



Las Vegas Sphere: Technological Innovations that Bring Unforgettable Travel Experiences in the City of Neon Lights

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Abstract. This study aims to show that the uniqueness of Sphere lies not only in its size but also in the advanced technology that pushes it to new heights. Sphere promises sensations that overwhelm the senses for the audience. The integration of cutting-edge technology is not just a feature but an integral part of Sphere's identity, making it more than just a convention entertainment venue. Technology is advancing in this digital era. Technology also continues to develop, and new things or innovations always appear. Today's generation is very dependent on technology. Almost all aspects of this world, such as work, economy, politics, and entertainment, use various technologies. This study uses a literature approach to explore specific aspects of technological innovation in the tourism industry. The descriptive method is a conventional approach that involves searching and filtering literature relevant to the chosen topic. Overall, the Las Vegas Sphere provides a comprehensive and immersive tourist experience, combining high-quality entertainment with innovative technology and architectural design, making it a must-visit attraction in Las Vegas. The Las Vegas Sphere, as the latest innovation in the entertainment industry, has had a significant impact on the tourist experience in Las Vegas and changed the city's image associated with gambling, casinos, and betting.

Keywords: Las Vegas, Sphere, Tourism, Technology, Innovation

INTRODUCTION

The Las Vegas Sphere, or the MSG Sphere, is a multibillion-dollar entertainment venue that towers 366 feet (111 meters) and is located close to the Las Vegas Strip, adjacent to the Venetian and Palazzo resorts. It is the largest spherical structure in the world, with a capacity for 17,600 spectators and a surface area of approximately 220,000 square feet. Its enormous size demonstrates the prowess and scale desired by the entertainment industry, paving the way for a new era of immersive experiences for visitors and locals alike. The Sphere is expected to be a major attraction for tourists worldwide and offers a unique and unforgettable experience for music and entertainment enthusiasts.

This colossal structure is a physical marvel and architectural masterpiece and a testament to human innovation and toughness, representing an attempt to push the boundaries of what is possible. Equipped with state-of-the-art technology, it features a four-acre screen and 18,000 seats in 875,000

square feet of interior space. The venue is designed to host concerts, sporting events, movie premieres, and other productions and is expected to revive Las Vegas tourism.

The uniqueness of Sphere lies not only in its size but also in the advanced technology that pushes it to new heights. Sphere promises sensations that overwhelm the senses for the audience. The integration of cutting-edge technology is not just a feature but an integral part of Sphere's identity, making it more than just a conventional entertainment venue.



Figure 1. view of the Las Vegas Sphere in the city of Las Vegas
Source: [reviewjournal.com/entertainment/the-las-vegas-spheres-displays-so-far-photos-28051](https://www.reviewjournal.com/entertainment/the-las-vegas-spheres-displays-so-far-photos-28051)



Figure 2. Las Vegas Sphere forms emojis that attract tourists' attention
Source: [headtopics.com/us/long-awaited-las-vegas-sphere-set-to-open-with-u2-concert-45595](https://www.headtopics.com/us/long-awaited-las-vegas-sphere-set-to-open-with-u2-concert-45595)

With diversity in mind, MSG Sphere is designed to be a global event hub. It starts from holding thrilling concerts that reverberate with the rhythm of famous artists to hosting exciting matches, film premieres, and other spectacular productions. The Sphere is a multipurpose space ready to meet various entertainment needs. Its diversity ensures it remains a dynamic and ever-evolving venue, attracting a broad spectrum of audiences.

Beyond its architectural and technological sophistication, the Las Vegas Sphere supports the urban tourism industry. The Sphere is becoming a significant tourism attraction magnet today. The Sphere is anticipated to revive Las Vegas's entertainment scene and significantly contribute to the city's economic growth. The Las Vegas Sphere has several technological integration attractions that set it apart as a revolutionary entertainment venue, including the following:

1. The interior LED screen measures 160,000 square feet. Sphere features an interior LED screen field of 160,000 square feet, creating a visually stunning and dynamic environment for spectators.
2. They were leading audiovisual capabilities. The venue is equipped with advanced audiovisual capabilities, including interior LED screens with 16K resolution, speakers with beamforming and wave field synthesis technology, and 4D physical effects, providing a fully immersive experience for visitors.
3. Deep haptic technology. Sphere integrates immersive haptic technology and amplifier solutions, contributing to an immersive sound experience and enhancing visitors' overall experience.
4. Versatile studio. Sphere Studios, a spherical studio facility, uses a unique camera system to produce content and is a mini version of the Las Vegas Sphere, showcasing innovative technology and contributing to the immersive experience of the venue.

These technological features collectively position the Las Vegas Sphere as a cutting-edge entertainment venue, offering a fully immersive and unforgettable experience for visitors, as well as solidifying its status as the premier attraction in Las Vegas.

LITERATURE

Today, after the emergence of new media (read: internet), there is also a change in news/information acquisition consumption patterns. Initially, news/information sources were obtained through print media, such as newspapers and magazines, or electronic media, such as radio and television. However, since new media/internet, news/information seekers migrate media to new

media. With the principle of news presented more fluidly and dynamically by new media, it reflects current consumption patterns desired by the community (Wenerda, 2015).

Globalization is inevitable; it will occur and must be faced by the world community. A country must follow development for development to compete to be the most advanced. Globalization can force every country to open up in every line of life, namely the political, economic, social, cultural, scientific, and technological fields (IPTEKS). Technological advances today have integrated with people's lives, and their influence from time to time varies based on their sophistication so that all events that occur in this world or any information are directly spread through the internet without borders.(Suci Rahayu Rais et al., 2018).

Technology is advancing in this digital era. Technology also continues to develop, and new things or innovations always appear. Today's generation is very dependent on technology. Almost all aspects of this world, such as work, economy, politics, and entertainment, use various technologies. Needs such as digital marketing, advertising, and promotion are now relying on the technological greatness of Edelman Heller. Examples include the use of social media for product sales, the use of ad advertising (retail), the introduction of individuals or companies, and others (Michael et al., 2020).

METHOD

This study used a literature-based approach to explore specific aspects of technological innovation in the tourism industry. The descriptive method is a conventional approach that involves searching and filtering literature relevant to the chosen topic. A literature review is a foundation for research activities, providing a comprehensive overview of theories, findings, and other research materials obtained from various reference sources. The review includes the author's evaluation, summary, and reflection on various library sources, such as articles, books, slides, and online information pertaining to the subject at hand. Theoretical foundations, theoretical reviews, and literature reviews are some approaches that can be adopted to conduct a literature review.

DISCUSSION

For tourists, the Sphere offers more than just entertainment venues that promise an immersive and unforgettable experience. Whether you are watching a revolutionary concert, attending an exciting sporting event, or being blown away by a movie premiere, visitors are most likely to be blown away by the scale and innovation embodied within the walls of the Sphere. The Las Vegas Ball is also used in the Formula 1 Las Vegas Grand Prix to enhance the racing experience and provide dynamic content for spectators.

In this prestigious car racing event, MSG Sphere is used to support the running of this event with the following:

- a. Content display. Sphere will display real-time positions, driver details, and advertisements during F1. Las Vegas Grand Prix. The exterior LED display, the Exosphere, will feature custom racing content, including dynamic racer cards, real-time pole positions, and custom podium graphics. This creates an engaging visual experience for fans in attendance and spectators worldwide.
- b. Live content. Content created exclusively by Sphere Studios will be shown live throughout the race weekend, including real-time pole positioning and custom podium moments to celebrate race winners. This display of live content marks a significant use of Sphere in a live sports environment.
- c. They enhanced the racing experience. The Sphere's dynamic visuals and engaging content are expected to enhance the racing experience, making each round an enthralling experience for fans in attendance and spectators worldwide.



Figure 3. Las Vegas Sphere used in F1 Race events

Source: <https://ftw.usatoday.com/lists/f1-las-vegas-sphere-photos-practice>



Figure 4. Las Vegas Sphere welcomes F1 spectators
Source: <https://www.redbull.com/us-en/las-vegas-grand-prix-need-to-know>

This Digital Innovation of the Las Vegas Sphere is expected to impact the city's tourism landscape significantly. Sphere is designed as a next-generation entertainment venue utilizing cutting-edge technology to provide visitors with a unique experience. Immersive performances, concerts, and events, combined with cutting-edge design and leading-edge audiovisual capabilities, are believed to revolutionize the entertainment industry and offer a fully immersive experience for visitors.

In addition, Sphere's impact on the local economy, job creation, and its potential to become a hub of innovation and technology further confirms its significance in shaping the urban travel experience. The digitization of the Las Vegas Sphere is expected to redefine the entertainment landscape, offering modern and innovative attractions that complement the traditional offerings associated with Las Vegas.

Digital intervention in this context of the Las Vegas Sphere created the Las Vegas tourism scene, traditionally associated with casinos, betting, and gambling, representing a significant shift in the entertainment landscape of this city. Las Vegas has long been renowned as a global gambling hub, and the Sphere's development introduced a new dimension to the city's offerings. The forms of intervention include the following:

- 1) Diversify entertainment. The main impact of the Las Vegas Sphere has been the diversification of entertainment options in the city. Historically, Las Vegas was synonymous with casinos and gambling. However, Sphere, a cutting-edge entertainment venue, expands

the spectrum by offering immersive shows, concerts, and events beyond the traditional casino experience.

- 2) Attract a wider audience. While casinos appeal to a specific demographic, Sphere's diverse entertainment offerings aim to appeal to a broader audience. This can attract visitors who may not be primarily interested in gambling, thereby expanding the city's appeal to a more diverse tourist base.
- 3) Global appeal. The Sphere's cutting-edge technology and potential to stage major events and shows are expected to attract attention globally. This can position Las Vegas as a destination for gambling enthusiasts and those looking for a world-class entertainment experience.
- 4) Economic impact. The development of the Sphere is likely to have a substantial economic impact on the local economy. Beyond revenue generated directly from venues, increased tourism and diverse entertainment options can contribute to job creation and stimulate economic growth in sectors beyond the traditional game.
- 5) Innovation and technology center. Featuring its advanced technology, Sphere has the potential to become a hub for innovation and technology in the entertainment industry. This aspect aligns with the broader trend to embrace technology across multiple sectors, contributing to Las Vegas' image as a city at the forefront of entertainment innovation.



Figure 5. First Concert at Las Vegas Sphere

Source: <https://edm.com/events/watch-mind-blowing-footage-first-concert-vegas-sphere-u2>

In addition, the Las Vegas Sphere also helps improve the tourist experience that comes to Las Vegas with the digital integration it uses. Some of these unique features have enhanced the tourist experience. Thus, the digitization of the Las Vegas Sphere has changed how we view entertainment and opened the door to a more diverse and immersive travel experience in Las Vegas, making it a premier destination for those seeking thrill and innovation in one comprehensive package. Las Vegas also offers a unique and immersive tourist experience, from concerts inside the building to seeing architectural wonders outside. If viewed from the attraction's location, it will be divided into two: from the outside and the inside. Here are the attractions of the Sphere based on its visual location.



Figure 6. Concerts at Las Vegas Sphere

Source. <https://www.barrons.com/visual-stories/sphere-las-vegas-u2-concert-live-257b808b>

When viewed from within the Sphere, the attractions that enhance the tourist experience are as follows.

- (a) Concert. Sphere hosts live concerts, providing an unparalleled experience for music and entertainment fans. The venue is designed to offer an intimate setting for performers and fans, with a seating capacity of approximately 18,000 people and standing seating for 20,000.
- (b) They were leading audiovisual capabilities. Sphere's advanced technology, including a massive LED display field, immersive haptic technology, and interactive humanoid robots, enhances the concert experience for visitors.

- (c) Innovative program. In addition to live concerts, the Sphere is designed to host various programs, such as movie screenings, sporting events, and cultural experiences, offering various entertainment options for visitors.

When viewed from outside the Sphere, the attractions that enhance the tourist experience are as follows.

- (1) Architectural wonders. The Sphere's unique spherical design, standing 366 feet tall and 516 feet wide, is a dazzling addition to the Las Vegas skyline, making it a popular tourist attraction.
- (2) Exterior LED display. The Sphere's exterior LED display, the Exosphere, displays dynamic content, including real-time pole positioning, custom podium moments, and promotional ads for upcoming events.
- (3) Artificial intelligence robots. Visitors to the Sphere are greeted by five humanoid robots activated by an artificial intelligence named Aura, which tells the history of humanity and innovation, reaching the top with the sighting of the Sphere.

CONCLUSION

Overall, the Las Vegas Sphere provides a comprehensive and immersive tourist experience, combining high-quality entertainment with innovative technology and architectural design, making it a must-visit attraction in Las Vegas. The Las Vegas Sphere, as the latest innovation in the entertainment industry, has had a significant impact on the tourist experience in Las Vegas and changed the city's image associated with gambling, casinos, and betting.

With its unique features, the Sphere has become a significant player in the entertainment industry and a major attraction for tourists in Las Vegas. The Sphere's versatile capabilities, designed to stage various events, including concerts, sporting events, and corporate events, are expected to attract big names in the entertainment industry and become a significant tourist attraction in Las Vegas. This diversification of entertainment offerings has the potential to complement the city's traditional gambling attractions, presenting a modern and innovative venue that provides a fully immersive experience to visitors.

Sphere's impact on the local economy, job creation, and its potential to attract a diverse audience beyond conventional casino visitors confirms its potential to reshape the city's tourism landscape. Thus, technological intervention in tourism, especially in the context of the MSG Sphere, can increase the tourist experience and diversify a tourism product.

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