




## BRIEF COMMUNICATION

# A Brief communication on Virtual Reality (VR) in Hospitality Industry & Global Travel and Tourism

## Breve comunicación sobre la realidad virtual (RV) en el sector de la hostelería y los viajes y el turismo mundial

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### ABSTRACT

Virtual reality is now being utilised to improve the travel experience by offering extra marketing tools to destinations, attractions, and companies, altering customer experiences, and creating a new tourism paradigm. Our work was inspired by a rapidly changing world in which virtual reality is gradually becoming the norm in which we live, work, and play. These technologies are always improving, posing new problems to tourist and hospitality management. As the VR literature grows, there is an urgent need to synthesise existing information in the area. To address this difficulty, we conducted a systematic evaluation of 54 publications on virtual reality published in high-quality journals. The findings synthesise existing knowledge for research and managerial decisions. Our evaluation also identifies prospective research streams and important management consequences on a nine-step customer experience in anticipation of the increasing use of virtual reality in the field.

**Keywords:** Virtual Reality; Hospitality Industry; Travel and Tourism; Changing World.

### RESUMEN

La realidad virtual se está utilizando actualmente para mejorar la experiencia de los viajes, ofreciendo herramientas de marketing adicionales a destinos, atracciones y empresas, alterando las experiencias de los clientes y creando un nuevo paradigma turístico. Nuestro trabajo se inspira en un mundo en rápida evolución en el que la realidad virtual se está convirtiendo poco a poco en la norma en la que vivimos, trabajamos y jugamos. Estas tecnologías mejoran constantemente y plantean nuevos problemas a la gestión del turismo y la hostelería. A medida que aumenta la bibliografía sobre la RV, se hace urgente sintetizar la información existente en la materia. Para abordar esta dificultad, realizamos una evaluación sistemática de 54 publicaciones sobre realidad virtual publicadas en revistas de alta calidad. Los resultados sintetizan los conocimientos existentes para la investigación y la toma de decisiones de gestión. Nuestra evaluación también identifica corrientes de investigación prospectivas e importantes consecuencias para la gestión sobre una experiencia del cliente en nueve pasos, en previsión del creciente uso de la realidad virtual en este campo.

**Palabras clave:** Realidad Virtual; Hostelería; Viajes y Turismo; Mundo Cambiante.

## INTRODUCTION

Virtual technology is recognised as a potent marketing tool for hospitality and tourism (Huang et al., 2016), since it offers travellers new and enhanced experiences (D. I. D. Han et al., 2019). Virtual technology encompasses virtual reality (VR), augmented reality (AR), and mixed reality (MR). VR with a head-mounted device (HMD) offers the unique capability of providing consumers with an immersive experience (Wei, 2019). AR is the superposition of a composite picture over actual photos to improve the information gained by users (T. H. Jung et al., 2018). MR integrates the real and virtual worlds to create experiences that involve both physical and digital interactions (De Souza & Sutko, 2009). Talwar et al. describe virtual tourism as a new type of tourism which can generate economic benefits for the tourist sector. The virtual economy has had a 20-fold increase in income over the previous 5 years (Talaubieke et al., 2021). The COVID-19 pandemic has impacted the growth of virtual tourism (W. J. Lee & Kim, 2021). The value of virtual reality tourism is anticipated to reach USD 49,7 billion by 2023, up from USD 3,13 billion in 2018. Many studies on different types of virtual technologies have lately been undertaken in various study settings in hospitality and tourism, but a systematic literature review is required to provide a comprehensive overview of the uses and implications of virtual technologies in this industry.

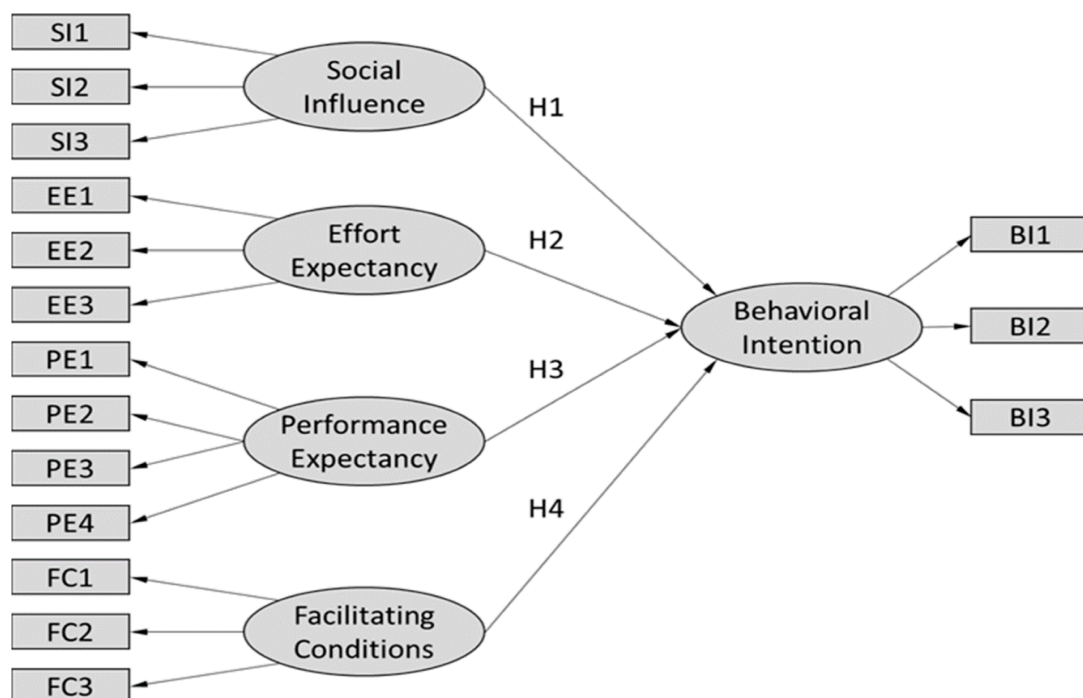


Figure 1. Proposed research model by Oncioiu et al.  
Source: <https://www.mdpi.com/2071-1050/14/7/4191>

## VR Definition

Mandal (2013, p.304) defines virtual reality as a technology that allows users to engage with computer-simulated environments, whether real or fictitious. This signifies that.

Any environment may be mimicked, including a hotel and its amenities. Operators can customise user experiences and modify their position from bystander to participation based on their actions (Riva, 2006). Farshid et al. (2018) suggest that people can roam around, conduct housework, and explore various places. Achieving this experience requires appropriate hardware and software. The Virtual Reality beginning bundle contains VR goggles. VR requires a headgear, a camera for movement tracking, and a compatible device such as a PC, laptop, or PlayStation (Nowag, 2020).

## VR Examples in the Real World

Virtual Reality has become a common tool in modern technology. Experts first identified VR's promise in gaming, but it has now become a valuable tool in other businesses (Zobel et al., 2018). One of the benefits of VR technology is its application in planning and management. VR technology can benefit both architects and customers by allowing them to visualise the space and make changes before the project begins (Heldal, 2007). VR is a popular technology in the entertainment sector for improving client experiences.

### VR in Hotel industry

VR in the hotel business offers several perks and advantages. Many hotels now provide virtual reality tours of their facilities on their websites to attract clients, as they are more appealing than traditional ads (Wan et al., 2007). Virtual reality can assist tourists overcome uncertainties and lack of understanding about their journey, destination, and accommodations (Lee & Oh, 2007). VR can help with travel planning as well as anxiety reduction. Pestek and Sarvan (2021) suggest that finding suitable accommodations might also aid in selecting destinations and tourism attractions. Amadeus is one of the world's major global distribution systems (GDS).

### Literature Review

**Table 1.** Empirical study on the application of virtual reality in tourism and hospitality (2016-2019)

Study	Research context	Key findings
Tussyadiah (2016)	Virtual destinations	Congruence between images held and stimuli presented in virtual reality influences spatial presence in virtual reality. A certain level of presence is necessary to support the persuasive power of virtual reality.
Jung et al. (2016)	Application of mixed augmented reality and virtual reality in museum	Social presence in mixed augmented reality and virtual reality has a positive effect on visitor's experiences.
Jung et al. (2018)	Application of virtual reality and other technologies at cultural heritage places	Usability, requirements, involvement, experience realism, and impression constitute the virtual reality experience. Positive attitude towards the use of virtual tourism increases immersed experience, which leads to greater visit intention.
Tussyadiah, Wang, and Jia (2017)	Virtual destinations	Attention in virtual reality experience increases perceived presence.
Marchiori et al. (2017),	Virtual destinations	The characteristic of proposing an unusual horizon perceptive in virtual has the potential to lead to strong memories.
Griffin et al. (2017)	Virtual destinations	When a destination is promoted through virtual reality rather than static photos or videos, consumer intention to share their experience and to recommend the destination is greater.
Disztinger et al. (2017)	Google street view for holiday destinations	Perceived immersion, interest, perceived enjoyment and perceived usefulness have a significant effect on the intention to use virtual reality for travel planning.
Beck and Egger (2018)	Destination virtual reality marketing video	Relevant virtual reality content positively influences emotions and decision-making.
Rainoldi et al. (2018)	Destination virtual reality marketing video	Compared to a traditional brochure, virtual reality enables a greater degree of interactivity that generates a stronger sense of "being there".
Tussyadiah et al. (2018)	Virtual reality city tours and tourism destination.	The feeling of being present increases the enjoyment of virtual reality experience and liking of the destination, and the positive attitude change leads to a higher level of visit intention.
Tom Dieck et al. (2018)	Virtual national park experience	The usability, hedonic benefits, emotional benefits, social benefits and attitude influence behavioral intention.
Kim et al. (2019)	Virtual reality tourism in general	Attachment to virtual reality, cognitive and affective response influence visit intention.
Flavián et al. (2019)	Tourism (city, nature, adventure)	The embodiment of virtual reality influences tourist engagement and behavior intention via immersion and

**Source:** <https://durham-repository.worktribe.com/output/1274672/when-online-reviews-meet-virtual-reality-effects-on-consumer-hotel-booking>

### Virtual Reality (VR) in Hospitality

Virtual reality in the hospitality business transforms visitor experiences by providing immersive previews of locations and lodgings. This technology is critical for increasing marketing and consumer engagement, providing a realistic impression of the offers before a physical visit, and assisting in planning and decision-making for potential travellers.

According to Fact.MR's Virtual Reality industry Report, the worldwide virtual reality industry is expected to develop at a 26 % CAGR through 2033. Virtual reality has been around since at least the 1930s. Nonetheless, high-quality virtual reality headsets have only lately become a popular consumer product, thanks in large part to increasing investment from Google, Facebook, and Samsung.

### Reasons for the Virtual Reality Hospitality Industry's Growth and Importance

While many current virtual reality apps are designed for entertainment purposes, companies are rapidly realising the potential of VR as a marketing tool. VR provides crucial information to potential clients in an engaging and sensory-stimulating format. VR has proven especially essential in the hospitality business, because the average client needs a lot of information before booking a hotel room. Rather than reading through descriptions that may or may not be reliable, VR allows buyers to experience things firsthand. Pentoz's AR/VR In the Hospitality Market Report predicts that the worldwide Hospitality AR/VR market would grow at a 30 % CAGR until 2028.

### Examples of How to Use VR in the Hospitality Industry

The true potential of virtual reality in the hotel business has only just been realised. Nonetheless, three of the most effective contemporary applications of the technology are listed below:

1. **Virtual Travel Experiences.** One of the most popular applications of virtual reality in the hotel industry to far has been the creation of virtual travel experiences utilising 360-degree video technology. Users may experience a virtual reproduction of many parts of travel, from the flight to arriving at some of the most important landmarks.
2. **Virtual Hotel Tours.** Another popular application of virtual reality technology in the hotel business is virtual reality hotel tours. These tours can be made available on hotel websites, letting visitors or potential guests to view their hotel room or other hotel areas prior to booking or arrival. While these tours are best enjoyed with a VR headset, they may also be made available to individuals who do not have one through social media platforms such as Facebook, which uses 360 video technology.
3. **VR Training.** Virtual reality hospitality sector training is transforming the way employees develop their talents. Modern hotels are using virtual reality (VR) to replace or complement traditional training programmes with innovative simulations. For example, one simulation allows trainees to practise choosing a room and checking in a virtual visitor. Trainees may hone their housekeeping skills in realistic virtual environments and acquire useful insights by interacting with lifelike avatars. VR enables trainees to learn from mistakes, even major ones, without fear of real-world consequences. This increases confidence and allows learners to hone their abilities before using them in the real world.



**Figure 2 .** Examples of How to Use VR in the Hospitality Industry

Source: <https://www.linkedin.com/pulse/using-virtual-reality-tool-help-hotels-compete-airbnb-femi-itiola/>

### Virtual staff training for hotels

One of the most innovative ways VR is being utilised in the hotel sector is to give a new type of staff training. Employee training programmes offered using VR headsets enable hotels to teach new employees or upskill current ones in critical areas such as customer service, dispute resolution, safety protocols, and emergency response.



VR training is especially beneficial for refining and improving soft skills since it allows employees to exercise abilities like active listening or conflict resolution in a safe and controlled setting where their reactions to a scenario can be evaluated and practised. This has been shown to eventually result in improved outcomes for both visitors and workers.

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## **CONFLICT OF INTEREST**

The authors declare that there is no conflict of interest.

## **AUTHORSHIP CONTRIBUTION**

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