtual tourism management, and sports marketing. Third, experimental studies comparing UX after the exposure to the content delivered via AR/VR/MR (treatment condition) versus traditional media (comparison condition) will enable us to verify the causal effects of EM on the outcome variables relevant to sports tourism, destination marketing, and tourism management.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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