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Mixed Reality Drama Towards Metaverse Technology in Smart Hotels an Exploratory Study on Egyptian Hotels Evidence from Guests' Perspectives

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Abstract

Once hotels use modern technology techniques, they will face different reaction concerns and questions from guests about this modern technology. This research aims to explore the extent of awareness and acceptance of guests in Egyptian hotels and their willingness to experience the Metaverse technology within Egyptian hotels and the challenges they face while using it, To achieve the research aim, an electronic questionnaire was designed and distributed to a random sample of guests in Egyptian hotels, 410 valid responses were received and analyzed by SPSS V.28. The results indicated that Egyptian guests do not have enough information about Metaverse technology to accept the experience of Metaverse technology in the future. This information includes advantages, risks, and to the cost factor of Metaverse technology, Therefore, maybe guests' acceptance and confidence in Metaverse technology is the major obstacles to the marketing process of this modern technology in Egyptian hotels. Based on the results, some recommendations were suggested and directed to artificial intelligence techniques (AIT) professionals, hotel managers, hotels owners and the government and institutions responsible for revitalizing tourism and hotels in Egypt. One of the main recommendations was that Providing the necessary infrastructure for the application of Metaverse technology through the conclusion of many agreements between hotels, government and artificial intelligence companies to properly apply Metaverse technology, providing devices for the application of Metaverse technology.

1. Introduction

According to **Bolar (2022),** the term "Metaverse" became popular worldwide in late 2021 when Facebook announced its name change to Meta. The metaverse is basically a term used to describe the digital or virtual world, which allows for social interactions, often using an avatar. The leading technologies associated with the idea of the metaverse technology are virtual and augmented reality, but video game hardware and blockchain technology can also play a role **(Kraus *et al.*, 2022; Huang, 2023)**. When companies, marketers, and tech experts talk about the metaverse, they tend to envision a digital environment where people can

interact with other people from all over the world. These social interactions in the digital sphere can also provide opportunities for e-commerce or guest experiences, including the creation of metaverse hotels. It is one of the main challenges in the field of hospitality in meeting the expectations and desires of guests on a continuous and evolving basis. Starting from the reservation process and unique accommodation experiences along with recreational activities, there is a great demand for a different and unique experience. As many of today's travelers are tech-savvy, the metaverse could transform the hospitality industry and redefine the smart guest experience (**Filimonau *et al.*, 2022; Ghare, 2022; Zhu, 2022**).

The research's problem is to explore the attitudes of guests' perspectives to use Metaverse technology in smart hotels, studying the challenges that prevent the organizational application of artificial intelligence and Metaverse technology in the smart hotels in the study community and raising awareness among guests to apply smart techniques in all its forms to most of the hotel services provided in the smart hotels. The opinion of hotel guests is important when making decisions to introduce Metaverse technology into hotel services. When they do not see the advantages of using Metaverse technology in Egyptian hotels, this is an obstacle towards its application. Therefore, the application of mixed reality and Metaverse technology in hotels is very important to increase the awareness about guests of its benefits **(Han *et al.*, 2022; Huynh-The *et al.*, 2022; Park and Kim 2022)**. Accordingly, the research aims to exploration the doubts, questions and challenges that the guest needs to know about this smart technology, and the acceptance of guests to Metaverse Technology in Egyptian hotels. This study focuses on increasing guests' awareness of Metaverse Technology and their acceptance and conviction of the modern technology and their desire to try it after adding new information about this technology.

Research Hypotheses

The research the explored while studying the metaverse technology *"Hybrid Reality Drama"* in smart hotels, that guest awareness has an informational effect and contributes to the acceptance of metaverse technology by guests in hotels. The research hypotheses can be suggested as follows:

Hypothesis1: There is a significant Impact of adopting metaverse technology in smart hotels of guests' acceptance (about "H. 1.1" guests awareness of metaverse technology , "H. 1.2" guests acceptance of metaverse technology, "H. 1.3" challenges facing guests to accept Metaverse technology) on guests' Perspectives in hotels.

Hypothesis 2: There are significant differences between the acceptance of guests' of metaverse technology according to demographical data ("H 2.1" Gender, "H 2.2" Age, "H 2.3" Educational level, "H 2.4"Monthly Income, "H 2.5" Marital Status, "H 2.6" Nationality, and "H 2.7" Frequency of Residence).

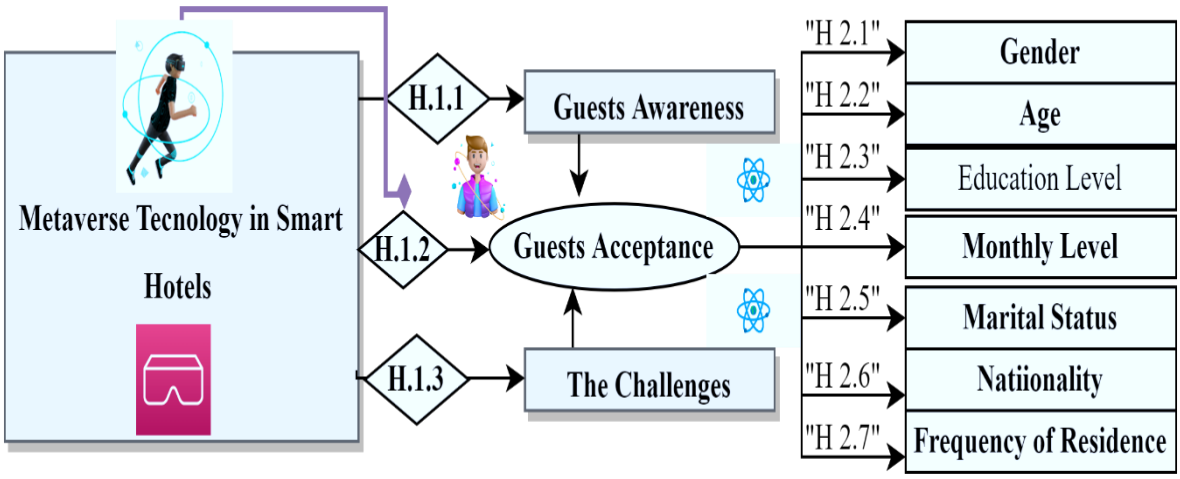

Figure 1: The Proposed Research Framework and Hypotheses

Literature review

Mixed Reality Drama Towards Metaverse Technology in Hotels Industry:

There are many advances in technology that allow Process drama to be shown in the virtual space. the virtual drama (the hybrid that mixes virtual and augmented reality) has stimulating effects for guests due to its success in attracting guests to visit hotels that apply Metaverse technology, which will create a smart entertainment experience for hotel guests (**El-Nasr *et al.*, 2008; Balfour *et al.*, 2022; Kamilia *et al.*, 2022; Trunfio, and Simona 2022)**.

Metaverse is defined *as a network of digital spaces used to describe the digital or virtual world, which allows the creation of interactions and social adventures for guests in a three-dimensional environment, often using an "Avatar" by means of sensors to control movement to interact with different objects in the world. The leading technologies associated with the idea of "Metaverse" are virtual reality, augmented reality, and mixed reality that called hybrid reality because it combines virtual and augmented reality*. Video game devices and cryptocurrency technology Bitcoin "*Blockchain*" can also play a role to facilitate payment for Online Metaverse Services. Metaverse can transform the hotel industry and redefine the smart guest experience **(Gadekallu *et al.*, 2022; Hee-Seog *et al.*, 2022 ;Huang, 2023)**.

According to **Buhalis, and Karatay (2022)**, Mixed Reality (*MR*) describes a very realistic augmentation of the real world for users. It is so realistic that users cannot distinguish virtual content from physical objects, providing a seamless experience between real and digitally constructed environments. *MR* requires special hardware, such as smart glasses, where the lenses are replaced by transparent screens and contain multiple sensors to track the user's environment. *MR* devices seamlessly integrate and merge realistic-looking 3D content into the user's physical environment. Microsoft's "*HoloLens 2*" device is an example of such technology. As nanotechnology develops these machines can be reduced in size and increased in power. Future devices therefore will offer even more realistic experiences using more ergonomic glasses (**Rauschnabel, 2022**).

Mixed Reality (*MR*) is becoming more popular, primarily in cocreating cultural heritage (**Yung, and Khoo-Lattimore, 2017; Han *et al.*, 2019**) and tourism experiences. MR can help revolutionize visitor interaction and satisfaction by providing information to educate and animate experiences (**Kaplan *et al.*, 2016**). AR/VR/MR/Metaverse are all equally fascinating platforms with the primary goal to digitize space for human experiences **Fig.2** (**Buhalis, and Karatay 2022)**. However, each has their own unique qualities and make distinctive contributions. The main distinction is that VR users get a completely immersive digital space, and they don't have the ability to see the real world when using *VR* sets, *AR* users have digital features added to their actual experience of the real world **(Han *et al.*, 2022)**. Users can explore *AR* possibilities at a destination by experiencing augmented destination features through their devices. Pokémon GO is the most well-established AR application that was used widely when users were invited to overcome challenges, catch Pokémon, and forge friendships through playing in real environments. However. *AR* may conflict with experiencing the destination freely. *" Generation Z"* customers, who are keen on using *AR*, most likely give up the AR opportunity, to avoid the technology overuse and see everything by their own. In the same way that *AR* projects 3D visual files that is spatially conscious and sensitive, *MR* does the same with 3D visual files **(Milgram, and Kishino,1994**). The MR has the capability to transpose digital data on real items and environments (**Chung *et al.*, 2015**). Hence, physical objects can be brought into a simulated universe or virtual objects can be brought into reality (**Olsson *et al.*, 2012; Godovykh *et al.*, 2022**).

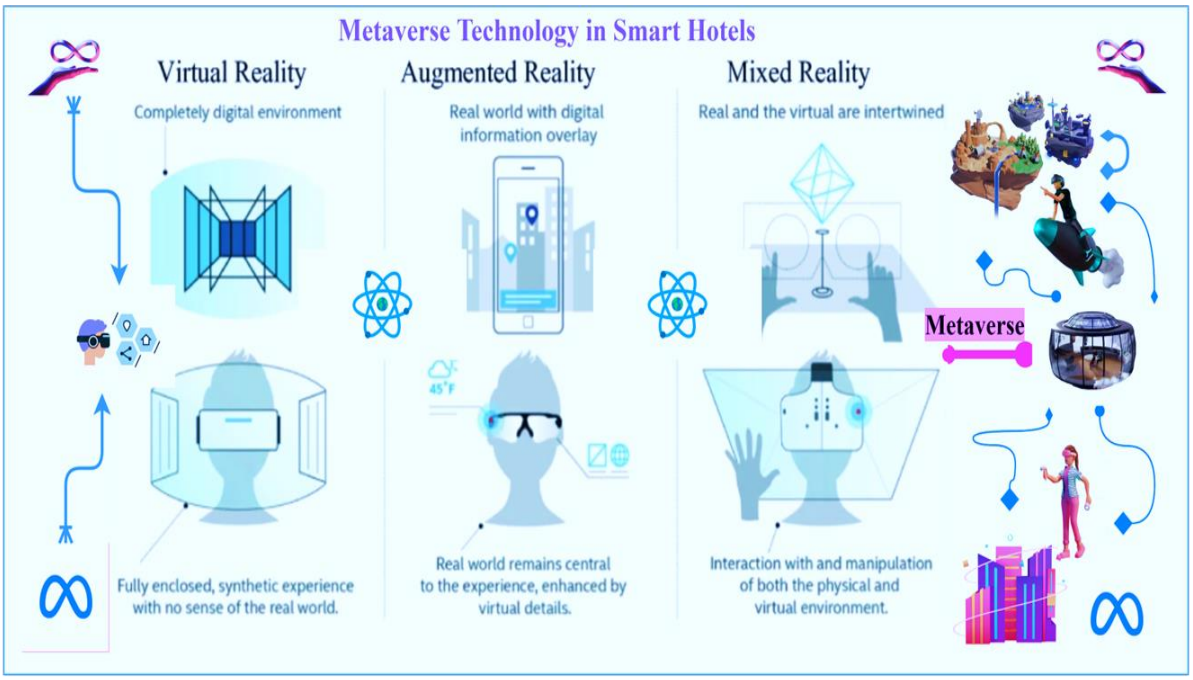

Figure (2): Metaverse Technology in Smart Hotels.
Source: Developed by the Researchers based on (**Buhalis, and Karatay 2022).**

According to **Chiappa (2022),** The hotel industry is an information-intensive sector. Enhancing cultural heritage sites with immersive MR experiences adds value to the entire customer engagement, particularly in conjunction with customization based on the preference of every customer. MR encourages users to experience and interact with hotel services whilst

in the real world by integrating engaging ways of narrative to involve guests. It supports the integration of physical and digital displays by projecting digital information in real environments and by displaying items with no material availability, Immersive and holographic interfaces have a wider variety of applications in mixed reality **(Buhalis *et al.*, 2022)**.

Metaverse Technology in Smart Hotels

According to **April (2022),** "Smart Hotels" refers to a "smart" world where hotels incorporate the latest technology to meet the desires of their guests, Smart hotels provide guests with an innovative technology-first approach, addressing the way we live today and our high digital expectations. Accordingly, smart hotels have integrated robots and smart techniques into their business operations to take advantage of artificial intelligence techniques such as Robots, drones, Chat bots, extended reality, smart Room, digital kiosks, wrists band, virtual reality, augmented reality, mixed reality, metaverse) to attract guests and find solutions to guests problems **(Ercan, 2019; Buhalis *et al.*, 2022; Kohli *et al.*, 2022)**.

Hotels must manage an entirely new set of products and services if the hotel metaverse is adopted **(Bolar, 2022)**. "*PMS*" is a property management system that in the future will be completely open and flexible cloud specification, based on open application programming interfaces "*APIs*" **(Um *et al.*, 2022)**. However, it is better to stay away, because any simple change will be difficult, time-consuming, and possibly cost a fortune (**Doppler,2022**). Typically, the guest experience begins with a search for a place to stay, and if the metaverse is approved, the hotel reservation process may move using the metaverse (**Revfine, 2022**).

customers can obtain basic information about their room reservation, such as room size, price, and features, as they do now, but travelers can also experience 3D virtual tours of hotels, Travelers can morph into digital avatars and virtually walk-through hotel or resort property prior to check-in. 3D Street View can give travelers a first-hand immersive experience of hotel rooms, décor, and amenities that still images can't provide, A 3D hotel tour can give guests a sense of confidence in making their hotel decisions and increase live booking rates. Since guest satisfaction is the measure of success for any hotelier, leveraging the metaverse to provide an interactive hotel room experience or an authentic local and cultural experience can tip the scales in your favor, this level of service can put you ahead of your competition and give your guests control over their next trips (**Ghare,2022**; **Robinson, 2022**).

Guests Awareness of Metaverse Technology in Egyptian Hotels

Digitization enables the realization of resilient infrastructure in every smart technology To achieve e-sustainability In the context of the hotel business, a resilient infrastructure based on smart technologies is crucial to obtaining the best guest feedback on providing quality service **(Narayan *et al.*, 2022; Poulova *et al.*, 2022)**. Metaverse technology has already proven to enhance hospitality services with smart decisions through real-time data, which requires educating guests in hotels about the importance of metaverse technology **(Anderson and Rainie, 2022)**. Metaverse technology enhances the hotel reservation and tour process by using

a digital avatar for a potential guest to conduct a virtual tour of the hotel before making a reservation decision **(Han *et al.,* 2022)**. Metaverse technology allows potential hotel guests to enter a hotel so they can get to know the features of the room they want to stay in just like the real thing **(Hee-Seog *et al.,* 2022)**. Metaverse technology enhances brand awareness of global hotel chains and excites hotel loyalty programs for guests **(Patil *et al.,* 2022)**. Metaverse technology improves the guest experience at all stages of the guest lifecycle **(Golf-Papez *et al.,* 2022).** Metaverse technology helps improve business operations and increase hotel stay rates **(Revfine, 2022)**. Metaverse technology can allow guests to fully explore menus and how different dishes are prepared before deciding to order food **(Buhalis *et al.,* 2022)**. Metaverse technology provides guests with access to virtual spaces, allowing them to host virtual birthday celebrations, hold virtual business meetings, or attend virtual concer **(Choi and Kims, 2017)**. Metaverse technology helps guests experience exciting and expensive rides such as rollercoasters **(Bibri, 2022)**. Metaverse technology can defy the laws of the natural world and enable virtual and augmented experiences for hotel guests such as "*walking on the moon or Mars*" **(Revfine, 2022; Suanpang *et al.,* 2022)**.

According to **Gursoy *et al.,* (2022),** Metaverse technology supports 3D virtual space *(Three-dimensional hologram -3DHT)* that makes fantasy fans visit mixed reality destinations in the world of dinosaurs. Metaverse technology supports the provision of all hotel services in exchange for cryptocurrency payments such as Blockchain **(Gadekallu *et al.,* 2022; Wei, 2022)**. Metaverse technology and intelligent mixed reality help improve personalized guest service online, right down to analyzing their data **(Ghare, 2022)**. Metaverse technology can turn guests into digital avatars and virtually take a 3D tour of a resort or hotel and experience how they look and feel **(Dionisio *et al.,* 2022)**. Metaverse technology can keep documents and discussions that take place in the virtual workroom private between guests and each other **(Revfine, 2022)**. Metaverse technology allows guests to time travel to the past or future and live in that world *"like the Pharaonic village in Egypt"* and live among the pharaohs at the same time **(Filimonau *et al.,* 2022)**.

Metaverse technology supports countering real-world threats to sustain guests, such as tourist visits to war zones *"Dark tourism"*, experiencing dangers in forests and dealing with wild animals **(Doppler, 2022)**. Metaverse technology also saves time and effort in the hotel experience for hotel guests **(Chiappa, 2022)**. Accordingly, educating hotel guests about Metaverse technology is one of the main pillars in knowing the advantages of this technology, and therefore making the decision to try Metaverse technology in hotels in the future **(Robinson, 2022)**.

Guests' Perspectives Towards Metaverse Technology in Smart Hotels

Guests' acceptance of modern smart techniques in hotels will determine the potential of the tourism and hotel market to adopt these smart techniques , because guests may be affected by the advantages of modern technology, as it has been proven that correct and sufficient information affects guests' acceptance and satisfaction with artificial intelligence and smart technology in the current era "the digital age" (**Dincelli, and Yayla 2022; Polas *et al.,* 2022; Shin *et al.,* 2022)**. This also applies to guests acceptance of the use of Metaverse technology

in hotels ,Metaverse technology blends the traditional and virtual worlds, revolutionizing how hotel guests facilitate the joint creation of transformative experiences and values between them and hotels organizations facilities, Metaverse technology helps develop the hotel industry, which in turn improves the hotel guest experience and increases the value of creativity and guest satisfaction (**Gursoy *et al.*, 2022**).

According to **Koo *et al.* (2022),** there are many advantages that support hotel guests' acceptance of Metaverse technology. Metaverse technology enhances hotel reservations and tours using a digital avatar for a potential guest to conduct a virtual tour of the hotel before making a reservation decision, Metaverse technology application helps to experience and enjoy imaginary things as if they were real, then the application of Metaverse technology will create a digital world that helps guests transform the hotel industry for the better, especially for guests who love artificial intelligence and smart technology **(Kandampully *et al.*, 2022)**.

According to **Solakis *et al.* (2022),** a study conducted in Australia for the public review aimed at identifying the key guest-based factors and technologies that influence the value co-creation (VCC) process through artificial intelligence (AI) and automation techniques in the hotel industry, where this paper focused On identifying guest co-creation experiences, identifying theoretical insights and summarizing themes to understand how Smart techniques can be used to improve co-creation among guests and hotel operators, the paper also explores key hotels guest-based factors and specific technologies that influence this process in relation to guests-based factors, guests perceptions, attitude, trust, social Influence, gentle motivation, objectification, and previous experience as important factors that can influence the value creation process through AI and smart automation technologies within hotels **(Bathla and Singh, 2022)**.

Challenges facing guests to accept Metaverse technology in the Egyptian hotel industry

Exploring the challenges facing guests Metaverse technology in the hotel industry is a very important factor in order to improve the guests experience and the process of creating shared value **(Dwivedi *et al.*, 2022; Peng *et al.*, 2022)**. There are many challenges that have been explored which are the legal aspects and security requirements for meetings and shared documents in the world of metaverse technology **(Park *et al.*, 2022)**. The high cost of experimenting with metaverse technology **(Ning *et al.*, 2022)**. The addiction to "virtual" reality as a result of experimenting with metaverse technology, the boredom of guests from the lack of experience in designing a bad event in Huge virtual spaces in the metaverse world, guest behavior shifting as a result of dealing with mixed reality that would threaten the real life of guests if they continue to experience metaverse technology, lack of personal touch for staff and dealing with the human element, exploitation of guest data to commit crimes and cyber thefts, lack of staff Trained in the use of metaverse technology devices in hotels, in addition to losing the hotel experience for guests who use metaverse technology with some natural characteristics such as inhaling the smell of the sea, the real taste of food, the s **(Njoku et al., 2022)** . Accordingly, these challenges must be taken into consideration during the implementation of metaverse technology in Egyptian hotels **(Hsu *et al.*, 2022; Um *et al.*, 2022).**

Research methodology

To achieve the aim of the research, guests in five-star Sharm El-Sheikh hotels were surveyed. Sharm El-Sheikh has been chosen as a representative sample of the Egyptian hotel society because of its popularity and it have the largest number of hotels compared with other cities which have resorts in Egypt (e.g., Taba, Dahab, Hurghada, Gouna, Safaga, Marsa Alam, Ain Sokhna) **(Chamber of Hotel Establishments, 2021)**. The sample equation was applied to unlimited society **(Thompson, 2012)** as follows:

$$\boldsymbol{n} = \frac{N \times P(1-P)}{\{N-1 \times (d^2 \div Z^2)\} + P(1-P)\}}$$

N:Sample size, P: Percentage of the purpose of this study 0.50 , d: Percentage of the error limit allowed 0.05 , Z:The standard degree used for giving general results is 95%. Thus, the standard degree = 1.96

$$\mathbf{N} = \frac{\mathbf{500000 \times 0.50(1-0.50)}}{\{\mathbf{500000-1} \times (\mathbf{0.05^2 \div 1.96^2}) + \mathbf{0.05}\,(\mathbf{1-0.50})\}}$$

$$= \frac{\mathbf{125.500}}{\mathbf{325.63}} \times \mathbf{100} = \mathbf{385.40} \simeq \mathbf{385}$$

The population of the study is unlimited due to the difficulty of determining a specific number of guests in Egyptian hotels, so the random sample size is an ideal method to apply in this study. According to **Thompson, (2012)** the lower limit of respondents, that are suitable in this study is **385**. A number of **410** electronic questionnaires were designed and distributed from 5 April **2022** to 15 September **2022**. The questionnaire consisted of four sections. The first section is intended to reveal the guests' demographic data and objective data. The second section intended to the guests awareness of metaverse technology in Egyptian hotels (17 statements). The third section included the extent of guests acceptance of metaverse technology in Egyptian hotels (7 statements). The fourth section included of Challenges facing guests to accept metaverse technology in the Egyptian hotel industry (10 statements). This questionnaire is based on the theoretical part of the research, and it was presented to a group of specialists in scientific research arbitration, and they approved the validity of its use. The respondents were asked to answer these statements by using a five-point Likert-type scale (Strongly agree = 5, agree =4, don't know = 3, disagree = 2 and, strongly disagree = 1) to determine the levels of agreement with the statements investigated. The Statistical Package for the Social Sciences (SPSS) version **28.0** was used to analyze and compute the collected data. for windows is used to analyze the valid forms. Among its many modules for statistical data analysis, including descriptive statistics such as frequencies, and categorical data analysis. With the exception of the open-ended questions, Frequency counts, percentage distributions. The range of each level of agreement was calculated as follow:

Table 1: Questions Answered Scale

Category	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Scale	1	2	3	4	5
Rang	1 – 1.80	1.81 – 2.60	2.61 – 3.40	3.41 – 4.20	4.21 - 5

Reliability Analysis

Table 2: Reliability Analysis

N	Dimensions	Number of Statements	Alpha
2	Guests Awareness of Metaverse Technology in Egyptian Hotels.	17	0.96
3	Guests acceptance of Metaverse Technology in Egyptian Hotels.	7	0.93
4	Challenges facing guests to accept Metaverse technology in the Egyptian hotel industry	10	0.90
Alpha Cronbach's test for all Dimensions.		**34**	**0.96**

Table No. **2** indicated that alpha coefficient of the questionnaires dimensions was **0.96** (higher than 0.70) **(Pallant, 2016)**. This result indicated to the reliability and validity of the questionnaires for using in the study.

Results and discussion

The results involved three main stages. Descriptive analysis was used to discover participants' responses, variance analysis for respondents' answers, correlation analysis, and regression were conducted to examine the relationship between independent variables and dependent variable. The results obtained were computed and analyzed in the following tables.

Table 3: Demographic Data of Guests.

Demographic Data	Attribute	Statistics		Rank
		Freq.	%	
Gender	Male	301	73.4	1
	Female	109	26.6	2
Total		**410**	**100%**	
Age	Less than 30 years	142	34.6	2
	From 30 – Less than 40 years	148	36.1	1
	From 40 years - Less than 50 years	72	17.6	3
	From 50 years and over	48	11.7	4
Total		**410**	**100%**	
Educational level	Vocational or Technical School	42	10.2	3
	Bachelor's Degree	220	53.7	1
	Postgraduate (Diploma-Master– Ph.D.)	148	36.1	2
	Others (please mention)	--	--	
Total		**410**	**100%**	
Monthly Income	Less than 5000 L. E	117	28.5	3
	From 5000 – 10000 L. E	175	42.7	1
	More than 10000 L. E	118	28.8	2
Total		**410**	**100%**	
Marital Status	Single	141	34.4	2
	Married	242	59.6	1
	Divorced	21	5.1	3
	Widow / Widower	6	1.5	4
Total		**410**	**100%**	

Nationality	Egyptian	261	63.7	1
	Arabic	121	29.5	2
	Foreigner	28	6.8	3
Total		**415**	**100%**	
Frequency of Residence	Permanent Guest	269	65.6	1
	Non-permanent guest	141	34.4	2
Total		**410**	**100%**	

The results in table (3) indicated that out of the 410 respondents, there were 73.4% males and 26.6% females, the majority of respondents were male they travel and stay in hotels more than females. The age variable represented as, 36.1% was Less than 30 years - less than 40 years; 34.6 % was Less than 30 years; 17.6 % were from 40– less than 50 years; 11.7 % were 50 years and over. The data concerning respondents' level of education variables shows that, 53.7% were in bachelor's degree It is the highest percentage, as the increase in learning has a positive impact on increasing awareness of Metaverse technology and its acceptance during the stay in Egyptian hotels ; 36.1% postgraduate (Diploma-Master–PhD),This indicates that the acceptance of Metaverse technology will be high because familiarity with this technology will be easier and faster than other levels of education., and 10.2% were in vocational or technical school, this requires intensifying and increasing awareness of Metaverse technology and artificial intelligence techniques used in hotels. The monthly income variable represented as 42.7% were from 5000 – 10000 L.E It is the highest percentage, and this supports the guests in Egyptian hotels for the additional cost of using Metaverse technology; 28.8% were more than 10000 L.E; and 28.5% were less than 5000 L.E, it is the lowest percentage. Description of demographic data shows respondents' marital status as; 59.6% were married, 34.4% were single, 5.1% were divorced, and 1.5% were widow / widower. The results show that nationality of respondents were 63.7% Egyptians, 29.5 % were Arabic, and 6.8% were foreigners. Finally, the results indicate that the largest percentage of guests' answers according to the frequency of residence 65.6% were a permanent guest and 34.4% were non-permanent guest, it is clear from this that the percentage of permanent guests is more, which supports the hotel's policy of adopting Metaverse technology and artificial intelligence techniques.

Table 4: Have you ever experienced Metaverse technology during your stay in Smart hotels?

Factor	Answers	Freq.	Percentage (%)	Rank	Mean
Have you ever experienced metaverse technology during your stay in Smart hotels?	Yes	68	16.6	2	0.17
	No	342	83.4	1	
Total		**410**	**100.0**	**--**	

The result of Table **(4)** f this question shows that 16.6% of investigated respondents ever experienced Metaverse technology during their residence in Smart hotels. Meanwhile, 83.4% did not ever experienced Metaverse technology during their residence in Smart hotels. This indicates that the Metaverse technology in the current situation has not been fully applied in hotels, so awareness must be raised and sufficient information must be provided about it to be accepted by guests, thus encourage Egyptian hotels to adopt it in the near future. These results are consistent with **Gursoy *et al.*, (2022)**.

Table 5: Do you prefer to interact with Metaverse technology and artificial intelligence techniques in providing hotel services?

Factor	Answers	Freq.	Percentage (%)	Rank	Mean
Do you prefer to interact with metaverse technology and artificial intelligence techniques in providing hotel services?	Yes	208	50.7	1	1.58
	To some extent	166	40.5	2	
	No	36	8.8	3	
Total		**410**	**100.0**	**--**	

According to table (5), the extent to which guests accept to interact with Metaverse technology and artificial intelligence technologies instead of humans and to trade-off between them in providing hotel services. Where 208 respondents (50.7%) indicated approval of accepting to interact with Metaverse technology and AI technologies instead of humans. while 166 respondents (40.5%) indicated neutrality in the accepting to interact with Metaverse technology and AI technologies instead of humans, . Finally, 36 respondents (8.8%) indicated their disapproval of to interact with Metaverse technology and AI technologies instead of humans in Egyptian hotels. It is clear from the results that there is acceptance by the guests towards the experience and use of Metaverse technology in Egyptian hotels. These results are consistent with both **Dionisio *et al.* (2022) and Um *et al.* (2022)**.

Table 6: Guests Awareness of Metaverse Technology in Egyptian Hotels.

Attributes	$\bar{x}$	SD	C.V	*Relative Weights*	T-test	P-Value	R
1. The Metaverse enhances the hotel reservation and tour process by using a potential guest's digital avatar to conduct a virtual hotel tour prior to making a reservation decision.	3.70	0.973	26.29	21.76%	76.92	.000*	3
2. Metaverse technology allows potential hotel guests to walk into the hotel so that they can learn about the features of the room they wish to stay in just like the real thing.	3.55	1.005	28.30	20.88%	71.57	.000*	16
3. Metaverse technology enhances the brand awareness of global hotel chains and the excitement of hotel loyalty programs for guests.	3.65	1.005	27.53	21.47%	73.56	.000*	6
4. Metaverse technology improves the guest experience at all stages of the guest cycle.	3.67	1.000	27.24	21.58%	74.20	.000*	4
5. Metaverse technology helps improve business operations and increase hotel stay rates.	3.58	0.998	27.87	21.05%	72.66	.000*	12
6. Metaverse technology can allow guests to fully explore the menus and how to prepare and prepare different food dishes before making the decision to order the food.	3.66	0.993	27.16	21.52%	74.67	.000*	5
7. Metaverse technology provides guests with access to virtual spaces, allowing them to host virtual birthday celebrations, hold virtual business meetings or attend virtual concerts.	3.56	1.048	29.43	20.94%	68.87	.000*	15
8. Metaverse technology helps guests experience exciting and costly games such as roller coaster.	3.58	1.011	28.24	21.05%	71.60	.000*	13
9. Metaverse technology can defy the laws of the natural world and enable virtual and augmented experiences for hotel guests such as "walking on the moon or Mars".	3.60	1.007	27.97	21.17%	72.41	.000*	10
10. Metaverse technology supports the 3D virtual space (3DHT) that makes the fantasy-lovers visit the mixed reality destinations of the dinosaur world.	3.60	1.054	29.27	21.17%	69.09	.000*	11
11. Metaverse technology supports the provision of all hotel services in exchange for cryptocurrency payments such as "Blockchain".	3.47	1.072	30.89	20.41%	65.59	.000*	17
12. Metaverse technology and intelligent mixed reality help improve guest personal online service, right down to the analysis of their data.	3.64	1.045	28.70	21.41%	70.58	.000*	7
13. Metaverse technology can transform guests into their digital avatars and virtually take a 3D tour of a resort or hotel and experience how they look and feel.	3.57	1.042	29.18	21%	69.35	.000*	14
14. Metaverse technology can keep documents and discussions that take place in the virtual workroom private between guests and each other.	3.61	1.013	28.06	21.23%	72.16	.000*	8
15. Metaverse technology allows guests to travel through time to the past or future and live in this world (such as the pharaonic village in Egypt) and live among the pharaohs at the same time.	3.71	1.000	26.95	21.82%	75.07	.000*	2
16. Metaverse technology supports facing real-world threats to maintain guests, such as tourist visits to war zones (Dark tourism), experience of dangers in forests and dealing with wild animals.	3.61	1.013	28.16	21.23%	72.16	.000*	9
17. Metaverse technology saves time and effort in the hotel experience for hotel guests.	3.73	1.013	27.15	21.94%	74.52	.000*	1
Average of Responses	**3.61**	**0.816**	**22.60**	**21.23%**	**----**	**----**	**---**

N= 410 **$\bar{x}$:** Mean **SD**: "Standard Deviation" **R**: Rank **CV**: Coefficient Variance (**SD** ÷ **$\bar{x}$** %) Relative Weights**:** Mean/scale × 100
Test value = (0.05) *sig. ≤ (. 05)

The results in Table **6** that the respondents do not have enough awareness about the metaverse technology of Egyptian hotels, where the average was (mean= 3.61). Besides, the results show that there are significant differences among respondents towards the attributes of the table above which p-value ≤ (.01). The previous table shows that hotel guests have knowledge of Metaverse technology with an average range between (mean= 3.47- 3.73) in Egyptian hotels.

With regard to the dimensions of the guests awareness of Metaverse technology in Egyptian hotels, the respondents showed a agree tendency towards most of the statements, and this means that they are sufficiently familiar with the Metaverse technology in smart Hotels. Considering the responses of guests about their knowledge of that it is Metaverse technology saves time and effort in the hotel experience for hotel guests (mean=3.73, CV= 22.60), as well as the responses of guests about Metaverse technology allows guests to travel through time to the past or future and live in this world (such as the Pharaonic village in Egypt) and live among the pharaohs at the same time. (mean=3.71, CV=26.95), and while their responses were on that it is metaverse enhances the hotel reservation and tour process by using a potential guest's digital avatar to conduct a virtual hotel tour prior to making a reservation decision (mean = 3.70, CV = 26.29), As for their awareness for is Metaverse technology that improves the guest experience at all stages of the guest cycle (mean = 3.67, CV= 27.24), While the results showed the responses of guests about their awareness of that it is Metaverse technology can allow guests to fully explore the menus and how to prepare and prepare different food dishes before making the decision to order the food (mean= 3.66, CV = 27.16). This result agrees with **Buhalis *et al.* (2022)**.

The results also yielded of the guests awareness of Metaverse technology in Egyptian hotels, considering the responses of guests about their knowledge of that it is Metaverse technology enhances the brand awareness of global hotel chains and the excitement of hotel loyalty programs for guests(mean= 3.65, CV= 27.53), where these results agree with **Patil *et al.* (2022)**. While the results showed the responses of guests about their awareness of that it is Metaverse technology and intelligent mixed reality help improve guest personal online service, right down to the analysis of their data (mean= 3.64, CV= 28.70). As for their awareness for is Metaverse technology can keep documents and discussions that take place in the virtual workroom private between guests and each other (mean= 3.61, CV= 28.06). As well as the responses of guests about Metaverse technology supports facing real-world threats to maintain guests, such as tourist visits to war zones "*Dark tourism*", experience of dangers in forests and dealing with wild animals (mean= 3.61, CV= 28.16), and this fits with that segment of guests who love technological intelligence and adventures.

Table 7: Guests Acceptance of Metaverse Technology in Egyptian Hotels.

Attributes	$\bar{x}$	SD	C.V	*Relative Weights*	T-test	*P*-Value	R
1. The Metaverse enhances the hotel reservation and tour process by using a potential guest's digital avatar to conduct a virtual hotel tour prior to making a reservation decision.	3.83	1.010	26.37	54.71%	76.80	.000*	1
2. You will be satisfied if Metaverse technology is applied in Egyptian hotels.	3.40	1.090	32.05	48.57%	63.06	.000*	7
3. You are ready to experience the Metaverse in hotels, despite their	3.71	0.975	26.28	53%	76.98	.000*	4

	high cost.						
4.	The metaverse will be a unique and preferred experience for tech-savvy guests.	3.67	0.985	26.83	52.42%	75.48	.000*	6
5.	Accept the application of Metaverse technology because it helps you to experience and enjoy imaginary things as if they were real.	3.73	0.996	26.70	53.28%	75.88	.000*	3
6.	Accept the application of Metaverse technology because it will be the tool of the near future.	3.70	1.014	27.40	52.85%	73.83	.000*	5
7.	The application of Metaverse technology will create a digital world that will help the guest transform the hotel industry for the better.	3.74	0.972	25.98	53.42%	77.92	.000*	2
Average of Responses		**3.68**	**0.847**	**23.01**	**52.57%**	**----**	**----**	**-**

N= 410 **$\bar{x}$:** Mean **SD**: "Standard Deviation" **R**: Rank **CV**: Coefficient Variance (**SD** ÷**$\bar{x}$** %) Relative Weights**:** Mean/scale × 100 Test value = (0.05) *sig. ≤ (. 05)

According to the dimension the guests acceptance of metaverse technology in Egyptian hotels in Table 7, the respondents showed agree tendency towards acceptance of metaverse technology in Egyptian hotels, which means that they have a willingness and conviction to experiment with metaverse technology during their stay in Egyptian hotels. That result is consistent with **Chiappa, (2022) and Buhalis *et al.* (2022)**. In detail, a large percentage of the sample agreed that it is the Metaverse enhances the hotel reservation and tour process by using a potential guest's digital avatar to conduct a virtual hotel tour prior to making a reservation decision (mean= 3.83, CV=26.37), and the application of metaverse technology will create a digital world that will help the guest transform the hotel industry for the better (mean=3.74, CV=25.98), they also agreed that accept the application of metaverse technology because it helps you to experience and enjoy imaginary things as if they were real (mean = 3.37, CV= 26.70), and You are ready to experience the Metaverse in hotels, despite their high cost (mean=3.71, CV=26.28), and they also agreed accept the application of Metaverse technology because it will be the tool of the near future (mean = 3.70, CV= 27.40), and the Metaverse will be a unique and preferred experience for tech-savvy guests (mean = 3.67, CV= 26.83), finally You will be satisfied if Metaverse technology is applied in Egyptian hotels (mean = 3.40, CV= 32.05). These results agree with **Hee-Seog *et al.* (2022)**.

Table 8: Challenges Facing guests to Accept Metaverse Technology in the Egyptian Hotel Industry

Attributes	$\bar{x}$	SD	C.V	*Relative Weights*	T-test	*P-Value*	R
1. Legal aspects and security conditions of meetings and documents shared in the Metaverse world.	3.69	1.056	28.61	36.9%	70.71	.000*	2
2. The high cost is due to the experience of Metaverse technology.	3.46	0.946	27.34	34.6%	74.09	.000*	10
3. Addiction to fantasy reality "virtual" as a result of the experience of Metaverse technology.	3.51	1.028	29.28	35.1%	69.06	.000*	9

4. Guests get bored with inexperience in designing a bad event in huge virtual spaces in the world of Metaverse.	3.59	1.048	29.19	35.9%	69.43	.000*	6
5. Changing guests' behavior as a result of dealing with mixed reality.	3.60	0.941	26.13	36%	77.43	.000*	4
6. Real-life threat to guests if they continue to experience Metaverse technology.	3.58	1.023	28.57	35.8%	70.88	.000*	7
7. Lack of the personal touch of the staff and dealing with the human element.	3.67	0.984	26.81	36.7%	75.56	.000*	3
8. Exploiting guests data to commit crimes and electronic thefts.	3.54	1.049	29.63	35.4%	68.38	.000*	8
9. Lack of trained personnel to use Metaverse technology devices in hotels.	3.60	1.049	29.13	36%	69.46	.000*	5
10. The hotel experience for guests with Metaverse technology does not have some natural characteristics such as, inhaling the smell of the sea, and real taste of food.	3.70	1.026	27.72	37%	72.89	.000*	1
Average of Responses	**3.59**	**0.739**	**20.58**	**35.9%**	**----**	**----**	**--**

N= 410 $\bar{x}$**:** Mean **SD**: "Standard Deviation" **R**: Rank **CV**: Coefficient Variance (**SD** ÷$\bar{x}$ %) Relative Weights**:** Mean/scale × 100 Test value = (0.05) *sig. ≤ (. 05)

According to the dimension challenges facing guests to accept Metaverse technology in the Egyptian hotel industry in Table 8, the respondents showed agree tendency towards challenges facing guests to accept Metaverse technology in the Egyptian hotel industry, which means that guests in hotels face many challenges that make them hesitate to try Metaverse technology during their stay in Egyptian hotels. This result is consistent with **Bathla and Singh, (2022); Gursoy *et al.* (2022) and Hsu *et al.* (2022)**. In detail, a large percentage of the sample agreed that it is the hotel experience for guests with Metaverse technology does not have some natural characteristics such as, inhaling the smell of the sea, and real taste of food (mean=3.70,CV=27.72), and legal aspects and security conditions of meetings and documents shared in the Metaverse world(mean= 3.69, CV= 28.61),they also agreed that lack of the personal touch of the staff and dealing with the human element (mean= 3.67, CV= 26.81), and changing guests' behavior as a result of dealing with mixed reality (mean= 3.60, CV= 26.31), and they also agreed lack of trained personnel to use Metaverse technology devices in hotels (mean= 3.60, CV= 29.13), and guests get bored with inexperience in designing a bad event in huge virtual spaces in the world of Metaverse (mean= 3.59, CV= 29.19), and real-life threat to guests if they continue to experience Metaverse technology (mean= 3.58, CV= 28.57), and exploiting guests data to commit crimes and electronic thefts (mean= 3.54, CV= 29.63), and addiction to fantasy reality "*virtual*" as a result of the experience of Metaverse technology (mean= 3.51, CV= 29.28), finally the high cost is due to the experience of Metaverse technology (mean = 3.46, CV= 27.34), where the additional cost caused by the use of Metaverse technology in Egyptian hotels is one of the important challenges facing hotel guests. This result is consistent with **Peng *et al.* (2022) and Yan *et al.* (2022).**

Testing hypotheses

Hypothesis1: There is a significant Impact of adopting Metaverse Technology in Smart Hotels of guests' acceptance (about "H. 1.1" Guests Awareness of Metaverse Technology , "H. 1.2" Guests acceptance of Metaverse Technology, "H. 1.3" Challenges facing guests to accept Metaverse technology) on guests' Perspectives in hotels.

Table 9: Correlation coefficient between dependent and independent variables:

Variables Test		**Guests Awareness**	**Guests Acceptance**
Guests Awareness of Metaverse Technology in Egyptian Hotels.	Correlation Coefficient	1.00	0.834**
	Sig. (2-tailed)	0	0.000
	N	410	410
Guests acceptance of Metaverse Technology in Egyptian Hotels.	Correlation Coefficient	0.834**	1.00
	Sig. (2-tailed)	0.000	0
	N	410	410
Variables Test		**The Challenges**	**Guests Acceptance**
Challenges facing guests to accept Metaverse technology in the Egyptian hotel industry	Correlation Coefficient	1.00	0.368**
	Sig. (2-tailed)	0	0.000
	N	410	410
Guests acceptance of Metaverse Technology in Egyptian Hotels.	Correlation Coefficient	0.368**	1.00
	Sig. (2-tailed)	0.000	0
	N	410	410

Correlation is significant at the 0.01 level,** **H. S= High significant at the ≤ (. 01) level

With regard to Table 9, There are significant correlations between guests' acceptance of experience Metaverse technology in Egyptian hotels and guests awareness of Metaverse technology in Egyptian hotels (Corr = 0.834**), and here are significant correlations between guests' acceptance of experience Metaverse technology in Egyptian hotels and challenges facing guests to accept Metaverse technology in the Egyptian hotel industry (Corr = 0.368**). accordingly, it is necessary to provide adequate information about Metaverse technology as it contributes to a large percentage of guests' persuasiveness to accept Metaverse technology **(Golf-Papez *et al.*, 2022; Gursoy *et al.*, 2022)**. Thus, the first hypothesis **H.corr.1 was be accepted.**

Table 10: The Simple Regression

Factors affecting on Guests Acceptance	**Parameters of Regression**	**T-test**	**p-value**	**R**
Guests Awareness of Metaverse Technology in Egyptian Hotels	0.844	27.48	0.000	1
Challenges facing guests to accept Metaverse technology in the Egyptian hotel industry	0.060	1.771	0.077	2

* = Highly significant at P≤ 0.05

With regard to Table **10**, It could be seen that; the values of the Parameters of Regression are less than 0.05. There is a significant effect at the 0.05 level of significance on the dependent

variable. guests awareness of Metaverse technology in Egyptian Hotels ranked as the first factor which affects Guests' perceptions toward acceptance of Metaverse technology, then Challenges facing guests to accept Metaverse technology in the Egyptian hotel industry was ranked as the second factor that affects the perceptions of Guests, to transforming their acceptance to experience of Metaverse technology in the Egyptian hotel industry.

Hypothesis 2: There are significant differences between the guests acceptance of Metaverse technology according to demographical data ("H 2.1" Gender, "H 2.2" Age, "H 2.3" Educational level, "H 2.4"Monthly Income, "H 2.5" Marital Status, "H 2.6" Nationality, and "H 2.7" Frequency of Residence).

Table 11: T-Test & One-Way ANOVA Test

DemographicData	DF	CI	T-Test	F	Sig.
Gender	408	0.95	0.241	-----	0.810
Age	409	-----	-----	0.386	0.998
Educational level	409	-----	-----	0.993	0.478
Monthly Income	409	-----	-----	1.500	0.054
Marital Status	409	-----	-----	1.211	0.218
Nationality	409	-----	-----	1.001	0.465
Frequency of Residence	408	0.95	1.257	-----	0.209

N=410, $\bar{x}$**:** Mean, Test value= (0.05), "DF": degrees of freedom, CI: confidence interval **sig. ≤ (. 01)

With regard to Table 11, the results of the t-test for two independent samples showed that there are no statistically significant differences between guests in Egyptian Hotels in the extent of their willingness to go through the experience Metaverse technology in Egyptian hotels again for the gender where the test t = (0.241) and P-value (0.810), (more than 0.5) This result shows the difference between respondents by gender Referring to The results of the one-way ANOVA test showed that there are no statistically significant differences between guests in Egyptian Hotels in the extent of their ability to experience the experience of Metaverse technology by age. F value = (0.386), P-value = 0.998 (more than 0.1), and at the same time, there are no statistically significant differences between guests in Egyptian Hotels in the extent of their ability to experience Metaverse technology to the educational level where the F value = (0.993), P-value = (0.478), (more than 0.1), and at the same time, there are no statistically significant differences between guests in Egyptian Hotels in the extent of their ability to experience Metaverse technology to the Monthly Income where the F value = (1.500), P-value = (0.054), (more than 0.1), and at the same time, there are no statistically significant differences between guests in Egyptian Hotels in the extent of their ability to experience Metaverse technology to the Marital Status where the F value = (1.211), P-value = (0.218), (more than 0.1), and at the same time, there are no statistically significant differences between guests in Egyptian Hotels in the extent of their ability to experience Metaverse technology to the Nationality where the F value = (1.001), P-value = (0.465), (more than 0.1), finally there are no statistically significant differences between guests in Egyptian Hotels in the extent of their willingness to go through the experience Metaverse technology in Egyptian hotels again for the Frequency of Residence where the test t = (1.257) and P-value (0.209), (more than 0.5). Thus, the second hypothesis **H.2 was not accepted**.

Conclusion

This study presents an investigation of a modern smart technology to be applied in Egyptian hotels, which is Metaverse technology. It was found that guests in Egyptian hotels do not have full awareness about Metaverse technology, due to the lack of sufficient information for guests in Egyptian hotels about Metaverse technology and its advantages, high cost is due to the experience of Metaverse technology, Addiction to fantasy reality "virtual" as a result of the experience of Metaverse technology, in addition to Egypt's lack of a Metaverse platform as cultural tourism content to encourage its application in hotels, in the event that information about Metaverse technology is available. It will affect hotel guests' ability to respond to all their concerns and doubts about this new technology. With regard to analyzing the opinions of guests regarding the application of Metaverse technology in Egyptian hotels, it was found that the majority of guests are not aware of this modern technology and expressed their desire to know information about the advantages of Metaverse technology and its role in adding a common value to the experience of guests during their stay in Egyptian hotels. Guests in Egyptian hotels rely on answers to their inquiries about this modern technology, Where the Metaverse technology allows potential hotel guests to walk into the hotel so that they can learn about the features of the room they wish to stay in just like the real thing, and Metaverse technology supports the provision of all hotel services in exchange for Crypto currency payments such as "Block chain".. Finally, there is a significant impact of the dimensions of the availability of sufficient information about Metaverse technology and the necessary infrastructure for its application, the availability of Metaverse devices, and the presence of specialists in artificial intelligence technologies to train staff and hotel guests on them, and therefore these dimensions affect the ability of guests in Egyptian hotels to experience Metaverse technology in Egyptian hotels. Where the You would be satisfied if Metaverse technology is applied in Egyptian hotels in the near future.

Recommendations

According to the literature review and the results extracted from the field study, the following recommendations could be suggested:

- Guests in Egyptian hotels should be made aware of the Metaverse technology through the media and institutional advertising and identifying the default content by the Tourism Promotion Authority and the Ministry of Tourism, in order to attract tourists to visit hotels that apply smart technologies**.**
- Adopting the application of Metaverse technology in Egyptian hotels to stimulate tourism in Egypt, especially in times of crisis**.**
- Providing the necessary infrastructure for the application of Metaverse technology through the conclusion of many agreements between hotels, government and artificial intelligence companies to properly apply Metaverse technology, providing devices for the application of Metaverse technology**.**
- Permanent awareness by specialists in artificial intelligence sciences and smart technologies for hotel owners, and providing them with sufficient information about Metaverse technology, training hotel workers on this modern technology so that expertise is available to deal professionally with this technology without any errors**.**
- Encouraging hotel to take measures to enhance the use of Metaverse technology to introduce the most important services provided in hotels and archaeological sites scattered in Egypt and display them in the form of 3D models that allow guests to take a virtual tour throughout the hotel to enhance the reservation process before making the final decision**.**

- Hotel owners and managers should formulate organizational policy to adopt Metaverse technology in terms of balancing authenticity and modern technology to satisfy all target groups**.**
- Creating promotional content for hotel guests using Metaverse technology, opening museums with extended reality technology, as well as traveling to the surface of Mars and the moon using Metaverse technology, as well as simulating the past of the Pharaonic era and the world of dinosaurs using Metaverse technology, discovering black tourism places and adventures with predatory animals in wildlife**.**
- The necessary regulations and instructions must be put in place by the Egyptian government to control the relations between hotel guests and Metaverse technology service providers to protect guests from illegal practices (such as electronic theft of personal data or funds).

Limitations and Future Research

The current study revealed a strong relationship between Metaverse technology and the guests' perspectives, the focus of the research. It cannot be claimed that its results are generalizable and represent the entire hotel industry within Egypt, which means that there are fruitful opportunities for future studies, for example, investigating the perspectives of hotel owners interested in artificial intelligence techniques, guests, and managers. Moreover, since the information provided to the subject of this study prior to their opinion was limited, some subjects were unable to express their support or objection to the issue of intent to adopt Metaverse technology in Egyptian hotels. Accordingly, at this point in theoretical development and empirical evidence, we are only able to partially predict the factors influencing of awareness and acceptance of guests in Egyptian hotels in a longitudinal framework to provide a deeper understanding of how the actual adoption decision shapes Metaverse technology in Egyptian hotels. For future research, investigate the role of rating (e.g., star rating) and hotel size in Egyptian hotel owners, managers' and guests' perspectives of the use of Metaverse technology. Furthermore, case studies of leading organizations that have implemented Smart technology can be used to gain qualitative insights into the implications of using Metaverse technology. Future research may also take a welfare perspective and explore how Metaverse technology improves the guest experience at all stages of the guest cycle. These topics point to a rich source of experimental research opportunities for Metaverse technology in hotels.

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دراما الواقع المختلط نحو تكنولوجيا الميتافيرس بالفنادق الذكية: دراسة استكشافية على الفنادق المصرية من وجهة نظر النزلاء

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معلومات المقالة

الكلمات المفتاحية

الذكاء الإصطناعى؛ الواقع المختلط؛ تكنولوجيا الميتافيرس؛ الفنادق الذكية؛ وجهات نظر النزلاء؛ الفنادق المصرية.

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الملخص

عند تبنى الفنادق للتقنيات التكنولوجيا الحديثة مثل تكنولوجيا الميتافيرس "**Metaverse** " كأحد التقنيات الذكية، حيث ستواجه ردود فعل مختلفة وأسئلة من الضيوف حول هذه التكنولوجيا الحديثة. يهدف هذا البحث إلى استكشاف مدى وعي وقبول الضيوف في الفنادق المصرية واستعدادهم لتجربة تكنولوجيا الميتافيرس "**Metaverse** " داخل الفنادق المصرية والتحديات التي تواجههم أثناء استخدامها. لتحقيق هدف البحث، تم تصميم إستبيان إلكتروني وتوزيعه على عينة عشوائية من النزلاء في الفنادق المصرية، وتم استلام ٤١٠ إجابة صحيحة وتحليلها بواسطة **SPSS V.28**. أشارت النتائج إلى أن الضيوف المصريين ليس لديهم معلومات كافية حول تكنولوجيا الميتافيرس "**Metaverse**" لقبول تجربتها في المستقبل. تتضمن هذه المعلومات المزايا والمخاطر، بالإضافة إلى عامل التكلفة لتكنولوجيا الميتافيرس "**Metaverse**"، لذلك ربما يكون قبول الضيوف وثقتهم في تكنولوجيا "**Metaverse**" هو العقبة الرئيسية أمام عملية تسويق هذه التكنولوجيا الحديثة في الفنادق المصرية. بناءً على النتائج، تم اقتراح بعض التوصيات وتوجيهها إلى متخصصي تقنيات الذكاء الاصطناعي (**AIT**)، ومديري الفنادق، وأصحاب الفنادق، والحكومة والمؤسسات المسؤولة عن تنشيط السياحة والفنادق في مصر. كانت إحدى التوصيات الرئيسية هي توفير البنية التحتية اللازمة لتطبيق تكنولوجيا الميتافيرس "**Metaverse**" من خلال إبرام العديد من الاتفاقيات بين الفنادق والحكومة وشركات الذكاء الاصطناعي لتطبيق تكنولوجيا "**Metaverse**" بشكل صحيح، وتوفير أجهزة لتطبيق تكنولوجيا الميتافيرس"**Metaverse**".