



**A STUDY ON THE FACTORS THAT IMPACT THE FUTURE
TRENDS OF MARKETING: EVIDENCE FROM THE HOSPITALITY
INDUSTRY IN KLANG VALLEY, MALAYSIA**

**Thilaga Sivaraman,
Mohamad Najat Bin Mohamad Zahrin,
Mohamad Yazid Bin Roni,
Kumaran Kanapathipillaiⁱ**
Faculty of Business Administration,
UNITAR International University,
Tierra Crest, Jalan SS6/3,
Kelana Jaya, 47301 Petaling Jaya,
Selangor, Malaysia

Abstract:

The hospitality industry has been impacted by the Covid-19 Pandemic and is still ravaging several nations. Therefore, changing the normality of business operations and activities, especially in marketing trends, is crucial. This research evaluates the factors that impact future marketing trends, focusing on the employees in the hospitality industry within Klang Valley, Malaysia. In this research, the independent variables (impact of the post-Covid-19 Pandemic, transition process from traditional to digital marketing methods, consumers' reactions towards digital marketing, and possibility of leveraging Industry 4.0) and their relationship to the dependent variable (future trends of marketing in the hospitality industry) were studied. Surveys via Google Forms were disseminated to employees in the hospitality industry within the Klang Valley. The data collected from 390 respondents from the hospitality industry contributed to this research by determining the correlated factors which shaped the future trends and practices in marketing. These factors were supported by the analysis modules and the underpinning theory developed by previous researchers. Based on the response, female respondents have responded more than male respondents, with the Malay ethnic group being the majority. Subsequently, most respondents have attained a bachelor's degree and worked in the industry as junior executives for nearly 15 years. This study has proven that the transition process from traditional to digital marketing methods, consumers' reaction, and the possibility of leveraging industry 4.0 has a significant relationship with future marketing trends. In conclusion, this research shows that technology transformation and consumer-centric methods can significantly change the landscape of marketing for the hospitality industry in the future.

ⁱ Correspondence: email kumar.erapintar@gmail.com

Keywords: hospitality industry, future marketing trends, Industry 4.0, digital marketing, consumers' reactions

1. Introduction

The Covid-19 Pandemic has made businesses pick up positive innovations to deliver information, specifically in marketing. Major businesses and brands have portrayed the evolution process of marketing from traditional to digital methods. This study focuses on the impact of the post-covid-19 Pandemic on marketing in the hospitality industry in Klang Valley and identifies the future trends of marketing. Additionally, this study explores the transformation journey of marketing and investigates the challenges faced by the hospitality industry in marketing. The findings will help to understand the current marketing practices in the hospitality industry and make recommendations on both practical and theoretical aspects for future practitioners.

Recovering from the Covid-19 pandemic era takes work and effort, especially in the most affected industry. Many industries, irrespective of their size in Malaysia, have been impacted with regard to growth, profits, and employment (Kanapathipillai & Mahbob, 2021). Similarly, the hospitality industry in Malaysia has been forced to close, and the number of occupancies has dropped. Many four-star and five-star hotels in Kuala Lumpur claimed their occupancy rates have dropped below ten percent and faced business closure (Ramli & Zawawi, 2021). The industries that managed to survive during the Pandemic have the most chance to rebuild and re-expand in the endemic era even though the growing number of survivors struggle to catch up with the new norms. The trends and habits of people traveling and spending holidays have changed during the endemic era due to the new norms that required compulsory regulations by the government. For instance, consumers have chosen online platforms when purchasing holiday packages compared to purchasing holiday packages from brick-and-mortar travel agencies before the Covid-19 Pandemic (Kanapathipillai, 2021).

The hotel industries, inclusive of the whole part of the tourism industry, are most reliant on the Malaysian government to restart and recover their hotels and tourism activities (Kanapathipillai & Mahbob, 2021). The Malaysian government, through the ministry, has produced a contingency plan for at least two years, concentrating on two key factors: the building or area capacity and the digitization of the hotels and tourism industries (Kanapathipillai & Mahbob, 2021). The contingency plan has emphasized the transformation of tourism and hotel industry integration by using the information of technology for implementing "Smart Tourism" (Khan et al., 2020; Kanapathipillai, 2021). Therefore, transformation to digitization shall be a good factor for the hotels and tourism industries to become relevant during the post-Covid-19 Pandemic.

Henceforth and to maintain its relevancy and rapidly recover in the post-pandemic era, tourism industries, especially the hotels in Klang Valley, must leverage the data and digital technologies into the tourism and hotels business ecosystem. Digitalisation offers industries an opportunity for market expansion, increased business

growth, improve hotel operations' efficiency, and sharpen their competitive edge in the business ecosystem (Kanapathipillai & Mahbob, 2021). Future marketing trends impacted by technological advancement can generate new tourism experiences, such as digital virtual tour guides for a memorable travel experience. Looking at the current post Pandemic industry movement and pace, i.e., Industry 4.0, which is driven by digitalisation, i.e., automation and the connection between virtual and physical systems and in line with Business 4.0, shall bring the hotels industries to a massive revolution in the future practices of hotels through digitalisation transformation (Pesonen, 2020; Dredge et al., 2018). Therefore, for this study's purpose, the hotels in Klang Valley will be the selected subject to explore the future trends of marketing impacted by factors such as the impact of the post-covid-19 Pandemic, the transition process from traditional to digital marketing methods, consumers' reactions towards digital marketing, and possibilities of leveraging industry 4.0.

1.1 Research Problem Statements

After the pandemic, the hotel industry's problem is that they need to prepare to handle the crisis within the business ecosystem and have experienced a sharp decline in sales and revenue (Deraman et al., 2021). This is the post-pandemic implication where the industry has not shown sustainability in their *modus operandi*, excessive tourist in one place, do not take seriously the commencement of sustainability, and operates the operations in a neoliberalism and capitalistic manner (Carr, 2020; Cheer, 2020). This is very worrying as the Pandemic crisis not only put the industry at rock bottom, resulting in the industry becoming vulnerable and reflecting its lack of business elasticity, but still operating business like usual (as before Covid 19 hit the world) during the post-pandemic era without implementing the necessary and substantial changes in its future management, operations, and planning (Kanapathipillai & Mahbob, 2021).

Suppose the hospitality industry's practitioners need to prepare themselves to handle the challenges of the post-pandemic crisis. In that case, they will have the same problems adapting and manoeuvring the competitive landscape for digitalization transformation in micro, small, and medium-sized businesses. A study on the definition and application of digital technologies as part of the management process suggested that nowadays, social media platforms are used widely to exercise marketing activities (Eller et al., 2020). This reflects the need of the industrial hotel practitioner to apply the transition process from traditional ways to digital marketing platforms. The demand for digital marketing nowadays has increased through Social Media Marketing (SMM) which collaborated with Search Engine Optimization (SEO) and Search Engine Marketing (SEM) enhancement (Parvez et al., 2018).

Most of the hotels in the post-pandemic industries still lag in catching up with digital marketing transformation into their *modus operandi* in a practical methodology since the technological advancement proceeded the era and has significantly revolutionized the travel and hospitality sectors (Kaur & Chourasia, 2021). Thus, it is time for the transformation to take place. On the other hand, consumer reactions and

acceptance of digital marketing applications are unique in convenience, fast mode telecommunications, privacy and accuracy, and allowance of travel or vacation customization based on their preferences. At the same time, digitalisation or technological advancement will create value in their memories as it shows how the industries give the best services to customers through digitisation and technology applications (Kanapathipillai & Kumaran, 2022).

The other problem is that many hotels in the industry are operating post-pandemic without having a proper impact mitigation strategy in determining the suitable technology application to be used and the challenges they face for opting for the approach to streamline their business operations (Lau, 2020). Somehow, it will be back to the industrial practitioner on the importance of leveraging metaverse, artificial intelligence, virtual reality, and neuromarketing in the sector which is an excellent tool of marketing, parallel with the trending of Industry 4.0 and Business 4.0 and can be a potential saviour for the dying industry post-pandemic (Kanapathipillai & Kumaran, 2022). Moreover, digitalisation will be the trend but will face challenges such as revamping strategies, especially to balance food inventory with sales predictions, which will affect the hotel's supply chains and daily operations. Therefore, when digitalisation involves data collection, it will threaten customers' privacy like hackers and micro devices (Lau, 2020).

Based on the abovementioned issues, this study will determine the impact of predetermined factors (impact of post-Covid-19 pandemic, the transition process from traditional to digital marketing methods, consumers' reactions towards digital marketing, and the possibility of leveraging Industry 4.0) on the future trends of marketing.

However, some studies have revealed significant disadvantages. According to (Wirtz et al., 2018), service robots cannot feel real emotions, which is likely to be the case soon. In addition, Digital Display Advertising is costly and needs experts to drive good ROI (Return on Investment) for your business (Bala & Verma, 2018). Based on (Wirtz et al., 2021), robots can capture a lot of data (including through cameras and microphones) and access sensitive data that can be stored, processed, and passed on. This raises privacy concerns about data collection, tracking, analysis, and storage. Furthermore, Get Craft's Malaysia (2018) said there are still signs of hesitation to make investments in digital. This is because many marketers who responded to the survey acknowledge that they are still trying to figure out how to use digital methods.

On the other hand, according to (Wirtz & Lwin, 2009), consumers display concerns about their data privacy. To ease data security concerns, firms should follow and communicate with consumers by adopting the best practices in data privacy and corporate digital responsibility. Conversely, consumers who are most concerned about privacy are less likely to trust digital marketing to protect their data (Turow et al., 2009; McDonald & Cranor, 2010; Baek & Morimoto, 2012; Lambrecht & Tucker, 2013; Van Doorn & Hoekstra, 2013; Yang, 2013; Lee et al., 2015; Moore et al., 2015). Moreover, the transition to digital modernisation encourages employers to hire fewer employees, which creates joblessness (Giuggioli & Pellegrini, 2022). According to (Blanco et al., 2010),

people frequently perceive digital marketing as having a poor level of informational value because they find it boring. Contrariwise to (Kohtamaki et al., 2019), new anecdotal evidence reveals that the digital marketing process is arduous.

1.2 Research Questions

The research questions structured for this study are as follows:

RQ1: Is there a significant impact of the post Covid-19 Pandemic on the future trends of marketing in the hospitality industry?

RQ2: Is there a significant transition process from traditional to digital marketing methods on the future trends of marketing in the hospitality industry?

RQ3: Is there a significant consumers' reaction to the future trends of marketing in the hospitality industry?

RQ4: Is there a significant possibility of leveraging Industry 4.0 (metaverse, artificial intelligence, virtual reality, and neuromarketing) on the future trends of marketing in the hospitality industry?

1.3 Research Objectives

The objectives of this study are as stated below:

RO1: To study if there is a significant impact of the post Covid-19 Pandemic on the future trends of marketing in the hospitality industry.

RO2: To analyse if there is a significant transition process from traditional to digital marketing methods on the future trends of marketing in the hospitality industry.

RO3: To examine if there a significant consumers' reactions towards digital marketing to the future trends of marketing in the hospitality industry.

RO4: To identify if there is a significant possibility of leveraging Industry 4.0 (metaverse, artificial intelligence, virtual reality, and neuromarketing) on the future trends of marketing in the hospitality industry.

2. Literature Review and Hypothesis Development

This section focuses on the literature review and hypothesis developed for this study.

2.1 Relationship Between the Impact of The Post Covid-19 Pandemic and the Future Trends of Marketing in the Hospitality Industry

The hotel and tourism industries have had decades of steady expansion and continue to rank among the most significant global economic sectors. It plays a crucial role in the expanding services sector of the economy by bringing in money and foreign exchange, fostering job growth, promoting regional development, and assisting local communities. Tourism has a more significant impact on the domestic economy compared to other export sectors and is economically valuable (OECD Tourism Trends and Policies, 2020).

In December 2019, Wuhan, one of China's most populous cities, experienced coronavirus (Covid-19), which caused severe acute respiratory syndrome (Yang, 2021).

In April 2020, the International Air Travel Association estimated that nine out of ten people worldwide reside in nations with travel restrictions; 99 nations suspended flights; 52 nations were closed to non-residents; 48 nations were only open to certain nations; 15 nations were open but considered necessary health checks or quarantine; and only three nations have no travel bans (Gursoy et al., 2021).

The travel bans significantly negatively impacted the tourism and hospitality industries due to the sharp decline in international visitor numbers. International tourist arrivals are expected to have decreased by 70% between January and August 2020 in comparison to the same period last year, according to the United Nations World Tourism Organisation (UNWTO). Most events held at the international, governmental, and local levels have been axed or rescheduled. (Seabra et al., 2021).

The World Tourism Organisation estimates that the travel and tourism limitations imposed as a result of Covid-19 resulted in a 70% decline in the number of foreign arrivals in the first eight months of 2020 (Androniki et al., 2021).

Hospitality is one of the people-to-people businesses suffering greatly as the Covid-19 Pandemic sweeps across the globe. The travel and tourism sector, including the hotel sector, has temporarily reached a standstill, but the long-term effects could persist indefinitely. The resumption of international travel, and more significantly, the reopening of hotels, will need to reflect the current situation and recognise that the world is moving into a new era of safety.

Due to the Covid-19 Pandemic's quick spread, 2020 was an odd year for the world economy. The stakeholders in every sector of the local and global economies were severely impacted by unprecedented economic and public health problems. The shifting economic landscape and the "new norm" to which consumers had to adjust infuriated them. Businesses had to figure out how to continue operating while expanding or, at the very least, retaining their brand and clientele (Kanapathipillai & Mahbob, 2021). In 2020, worldwide economic activity was declining, but the pandemic caused a rise in e-commerce. Businesses and consumers have become more dependent on digital transactions as lockdowns have become the "new normal." There was a movement in favour of communication tactics built on trust. Many businesses had to formulate innovative ways to sustain their brand and develop new products aligned with the new reality. (Ogechi et al., 2022).

Sectors like tourism have recently been encouraged to accommodate new technologies, particularly the internet and social media, into their business models and advertising (Bennett et al., 2016). With the advancement of these new technologies, marketing has transformed into a digital environment where goods and services are available around the clock, every day of the week (Sutherland et al., 2017).

The term branding has become much more concentrated since the basic meaning of branding focuses on a "*name, word, logo, symbol or design, or a blend of them meant to goods and services of one seller or group of sellers and to differentiate them from those of other vendors*" (Sampson, 2018). The importance of branding has increased in the hospitality industry. There are well-known mono hotels, which will never be more than "brands of one," and

the massive hotel brands, which seem to get bigger every day with strategic market segment tiers. However, branding must go beyond just adding a logo to letterhead and building signage. To encourage the highest level of interaction, any business needs to delve into the psychology of its audience. The brand exists in the minds and hearts of consumers and prospects. It results from their collective experiences and viewpoints, some of which managers have some control over, and others do not. A brand is an essential component of marketing communication. One should always have one. Today, almost all travellers say that location is "very influential" when choosing a hotel, compared to somewhat more than half who say that brand affects their decision.

The rapid development of online communication networks has been one of the main changes since the Covid-19 issue (Ratten & Thaicon, 2021). This has altered how people behave and made it possible for online versions of real-world social relationships to exist. Businesses must accept advertising as a means of increasing brand recognition. The development of digital technology has changed how companies advertise.

In contrast, according to (Cobanoglu et al., 2022), digital marketing presents unique difficulties for its practitioners. Digital channels are multiplying quickly, so digital marketers need to stay on top of how they operate, how users interact with them, and how to use them best to promote their goods and services. Additionally, because recipients are being assaulted with more and more competing advertisements, it is getting harder to hold their attention. It can be challenging for digital marketers to analyse the enormous amounts of data they collect and then use that data to create new marketing initiatives. The difficulty of efficiently obtaining and utilising data emphasises the need for a marketing strategy based on a thorough understanding of consumer behaviour in digital marketing.

In this era of increased digital connectivity, hotels are faced with a variety of digital marketing issues (Kanapathipillai & Mahbob, 2021). Hotels must successfully manage them to differentiate themselves from the competition and generate more reservations. Travellers' preferences and behaviours are changing. Their purchasing experience has grown more difficult due to the expanded options available to them.

The constant goal of the technology process is to facilitate, improve, and advance human relationships, encompassing both work-related and practical life situational components. The objectives of technology development and its application in digital marketing are to make routine and, in the future, even more, specialised commercial tasks more convenient. For digital marketers and communicators, technical breakthroughs, such as those fuelled by artificial intelligence (AI), can present numerous ethical, normative, and legal issues (Kanapathipillai, 2021).

Therefore, the literature above has identified some gaps that need examining. Thus, based on the above literature, the following hypothesis is proposed:

H1: There is a statistically significant relationship between the impact of the post Covid-19 Pandemic and the future trends of marketing in the hospitality industry.

2.2 Relationship between Transition Process from Traditional to Digital Marketing Methods and The Future Trends of Marketing in the Hospitality Industry

Traditional marketing is declining, while social media and mobile marketing are rising (Sampson, 2018). Since social and mobile media advertising is significantly less expensive than television, print, and radio advertising, it may favour the hotel's bottom line. However, doing so demands employing or educating people in these areas.

Traditional marketing has transformed to incorporate digital marketing tactics with very high ROI. It is influenced by how much time people spend on their laptops and smartphones (Palos-Sanchez et al., 2019).

Before the pandemic, technology was already being used for product and service marketing. However, due to travel restrictions and social isolation, businesses had to speed up the adoption of digital systems to provide goods and services (Kanapathipillai & Mahbob, 2021). Organisations were compelled to alter their marketing tactics to comprehend modern consumer behaviour and discover ways to be relevant even during the pandemic (Kanapathipillai & Kumaran, 2022; Hoekstra & Leeflang, 2020). The pandemic has demonstrated that businesses need to invest in digital tools and media to create brands and promote their product and service offerings during a crisis and in an unpredictable world (Bettiol et al., 2021).

According to (Kanapathipillai & Mahbob, 2021), celebrity endorsement increased in emerging economies in 2020. The number of followers of endorsers on social media platforms like Instagram, Facebook, and YouTube is enormous. Especially during a period when customers were socially constrained, were forced to stay at home, and interacted with dear ones via digital tools and social media platforms, this presents them with a chance to influence or provide additional details about a business's products and services.

Information and communication technologies have made it feasible for users to generate content in addition to searching for it, and numerous social media platforms allow for two-way conversation (Alias et al., 2022). The distribution of information now involves the user directly. As a result, social media's interactive features helped to democratise the internet and close the communication gap between the supply and demand sides of the tourism industry. Additionally, social media usage has been increasingly embraced by corporations as a viable marketing strategy. It is significant to mention that they can provide people with real-time updates on the situation and its development during times of crisis (Alias et al., 2022). The professionals in these fields have realised the importance of social media in their businesses. They are now including them in their crisis management plans due to the pressure the Covid-19 crisis has placed on the global economy, which includes tourism (Adeola et al., 2022).

Brands were advised to use digital media as a critical instrument to adapt to the pandemic's changing market conditions. Celebrity endorsement, search engine optimization, content marketing, content automation, social media marketing, campaign marketing, direct e-mail marketing, e-books, and display advertising are among the

digital marketing tools used to communicate brand messages to customers during the crisis (Yamin, 2017).

The marketing climate has seen the arrival of cutting-edge, non-traditional media. The internet, search engines, mobile devices, and information and communications technology (ICT) are the main interconnected building pieces influencing market shifts and increasing marketing communications and brand development. ICT and digital technologies are developing quickly, impacting how people connect and communicate. In emerging economies, digital marketing is gaining traction and drawing clients to make purchases of goods and services (Kanapathipillai & Kumaran, 2022).

Utilising the advantages of digital transformation and guaranteeing sustainable tourism policies are two crucial concerns governments are presently dealing with in managing the tourism sector (OECD, 2020).

Technologies are developing quickly and changing the game for policymakers and the tourism industry. The sharing economy, mobile payment systems, virtual and augmented reality applications, blockchain technology, and artificial intelligence are anticipated to impact tourism-related goods, business models, services, and tourist preferences. These could necessitate policy reconsiderations, new laws, and action to maximise opportunities and safeguard consumers. In order to provide the ideal environment for all enterprises to participate in the digital revolution of tourism, governments have a significant role to play.

Kanapathipillai & Mahbob (2021) underlines the need for hotels to cut costs, which might be done by utilising efficient digital tools. At hotels, there is much interaction between guests and staff. Therefore, ensuring physical separation for hotel guests is crucial. In this regard, certain hotels, conscious of their visitors' needs, make technology investments for individuals who want a contactless arrival experience. Visitors may take part in the entire contactless check-in procedure using the Hilton Honors smartphone app. Electronic bracelets that visitors can use to pay for hotel services and unlock their room doors are available at Melia Hotels International.

Additionally, three-dimensional (3D) diagramming capabilities have been added to the Melia Hotels to improve virtual site inspections. The Mobex Hotel app enables guests to book a la carte restaurant reservations and offers tremendous convenience in contactless communication via mobile devices. One efficient method to create a social distance is using technology like hotel robots. Hilton and Marriott hotels throughout California use robots to carry meals, drinks, towels, and even pet treats to patrons who prefer contactless deliveries (Gursoy et al., 2021).

There is no doubt that the Coronavirus pandemic has changed how we think about and conduct business. First of all, digitalisation processes have become more intense than ever before. Businesses that were prepared to quickly adapt to the new environment and digitalise their internal operations had the chance to contribute value to it (Mahmut Demir et al., 2022).

However, contrary to what has been stated above, (Sergi et al., 2019) suggested that proficiency with digital technologies is required in most professions. In the future,

all vocations will require this competency. Additionally, because the technology used to produce and provide items in the economy is continually evolving, modern employees must continuously refresh their knowledge of these developments. Because technology will be modernising faster in the future, personnel will need to master and remaster current technologies more frequently.

Therefore, the literature above has identified some gaps that need examining. Thus, based on the above literature, the following hypothesis is proposed:

H2: There is a statistically significant relationship between the transition process from traditional to digital marketing methods and the future trends of marketing in the hospitality industry.

2.3 Relationship Between Consumers' Reaction Towards Digital Marketing and the Future Trends of Marketing in the Hospitality Industry

Consumers' behaviour has changed due to digitalisation in tourism (Fyall et al., 2019). New communication channels lead to new behaviours, and in recent years, a plethora of new channels have emerged. Reaction times have changed thanks to instant messaging platforms like SMS, Twitter, Facebook Messenger, and WhatsApp. Before this, we had to anticipate a few days for a response to arrive in the mail. These days, we prefer to catch those channels after a brief delay. Immediate responses are now demanded in the digital world, whether they relate to the amount of time it takes to visit a website, getting a response to a critical query before confirming payment, or our anticipation for the speed of delivery.

Every gen's style of life, financial decisions, and customer behaviour will probably continue to alter due to the virus and its economic effects. The world has transformed since the Covid-19 Pandemic. People have begun to purchase differently, live differently, and think out of the box in numerous ways (Androniki et al., 2021). Utilising cutting-edge technologies can strengthen customers' sense of connection to individual hotels. Consumer involvement is boosted due to real-time feedback and communication with hotels via digital channels.

In the upcoming years, technological prowess will be a natural gateway for increasing consumer retention and satisfaction (Sampson, 2018). The impact of information technology has been crucial to the growth of the hotel sector. Technology now plays a significant role in the hospitality sector, helping to manage labour productivity, client happiness, and revenue growth. Customers perceive technology as extremely important in the hospitality sector since it makes it possible to make reservations for rooms, compare costs, and evaluate the experiences of past visitors as well as the infrastructure and accommodations. The use of modern technology in hotels, such as online booking options made available by lodging establishments through mobile applications, websites, and social media accounts, has become increasingly crucial in raising customer satisfaction. In addition, most hotels provide Wi-Fi to improve connectivity and increase guest pleasure.

One of the most critical things hotel managers can do to aid Covid-19 recovery is to communicate openly, empower service providers, modify tourism strategy and plans, and promote contactless technology. According to (Gursoy et al., 2021), providing family-friendly tour packages, boosting domestic travel, creating specific bailout packages for the tourism industry, and creating recovery plans for the destination might all be feasible strategies for reviving the industry.

In the restart stage, destinations take action, including offering technological solutions for cleanliness and safety, collecting new demand, speeding digital and data analytics, and conceptualising new sustainable and responsible tourism. Business management must embrace various execution strategies that aid organisations in battling the pandemic (Kanapathipillai & Mahbob, 2021).

Businesses must develop a new service system in response to the Covid-19 outbreak by leveraging robotics and automation technologies to preserve physical distance (Seyitoglu & Ivanov, 2020). Considering the hotel's use of robots in food processing, (Sharma et al., 2020) proposed a contactless robotic system for preparing and dispensing food. A British chain of restaurants and tea cafes based in London hired a robotic waitress named "The Tea Theresa," which delivers food or drink and carries heavy trays of crockery such as teapots (Monk, 2019).

Due to Covid-19, businesses that produce food and beverages use some technological solutions to implement this procedure, enhance current applications, or reorganise business operations. Businesses offer quick and practical solutions like contactless digital payments, innovative packaging, or digital menus; these programs also assist businesses in managing bookings for tables and seats and restaurant capacity (Dias et al., 2016; Gursoy et al., 2021).

Businesses have changed some of their menus as a result of Covid-19. Menu planning strategies include concentrating on more salads, sandwiches, and entrees, providing pre-mixed drinks and craft beers to go, introducing family meal boxes for takeout and delivery, or serving meals rich in vitamins that support the immune system. As (Jiang & Wen, 2020) stated, enhancing the guest's trust and adapting the guest experience during Covid-19 are essential for hoteliers.

A brand comprises all the characteristics that set a product or service apart from competitors, help it stick in customers' minds, build on prior experiences, raise expectations for the future, and make it unique (Kotler & Pfoertsch, 2010). One of the essential components for consumption in the current lifestyle has evolved and moved to the forefront: the brand concept. The idea has become a reality and a crucial component of the consuming system. Consumer responses to brand evaluations have taken centre stage in market research recently. As a result, such activity plays a crucial role in increasing brand recognition (Kanapathipillai & Mahbob, 2021). For example, The Tourism Board of Singapore hosted an online food festival over two consecutive weekends in August 2020. The festival was an innovative initiative to bring about "the feel like real" and make the best of the situation. The festival consisted of live

masterclasses, Food Bundles (food packages delivered to guests for payment and to be enjoyed at home), virtual food tours, and food merchandise).

Contrastively, utilising data gathered from consumer-organisation interactions, such as those conducted via chatbots, and online consumer behaviours on organisational websites, official social media accounts, etc., is one of the most contentious aspects of using digital technology for marketing and communication. A "footprint" of each customer interaction with a company, brand, or online content is recorded and kept. These statistics is a valuable tool for digital marketers and communicators since they help them better understand their audience and target them with relevant content and tempting offers. Although this activity is shared across all sectors and all sizes and types of organisations (Vollero & Valentini, 2021), it has drawn more attention to Data Surveillance, a particular kind of targeted monitoring of our online behaviours that frequently occurs without our knowledge. The contradiction is highlighted by (Han, 2015), who claims that while Web 2.0 and digital media, in general, have enhanced openness of what is happening globally and in organisations, they have simultaneously strengthened control and produced a "digital panopticon."

Therefore, the literature above has identified some gaps that need examining. Thus, based on the above literature, the following hypothesis is proposed:

H3: There is a statistically significant relationship between consumers' reactions towards digital marketing and the future trends of marketing in the hospitality industry.

2.4 Relationship between the Possibilities of Leveraging Industry 4.0 (Metaverse, Artificial Intelligence, Virtual Reality, and Neuromarketing) and the Future Trends of Marketing in the Hospitality Industry

Brands now have unlimited access to consumer data because of the evolving nature of digital marketing. They can utilise this knowledge to shape consumer behaviour (Nripendra et al., 2020). A positive response cannot be ensured by placing merely a name and an image on an advertisement. As a result, the researchers would want to suggest that artificial intelligence (AI) might be used to extract client information, create adverts that will appeal to them, and share that data digitally. This will make it possible to interact personally with the clients.

Artificial intelligence (AI) is a relatively new technology that many significant businesses use to interact with their clients (Davenport, 2018). AI assists in creating valuable and automated solutions to common challenges that organisations confront, acting as an intelligent replacement for human intervention. Davenport et al. (2020) suggested that given the significance of AI, companies must adopt this technology trend to compete favourably. This proves that companies must learn how to engage with clients using AI-based tools like chatbots, as AI has recently become a crucial component of any corporate organisation's ability to flourish (Panetta, 2018).

The hospitality industry is most affected by how our communication and consumption habits have radically changed due to the proliferation of mobile devices

(Nripendra et al., 2020). The development of mobile apps has improved the link between mobile devices and the tourist industry by enabling greater user-hotel communication and the creation of customised products. Because they offer the chance to produce customised products, the researchers recommend that the hotels develop hotel chain apps that may be utilised inside customer loyalty schemes.

Augmented reality is one of the technologies that can alter how the tourism industry will function in the future (Tavakoli & Mura, 2015). Through augmented reality, tourists and travellers can engage with the landmarks and locations they visit through their smartphones, enabling interaction between the destinations they visit and tourists themselves. Augmented reality is established as one of the future trends of the growth of this industry in the digital environment if we relate the development of this technology to the rise in mobile phone users globally and the percentages of increase in terms of tourism at the global level (Palos-Sanchez et al., 2018).

The development of mobile applications that enable interaction between the physical world and a virtual one that is viewable on smartphones, tablets, or desktops is known as virtual reality (Jose Duarte Santos, 2020). As long as users may imagine the reconstruction of a certain geographic location or view similar stories that occurred in a tourism setting, VR is attractive in this situation. This is made possible by programmes that create these alternative realities. The tourism industry can reclassify its strategies based on offering new products and services characterized by this technology because VR is also firmly established as a trend. This allows for online and offline interactions between visitors and tourist destinations (Burova et al., 2022).

Travelers can profit from virtual experiences in various ways, including by achieving a wide range of goals. For instance, visitors can engage with informative and entertaining virtual reality applications. No matter how they use them, virtual reality apps in tourism can make visitors' experiences better. VR may also be a fantastic marketing tool for businesses and tourist attractions (Bahaaeddin et al., 2022).

The tourism industry is experiencing significant changes due to the digital revolution, transforming how people travel and how services are provided. The customer experience has also changed due to businesses using new technology-enabled services like virtual assistants, service robots, and chatbots (Buhalis, 2019). Augmented reality (AR) and virtual reality (VR) are being used in marketing communications channels, notably in the hotel and tourism sectors, to improve the client experience (Serravelle et al., 2019). Businesses in emerging economies can better customer interactions, customer experience, brand perception, and business objectives with these digital tools (Adeola et al., 2022).

As a field of study, neuromarketing is progressively being used to examine the connections between human behaviour and the choices taken by the brain (Garczarek-Bąk 2021). In this manner, neuromarketing researches the human brain to foresee judgments that it will make. If this idea is used to design approaches for the digital industry, such as eye tracking, specialised software can determine where a user is looking at a particular screen. Therefore, this technique aims to precisely pinpoint where a user

focuses when enjoying a certain piece of online content (Palos-Sanchez et al., 2018). If it is taken into account that users visit websites all over the world every day, these analytic actions are highly crucial. If this data is thoroughly examined, patterns may be discovered that enhance the design of hotel-related websites or even the experiences of hotel visitors. For instance, the hotel can enhance its menu options for food and drinks based on the tastes of its regular customers.

It's crucial to make the most use of the personnel resources that are now available, given the present skills deficit. Automation of monotonous jobs can benefit from digitisation. It also aids in process simplification. Many procedures no longer require manual labour, thanks to contemporary technologies. Hotels should start with those areas where digitalisation may save money without sacrificing quality (Kanapathipillai & Kumaran, 2022). In marketing, digitalisation has thus far been viewed as an "online marketing toolbox" (Kayhan Tajeddini et al., 2020). In the future, the guest will handle more of a hotelier's standard services. These are the well-known reservation procedures using the hotelier's reservation systems and third-party ones provided by "channel managers" and "online travel agents" (OTA). This will be enhanced by the guest checking in independently, opening the doors with controllable devices, and issuing and paying individually tailored bills on his device. The catchphrase is "Bring Your Own Device" (BYOD). The visitor will enjoy and gladly take advantage of this excellent action method at reception. The result of this procedure: The hotel owner will have to hand over the guest's duty for this procedure and permit a staff member only partially to supervise and oversee it (Kanapathipillai & Mahbob, 2021). As described above, investment in a hotel brand will provide comfort. This "guest experience" will be perceived by the visitor as a "digital guest experience" that represents a "commitment in the sense of adding extra value" to the hotel's brand.

As a result of the impending digitalisation, marketing will be done in real-time, multiplying the prior efforts made to aid in this process, which will have little to no bearing on the hotel's original primary business. However, in the future, digitalisation will make it possible for customer retention through this in-the-moment action and so produce consumer benefits throughout the stay rather than just after it (Kanapathipillai & Kumaran, 2022). The production of pricing consistent with the market price for a room at a specific time (revenue management) and communication with the guest will become more complex. Prices do get unique. Hotels adopt the method used to determine prices for consumer goods.

This study aims to increase knowledge of this expanding area of demand and supply in the hospitality industry. Based on the findings, the researchers will discuss best practices that should be applied to marketing strategies and the boost that cutting-edge technology can provide in this area.

Governments are actively supporting the growth of the tourism industry since it positively impacts the economy and benefits a variety of stakeholders, including local communities, businesses, residents, and tourists. Success in the tourism industry can now

be gauged in terms of visitors, jobs, and cash. There has been progress toward ensuring local communities can profit from tourism more evenly (OECD, 2020).

In order to prepare the tourism businesses for the digital future, the government can apply the following actions:

- 1) Actively support the digital transformation of the travel and tourist industry by fostering a digital mentality, updating legal frameworks, and enhancing SMEs' ability to participate in digital ecosystems.
- 2) Encourage the adoption of new technologies, the development of new skills, and creativity. Support current tourism SMEs in utilising the advantages of digital transformation and encourage the creation of smart tourism destinations.
- 3) Promote the adoption of data analytics and other supporting technologies, the optimization of business procedures, and the growth of accessible digital infrastructure, tools, and solutions to promote digitally enhanced tourism business models, value chains, and ecosystems.

Governments are progressively establishing regulations that aim to maximize the economic, environmental, and social benefits that tourism may offer while lessening the challenges that arise when this expansion is unplanned and uncontrolled, even though overall growth patterns in this dynamic sector are positive. Policies addressing these issues have risen to the top priority list. The development of new products to extend the season, encouragement of higher productivity, better resource usage, and more steady employment, for instance, are only a few examples of the efforts done to address overcrowding at popular sites. Countries are stepping up coordination and implementation procedures, modernising regulations, adopting digital solutions, expanding interaction with civil society, and involving the private sector in policymaking to ensure these policies have the desired impact. (OECD, 2020).

Contrariwise, customers will face new challenges due to the digitalisation of the environment; whether they are companies or natural people, work and relationships will change. Customers must adapt to these changes and consider information protection, security, and other factors. The fourth industrial revolution's most crucial component will be information management, the legislation enabling it, and the adaptation of all legal systems to a completely digitalized world. Therefore, it will also be vital to focus on values and ethics (Ortiz, 2020).

Therefore, the literature above has identified some gaps that need examining. Thus, based on the above literature, the following hypothesis is proposed:

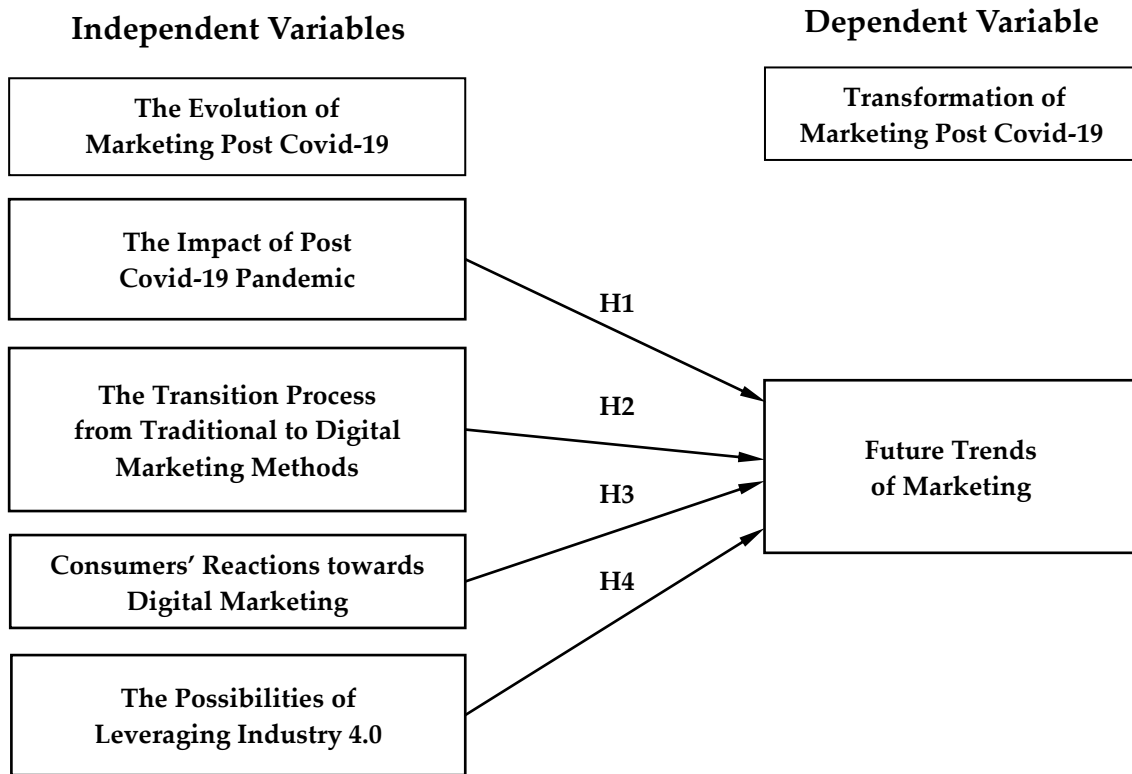
H4: There is a statistically significant relationship between the possibility of leveraging Industry 4.0 (metaverse, artificial intelligence, virtual reality and neuromarketing) and the future trends of marketing in the hospitality industry.

2.5 Proposed Conceptual Framework

Figure 1, Proposed Conceptual Framework in this research is to assess if the impact of the post- covid-19 pandemic, the transition process from traditional to digital marketing

methods, consumers' reactions towards digital marketing, and the possibilities of leveraging industry 4.0 influence the future trends of marketing in the hospitality industry at Klang Valley.

Figure 1: Proposed Conceptual Framework



3. Methodology

The following section provides the reliability analysis, the population and sampling of this study.

3.1 Reliability Analysis

Table 1: Cronbach Alpha in Reliability Analysis

| Variables | Cronbach's Alpha | No. of Items |
|--|------------------|--------------|
| Impact of Post Covid-19 pandemic | 0.933 | 5 |
| Transition process from traditional to digital marketing methods | 0.952 | 5 |
| Consumers' reactions towards digital marketing | 0.940 | 5 |
| The possibilities of leveraging industry 4.0 | 0.938 | 5 |
| Future trends of marketing | 0.943 | 5 |

Based on Table 1, the value of Cronbach's Alpha for The Impact of Post Covid-19 Pandemic is 0.933 with 5 items, the second variable The Transition process from

traditional to digital marketing methods, showed Cronbach’s alpha value of 0.952 with 5 items. As such, the Cronbach’s alpha value of Consumers’ reactions towards digital marketing, The Possibilities of Leveraging Industry 4.0, and Future Trends of Marketing are 0.940, 0.938, and 0.943 respectively. All Cronbach’s values have shown more than 0.9, which means the construct is excellent. Therefore, the level of reliability of the constructs is high.

3.2 Population, Sampling, and Measurements

There were 208,500 employees employed in the hotel industry in Malaysia in 2020 (World Tourism Organisation, 2020). Klang Valley is a well-known tourist hotspot, and because the hotels located engaged in successful marketing initiatives to draw tourists, this group of people was chosen as the population. Additionally, Klang Valley is well-positioned to benefit from the resumption of international travel thanks to a robust domestic tourist industry and Malaysia’s rising recognition as a halal tourism destination (Kuala Lumpur Hotel Market Outlook & Prospects Report, 2022). Google Forms was the tool utilised to distribute the questionnaire to the respondents. The respondents come from different ages, academic levels, experiences, and positions. Based on the aims of this study, the (Krejcie & Morgan, 1970) table furnished the estimated sample size. Therefore, a suitable sample size based on (Krejcie & Morgan, 1970) tabulation is 384.

4. Findings and Interpretation

The following section presents the findings and interpretation of the data collected for this study.

4.1 Demographic Profiles of the Respondents

The profile of the respondents studied is displayed in Table 2.

Table 2: Demographic Profiles of Respondents (N = 390)

| Demographics | Frequency | Percentage (%) |
|---------------------|-----------|----------------|
| Gender | | |
| Male | 182 | 46.70% |
| Female | 208 | 53.30% |
| Ethnic group | | |
| Malay | 298 | 76.40% |
| Chinese | 39 | 10.00% |
| Indian | 42 | 10.80% |
| Other | 11 | 2.80% |
| Age | | |
| Below 25 | 60 | 15.40% |
| 26 - 34 | 133 | 34.10% |
| 35 - 45 | 159 | 40.80% |
| 46 - 55 | 29 | 7.40% |
| Above 56 | 9 | 2.30% |

| Educational Level | | |
|---------------------------|-----|--------|
| Master's Degree | 26 | 6.70% |
| Bachelor's Degree | 172 | 44.10% |
| Diploma | 165 | 42.30% |
| Other | 27 | 6.90% |
| Working Experience | | |
| Below 5 years | 97 | 24.90% |
| 5 - 10 years | 103 | 26.40% |
| 11 - 15 years | 112 | 28.70% |
| Above 16 years | 78 | 20.00% |
| Designation | | |
| CEO | 5 | 1.30% |
| Executive Director | 2 | 0.50% |
| General Manager | 10 | 2.60% |
| Operations Director | 4 | 1.00% |
| Department Director | 2 | 0.50% |
| Head of Department | 14 | 3.60% |
| Senior Manager | 15 | 3.80% |
| Manager | 36 | 9.20% |
| Assistant Manager | 37 | 9.50% |
| Senior Executive | 55 | 14.10% |
| Junior Executive | 152 | 39.00% |
| Fresh Graduates | 58 | 14.90% |

Based on Table 2, the number of respondents in this research N=390. The survey exhibits that the majority of respondents were females (53.3%) or 208. A majority of 298 or (76.4%) of the respondents are Malays. In terms of age, the majority were between (35-45) years old, which is (40.8%) or 159 respondents. In terms of educational level, a majority of 172 or (44.1%) of the respondents have attained a bachelor's degree. A majority of 112 or (28.7%) of the respondents have (11-15) years of working experience. Finally, A majority of 152 or (39.0%) of the respondents are junior executives in their organizations.

3.3 Correlation Results

The correlation analysis was conducted to examine how the variables are correlated as shown in Table 3: Correlation Matrix below.

Table 3: Correlation Among Variables (N=390)

| Factors | IPC | TRN | CRN | IND | FTM |
|--|---------|---------|---------|---------|-----|
| Impact of Post Covid-19 Pandemic (IPC) | 1 | | | | |
| Transition process from traditional to digital marketing methods (TRN) | 0.885** | 1 | | | |
| Consumers' reactions towards digital marketing (CRN) | 0.859** | 0.903** | 1 | | |
| Possibilities Of Leveraging Industry 4.0 (IND) | 0.835** | 0.880** | 0.902** | 1 | |
| Future Trends Of Marketing (FTM) | 0.843** | 0.896** | 0.913** | 0.879** | 1 |
| **correlation is significant at the 0.01 level (2-tailed) | | | | | |

Based on Table 3 the correlation revealed that the data significantly supported the measurement model. The correlation matrix recorded that the variables Impact of Post Covid-19 Pandemic, the Transition process from traditional to digital marketing methods, Consumers' reactions towards digital marketing, and Possibilities of Leveraging Industry 4.0, displays a very high positive correlation with the variable Future Trends Of Marketing ($r = 0.843$; $p < 0.001$), ($r = 0.896$; $p < 0.001$), ($r = 0.913$; $p < 0.001$), and ($r = 0.897$; $p < 0.001$) respectively.

Furthermore, the association between the variable Transition process from traditional to digital marketing methods and Impact of Post Covid-19 Pandemic illustrates a high positive correlation ($r = 0.885$; $p < 0.001$). Moreover, the variables Impact of Post Covid-19 Pandemic and Transition process from traditional to digital marketing methods shows a high positive correlation with Consumers' reactions towards digital marketing ($r = 0.859$; $p < 0.001$) and ($r = 0.903$; $p < 0.001$) respectively.

Finally, the association between the variables Impact of Post Covid-19 Pandemic, Transition process from traditional to digital marketing methods, and Consumers' reactions towards digital marketing with the variable Possibilities of Leveraging Industry 4.0 displays a high positive correlation ($r = 0.835$; $p < 0.001$), ($r = 0.880$; $p < 0.001$), and ($r = 0.902$; $p < 0.001$) respectively. Overall, all the associations between the variables in this study indicate a high positive correlation.

4.3 Multiple Regression Results

The multiple regression procedure is used to test the relationship between the independent and dependent variables in this study.

Table 4: Model Summary for Regression

| Model Summary | | | | |
|--|-------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | 0.931 | 0.867 | 0.866 | 0.360 |
| a. Predictors: (Constant), Impact of Post Covid-19 Pandemic (IPC), Transition process from traditional to digital marketing methods (TRN), Consumers' reactions towards digital marketing (CRN), and Possibilities of Leveraging Industry 4.0 (IND). | | | | |

From Table 4 Model Summary, $R = 0.931$ indicates the multiple correlation coefficient value which exhibits a high degree of predictive accuracy. The $R^2 = 0.867$. This implies that 86.7% of the variation in the dependent variable (Future Trends of Marketing (FTM)) can be explained by the independent variables (Impact of Post Covid-19 Pandemic (IPC), Transition process from traditional to digital marketing methods (TRN), Consumers' reactions towards digital marketing (CRN), and Possibilities of Leveraging Industry 4.0 (IND)).

Table 5: ANOVA for Regression

| ANOVA ^a | | | | | | |
|--|------------|----------------|---------|-------------|---------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 326.089 | 4 | 81.522 | 627.918 | .000 ^b |
| | Residual | 49.984 | 385 | 0.13 | | |
| | Total | | 376.073 | 389 | | |
| a. Dependent Variable: Future Trends of Marketing (FTM) | | | | | | |
| b. Predictors: (Constant), Impact of Post Covid-19 Pandemic (IPC), Transition process from traditional to digital marketing methods (TRN), Consumers' reactions towards digital marketing (CRN), and Possibilities of Leveraging Industry 4.0 (IND). | | | | | | |

Table 5 ANOVA, shows that the independent factors statistically and substantially predict the dependent variable, (F=627.918, p < 0.001) Therefore, the regression model fit is good. Thus, the independent variables (Impact of Post Covid-19 Pandemic, Transition process from traditional to digital marketing methods, Consumers' reactions towards digital marketing, and Possibilities of Leveraging Industry 4.0) can be used to predict the dependent variable (Future Trends of Marketing).

Table 6: Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|------------|-----------------------------|------------|---------------------------|-------|-------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 0.183 | 0.074 | | 2.459 | 0.014 |
| | IPC | 0.035 | 0.042 | 0.034 | 0.85 | 0.396 |
| | TRN | 0.279 | 0.049 | 0.289 | 5.664 | 0.000 |
| | CRN | 0.447 | 0.051 | 0.446 | 8.742 | 0.000 |
| | IND | 0.193 | 0.044 | 0.197 | 4.403 | 0.000 |
| a. Dependent Variable: Future trends of marketing (FTN) | | | | | | |

Table 6 shows that Transition process from traditional to digital marketing methods (TRN) [B = 0.279; p < 0.001] Consumers' reactions towards digital marketing (CRN) [B = 0.447; p < 0.001], and Possibilities of Leveraging Industry 4.0 (IND) [B = 0.193; p < 0.001] are statistically significant. Meanwhile, Impact of Post Covid-19 Pandemic (IPC) [B = 0.035; p > 0.001] is insignificant.

Thus, this implies that there is a significant relationship between the predictor variables (Transition process from traditional to digital marketing methods, Consumers' reactions towards digital marketing, and Possibilities of Leveraging Industry 4.0) and the dependent variable (Future Trends of Marketing).

Based on Table 7 Coefficients, the linear regression equation is as follows:

$$FTM = 0.183 + 0.279 (TRN) + 0.447 (CRN) + 0.193 (IND)$$

Where;

FTM = Future trends of marketing;

TRN = The transition process from traditional to digital marketing methods;

CRN = Consumers' reactions towards digital marketing;

IND = The possibilities of leveraging industry 4.0;

0.183 = constant or the y-intercept.

The result indicates that with a one-unit increase in the factors (Transition process from traditional to digital marketing methods, Consumers' reactions towards digital marketing, and The Possibilities of Leveraging Industry 4.0), there is an increase in the factor (Future Trends of Marketing) by 0.279, 0.447, and 0.193 respectively.

Additionally, the outcome of multiple regression analysis rates the influence of independent factors on the dependent factor. The stronger the standardization coefficient, the more significant the influence of the predictor variables on the outcome variable (Future Trends of Marketing). With a standard coefficient (Beta = 0.446), the factor of Consumers' reactions toward digital marketing is the predictor variable contributing the most to the variance in (Future Trends of Marketing). The variable (Transition process from traditional to digital marketing methods) follows with (Beta = 0.289), and lastly the factor (Possibilities of Leveraging Industry 4.0) with (Beta = 0.197).

5. Discussion

The first research question is to answer if there is a statistically significant relationship between the impact of the post-Covid-19 Pandemic and the future trends of marketing in the hospitality industry, where the p-value of the impact of the post-Covid-19 Pandemic is 0.396 which is greater than 0.001, indicating that the result is insignificant and the hypothesis is not accepted by data. From a previous study, the rapid development of online communication networks has been one of the main changes since the Covid-19 issue (Ratten & Thaicon, 2021). This has altered how people behave and made it possible for online versions of real-world social relationships to exist. Businesses must accept advertising as a means of increasing brand recognition. The development of digital technology has changed how companies advertise. This result negates the previous literature of many researchers and authors. The result instead supports the statement of (Cobanoglu et al., 2021) that digital marketing presents unique difficulties for its practitioners. Digital channels are multiplying quickly, so digital marketers need to stay on top of how they operate, how users interact with them, and how to use them best to promote their goods and services.

Additionally, because recipients are being assaulted with more and more competing advertisements, it is getting harder to hold their attention. It can be challenging for digital marketers to analyse the enormous amounts of data they collect and then use that data to create new marketing initiatives. The difficulty of efficiently obtaining and utilising data emphasises the need for a marketing strategy based on a thorough understanding of consumer behaviour in digital marketing. In this era of increased digital connectivity, hotels are faced with a variety of digital marketing issues. Hotels must successfully manage them to differentiate themselves from the competition and generate more reservations. Travellers' preferences and behaviours are changing. Their purchasing experience has grown more difficult due to the expanded options

available to them. Thus, the findings of this research have answered the first research question and narrowed the literature gap.

The second research question is to answer if there is a significant transition process from traditional to digital marketing methods in the future trends of marketing in the hospitality industry. There is strong supporting evidence from previous studies that the transition process from traditional to digital marketing methods significantly impacts future marketing trends in the hospitality industry. Traditional marketing is declining, while social media and mobile marketing are rising (Sampson, 2018). Since social and mobile media advertising is significantly less expensive than television, print, and radio advertising, it may favour the hotel's bottom line. However, doing so demands employing or educating people in these areas. Traditional marketing has transformed to incorporate digital marketing tactics with very high ROI rates and is influenced by how much time people spend on their laptops and smartphones (Palos-Sanchez et al., 2019). Technology was already being used for product and service marketing prior to the Pandemic. However, due to travel restrictions and social isolation, businesses had to speed up the adoption of digital systems to provide goods and services (Kanapathipillai & Mahbob, 2021). Organisations were compelled to alter their marketing tactics to comprehend modern consumer behaviour and discover ways to be relevant even during the Pandemic (Kanapathipillai & Kumaran, 2022; Hoekstra & Leeflang, 2020). The Pandemic has demonstrated that businesses need to invest in digital tools and media to create brands and promote their product and service offerings during a crisis and in an unpredictable world (Kanapathipillai & Mahbob, 2021). According to the results obtained, the p-value of the transition process from traditional to digital marketing methods is 0.000, which is less than 0.001, indicating that this hypothesis result is accepted by the data. This proves that the result supports the previous research that there is a significant impact of the transition process from traditional to digital marketing methods on future marketing trends in the hospitality industry. The study's outcome negates the findings of (Sergi et al., 2019), who suggested that proficiency with digital technologies is required in the majority of professions. In the future, all vocations will require this competency. Additionally, because the technology used to produce and provide items in the economy is continually evolving, modern employees must continuously refresh their knowledge of these developments. Because technology will be modernising faster in the future, personnel will need to master and remaster current technologies more frequently. Thus, the findings of this research have answered the second research question and narrowed the literature gap.

The third research question is to answer if there is a significant consumers' reaction on the future trends of marketing in the hospitality industry. Based on earlier research, there is strong supporting evidence that consumers' reactions toward digital marketing positively affect future marketing trends in the hospitality industry. Customer behaviour has changed due to digitalisation in the tourism sector (Fyall et al., 2019). New communication channels lead to new behaviours, and in recent years, a plethora of new channels have emerged. Reaction times have changed thanks to instant messaging

platforms like SMS, Twitter, Facebook Messenger, WhatsApp, and others. Before this, we had to anticipate a few days for a response to arrive in the mail. These days, we prefer to catch those channels after a brief delay. Immediate responses are now demanded in the digital world, whether they relate to the amount of time it takes to visit a website, getting a response to a key query before confirming payment, or our anticipation for the speed of delivery. Every gen's style of life, financial decisions, and customer behaviour will probably continue to alter as a result of the virus and its economic effects. The world has transformed since the Covid-19 Pandemic. People have begun to purchase differently, live differently, and think out of the box in numerous ways (Androniki et al., 2021). Utilising cutting-edge technologies can strengthen customers' sense of connection to individual hotels. Consumer involvement is boosted due to real-time feedback and communication with hotels via digital channels.

In the upcoming years, technological processes will be a gateway for increasing consumer retention and satisfaction (Sampson., 2018). The impact of information technology has been crucial to the growth of the hotel sector. Technology now plays a significant role in the hospitality sector, helping to manage labour productivity, client happiness, and revenue growth. Customers perceive technology as extremely important in the hospitality sector since it makes it possible to make reservations for rooms, compare costs, and evaluate the experiences of past visitors as well as the infrastructure and accommodation. The use of modern technology in hotels, such as online booking options made available by lodging establishments through mobile applications, websites, and social media accounts, has become increasingly crucial in raising customer satisfaction. In addition, most hotels provide Wi-Fi to improve connectivity and increase guest pleasure. The p-value of consumers' reactions toward digital marketing based on the results is 0.000, less than 0.001. Therefore, the hypothesis result is accepted by data. This proves that the previous or earlier data and literature support the results of our research. This result overturned the statement of (Han, 2015), who claims that while Web 2.0 and digital media, in general, have enhanced openness of what is happening globally and in organisations, they have simultaneously strengthened control and produced a "digital panopticon." Thus, the findings of this research have answered the third research question and narrowed the literature gap.

The fourth research question is to answer if there is a significant relationship between the possibility of leveraging Industry 4.0 (metaverse, artificial intelligence, virtual reality, and neuromarketing) on the future trends of marketing in the hospitality industry. Previous studies have shown a constructive relationship between the possibility of leveraging Industry 4.0 (metaverse, artificial intelligence, virtual reality, and neuromarketing) and the future trends of marketing in the hospitality industry. Brands now have unlimited access to consumer data because of the evolving nature of digital marketing. They can utilise this knowledge to shape consumer behaviour (Nripendra et al., 2020). A positive response cannot be ensured by placing merely a name and an image on an advertisement. As a result, the researchers would want to suggest that artificial intelligence (AI) might be used to extract client information, create adverts

that will appeal to them, and share that data digitally. This will make it possible to interact personally with the clients. Augmented reality is one of the technologies that can alter how the tourism industry will function in the future (Tavakoli & Mura, 2015). Through augmented reality, tourists and travellers can engage with the landmarks and locations they visit through their smartphones, enabling interaction between the destinations they visit and tourists themselves. Augmented reality is established as one of the future trends of the growth of this industry in the digital environment if we relate the development of this technology to the rise in mobile phone users globally and the percentages of increase in terms of tourism at the global level (Palos-Sanchez et al., 2018). Based on the results obtained, the p-value of the possibility of leveraging Industry 4.0 is 0.000, less than 0.001. Additionally, the study's outcome negates the findings of (Ortiz, 2020), which says that customers will face new challenges due to the digitalisation of the environment; whether they are companies or natural people, the nature of work and relationships will change. Customers must adapt to these changes and consider information protection, security, and other factors. The fourth industrial revolution's most crucial component will be information management, the legislation enabling it, and the adaptation of all legal systems to a completely digitalized world. Therefore, it will also be vital to focus on values and ethics. Thus, the findings of this research have answered the fourth research question and narrowed the literature gap.

6. Conclusion

The first objective of this research is to study if there is a significant impact of the post-Covid-19 Pandemic on the future trends of marketing in the hospitality industry. This study has shown that the relationship between the impact of the Covid-19 Pandemic on marketing and the future trends of marketing in the hospitality industry is insignificant. According to (Ratten & Thaicon, 2021), supported by other researchers, the growth of the digital transformation in the marketing trends in entrepreneurship is required just in time. The Covid-19 crisis has necessitated the future trends of digital transformation in the healthcare sector only. In the meanwhile, has become an opportunity for other stakeholders to introduce and implement the transactions without papers (Ratten & Thaicon, 2021). The results of this study supported research conducted by (Cobanoglu et al., 2021), digital marketing presents exceptional complexities. Analysing the vast volumes of data, they gather and using it to develop new marketing campaigns can be challenging for digital marketers. The challenges of efficiently obtaining and utilising data highlight the need for a marketing strategy based on a thorough understanding of consumer behaviour in digital marketing.

A study on the hospitality and tourism information technology which is not related to the Covid-19 Pandemic, was conducted on hotel managers as well as hotel technology executives who suggested that data analytics and business intelligence, mobiles, software applications (bots), and guest technology will impact the industry in the coming years (Cobanoglu et al., 2021). Digital marketers must always compete to be

on top of digital technologies as digital channels multiply quickly. According to (Ratten & Thaicon, 2021) as well, the digital transformation concept is a multi-dimensional phenomenon that, no matter how will impact any entities differently based on the environmental factor. With the advancement of these new technologies, marketing has transformed into a digital environment where goods and services are available around the clock, every day of the week (Sutherland et al., 2017). Supported by the study conducted by (Sutherland et al., 2017) prior to the Covid-19 Pandemic, which mentioned the advancement of these new technologies, marketing has transformed into a digital environment where goods and services are available around the clock, every day of the week. Nonetheless and in converse, some researchers have agreed on the significant impact of the Covid-19 Pandemic on the future trends of marketing in the hospitality industry. (Seabra et al., 2021) states that most events held at the international, governmental, and local levels have been axed or rescheduled. The World Tourism Organization estimates that the travel and tourism limitations imposed as a result of Covid-19 caused a 70% decline in the number of foreign arrivals in the first eight months of 2020 (Androniki et al., 2021). According to (Bennett et al., 2016), industry sectors like tourism have recently been encouraged by the emergence of modern technologies, particularly the Internet, to accommodate their business models to the 21st century and the new advertising methods.

The second objective of this research is to study the significant relationship between the transition process from traditional to digital marketing methods and the future trends of marketing in the hospitality industry. As a result, the findings of this research show a significant relationship between the transition process from traditional to digital marketing methods and the future trends of marketing in the hospitality industry. Thus, it explains the evolution of technology applications worldwide, similar to Industry 4.0. This is in line with the study conducted by (Sampson, 2018), where traditional marketing is declining while social media and mobile marketing are on the rise. Supported the findings researched by (Kanapathipillai & Mahbob, 2021), who stated that technology was already being used for product and service marketing prior to the Pandemic. However, due to travel restrictions and social isolation, businesses had to speed up the adoption of digital systems to provide goods and services.

The third objective of this research is to study the relationship between consumers' reactions toward digital marketing and future marketing trends in the hospitality industry. As a result, this research has proved a significant relationship between consumers' reactions toward digital marketing and future trends of marketing in the hospitality industry. Supported by the findings by (Androniki et al., 2021), people have begun to purchase differently, live differently, and think out of the box in numerous ways. The transformation has been evident since the Covid-19 Pandemic. Utilising cutting-edge technologies can strengthen customers' sense of connection to individual hotels. Consumer involvement is boosted by real-time feedback and communication with hotels via digital channels. Especially for businesses that produce food and beverages which use technological solutions to implement the procedure, enhance applications, or

reorganize business operations. Due to Covid-19, businesses offer quick and practical solutions like contactless digital payments, innovative packaging, or digital menus; these programs also assist businesses in managing bookings for tables and seats and restaurant capacity (Dias et al., 2016; Gursoy et al., 2021).

The fourth objective of this research is to study the relationship between the possibilities of leveraging Industry 4.0 (metaverse, artificial intelligence, virtual reality, and neuromarketing) and the future trends of marketing in the hospitality industry. As a result, the finding of this study proved that there is a significant relationship between the possibilities of leveraging Industry 4.0 (metaverse, artificial intelligence, virtual reality, and neuromarketing) and the future trends of marketing in the hospitality industry. According to Mosedale (2018), many procedures nowadays no longer require manual labor, thanks to contemporary technologies. Hotels should start with those areas where digitalisation may save money without sacrificing quality. In marketing, digitalisation has thus far been viewed as an "online marketing toolbox" (Kayhan Tajeddini et al., 2020). As a result of the impending digitalisation, marketing will be done in real-time, multiplying the prior efforts made to aid in this process, which will have little to no bearing on the hotel's original primary business. Based on the research findings, the researchers have emphasized and provided the result of practices that should be applied to marketing strategies and the boost that cutting-edge technology can provide in the hospitality industry.

As for management planning in the hospitality industry, this research shall assist the corporate management and the marketing teams in a better understanding of the evolution of the technology applications and methods in marketing. It comprehends how the evolution of technology penetrates the daily activities of every person's desires and wants, narrowed into the hospitality sector. Industry 4.0 has become the new benchmark for the hospitality industry, and the findings of this research will be beneficial to digital marketers in setting a baseline for a digital marketing campaign. Online tools have been implemented to reach the effectiveness of digital marketing worldwide with several advantages, including but not limited to faster growth, widespread social media exposure, credibility enhancement, and the creation of leads rapidly.

Generally, future marketing trends in the hospitality industry will become the backbone of industry evolutions. The Covid-19 Pandemic has breached the revolution of digital marketing in hospitality to be widely and effectively practiced and become trending not just within the Klang Valley population but also globally.

7. Limitation of Research

Researchers emphasize that the constraints and challenges mentioned in concluding the research shall not weaken the importance of the research result. This research is comparatively new to Malaysia in conjunction with the recent Covid-19 Pandemic and the new way of life. As a result, some limitations are inescapable. Nonetheless, this research shall contribute as supporting platforms and citations for future research.

More time was needed to get the responses from the sample. This is because the research instrument is not straightforward, as it covers all the discussed topics. This may have caused a delay because the respondents must understand the questions before responding. As the time gap is quite tight, quantitative questionnaires were applied to compensate for the complexity of the research's sampling processes.

At the initial stage, the research materials were collected based on the impacts of Covid-19, and researchers found there are still preliminary studies conducted globally. As a result, researchers were allocating more time to allocating significantly relevant content and materials as citations. In addition, gaining access to most of the available materials and citations online is difficult as it involves costs. Despite the challenges, researchers have considered allocating alternative resources externally to view and acquire important content, especially to the independent variables.

Since the convenient sampling procedures were applied, researchers may need to be able to avoid bias in the sampling result. The bias may occur in the sampling result as the sampling populations are mainly people who have already enjoyed the accessibility of the technology applications.

8. Recommendations for Future Research

Researchers of this project have initiated a survey within Klang Valley (urban areas) and have obtained 390 respondents. In fact, for future research, the researchers of this project would like to recommend a bigger sample size inclusive of both urban and rural areas. The result will be significantly different due to the financial, the standard cost of living, exposure of mindset, and people's acceptance and adaptability towards technology awareness and applications.

It is also recommended that more citations, references, real cases, and materials on the project issues and contents are gathered in future research. Further Independent Variables should also be incorporated and assessed to have a more detailed analysis of consumer perceptions towards the influenced factors that impact the future marketing trends in the hospitality industry. Based on the findings of this research, the Independent Variables (The Impact of Post-Covid-19 Pandemic, The transition process from traditional to digital marketing methods, Consumers' Reactions, and The Possibilities if Leveraging Industry 4.0) contributed 86.7% of the variation in the Dependent Variables (Future Trends of Marketing), in which leaving 13.3% indefinite. As a result, it demonstrated that there is still little room for additional independent variables that can influence the future trends of marketing which are yet to be anticipated in this research. Therefore, the other additional independent variables should be included in future research to determine further the influential factors towards future marketing trends in the hospitality industry.

The current research may also be duplicated in rural areas, such as in villagers or amongst the native populations. This duplication may allow researchers to determine whether the result may be produced in contrast in the different populations, proving

various evidence for the research's consistencies. Additionally, other factors, such as incomes per capita, economic recessions, and demographic data, can be other advantages for future research.

Future researchers may anticipate quantitative and qualitative methods compared to this research, which exclusively implements the quantitative research method. Quantitative and qualitative methodologies may contribute to other conclusions which will cause social change.

Acknowledgments

The authors would like to express their genuine appreciation to all the respondents in the telecommunication companies for allowing the authors to conduct this research and value the time they have spent answering the questionnaire.

Conflict of Interest Statement

The authors of this research would like to assert that there are no conflicts of interest linked with this research, and this research was not supported by anyone that could have influenced its results. As the researchers of this study, the authors authenticate its originality, accentuate that this research has not been published previously, and validate that it is not presently intended for publication elsewhere.

About the Authors

Thilaga Sivaraman is a Diploma holder in Hotel Management from MSU College (formerly PTPL College). She is an experienced Publications and Corporate Communications Manager with a demonstrated history of working in a non-profit organization. She is highly skilled in written communications, public relations, and design. She was the Assistant Editor and Chief Designer for the Alumni E-Newsletter of the University of Southern Queensland. Currently, she serves as a media liaison for the Chartered Tax Institute of Malaysia. Her main research interest is in Marketing, focusing specifically on Digital Marketing, and she is keen to execute her role as a top leader in corporate management.

Mohamad Najat Bin Mohamad Zahrin is a Diploma holder in Banking (Finance) and graduated from the University of MARA Technology, Dungun Campus, Terengganu, Malaysia. He is currently working as a Contract and Procurement Executive in one of PETRONAS Profit Sharing Contractor (PSC). He has more than 15 years of experience in supply chain management, covering inventory and warehousing, logistics, and procurement. However, he is concentrating and possesses immense experience in Contracts and Procurement (Upstream Oil and Gas).

Mohamad Yazid Bin Roni studied from Sekolah Menengah Kebangsaan Sulaiman in 2006 with a STPM. VADS Business Process Outsourcing has employed him for 14 years. He currently works in business enablement, handling customer service inbound and outbound operations. His current research interests include sales, marketing management, and organisational management.

Kumaran Kanapathipillai holds a Ph.D. in Management/Business from the Management and Science University (Malaysia). He is an academic and a researcher in the areas of Management, Marketing, and Supply Chain Management. He supervises and assesses Masters and Ph.D. candidates. He conducts entrepreneurship, creative problem-solving, and project management training in various industries. His main areas of interest and research are contemporary entrepreneurship, logistics management, and marketing.

References

- Aaker, D. A. (n.d.). *Aaker on Branding*. New York. Morgan James Publishing. 2014.
- Adeola, O., Hinson, R. E., & Sakkthivel, A. M. (2022). *Marketing communications and brand development in emerging markets. Volume II*. Switzerland: Retrieved from: <https://books.google.com.my/books>.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211. 10.1016/0749-5978(91)90020-T.
- Ali Gaafar, H., & Al Romeedy, B. (2022). Neuromarketing as a Novel Method to Tourism Destination Marketing: Evidence from Egypt. *Journal of Association of Arab Universities for Tourism and Hospitality*, 22(1), 48-74.
- Alias, N. A., Hao, Y. Z., Muhammad Al-Fateh., Kang, F. Y., & Kanapathipillai, K. (2022). Factors that impact the effectiveness of social media as a marketing tool in small and medium-sized enterprises in Selangor, Malaysia. *European Journal of Management and Marketing Studies*, 7(4), 214-247. <http://oapub.org/soc/index.php/ejmms/article/view/1355>
- Androniki K., Havlovic, S. J., & Totska, N. (2021). *Strategic Innovative Marketing and Tourism in the Covid-19 Era*. Switzerland.
- Atli, D. (2020). *Analyzing the Strategic Role of Neuromarketing and Consumer Neuroscience*. United States of America: <https://books.google.com.my/books>.
- Avraham, E. (2018). Nation branding and marketing strategies for combatting tourism crises and stereotypes toward destinations. *Journal of Business Research*. Online First. Retrieved from: <https://doi.org/10.1016/j.jbusres.2018.02.036>.
- Baek, T. H., & Morimoto, M. (2012). Stay away from me: examining the determinants of consumer avoidance of personalized advertising, *Journal of Advertising*, 41(1), 59-76.
- Bahaaeddin A., & Allam, H. (2022). *Explore Business, Technology Opportunities and Challenges After the Covid-19 Pandemic*. Switzerland.
- Bala, M., & Verma, D. (2018). A Critical Review of Digital Marketing. *International Journal of Management, IT & Engineering*, 8, 321-339.
- Bala, M., & Verma, D. (2018). A Critical Review of Digital Marketing. *International Journal of Management, IT & Engineering*, 321-339.
- Barwitz, N. A. (2018). Understanding the omnichannel customer journey: determinants of interaction choice. *Journal of Interactive Marketing*, 43(1), 116-133.

- Bennett, N., Roth, R., Klain, S., Chan, K., Clark, D., Cullman, G., Epstein, G., Nelson, M., Stedman, R., Teel, T., & Thomas, R., Wyborn, C., Curran, D., Sandlos, J., & Verissimo, D. (2016). Mainstreaming the social sciences in conservation. *Conservation Biology: The Journal of The Society for Conservation Biology*, 31. 10.1111/cobi.12788.
- Bican, P. A. (2020). Digital business model, digital transformation, digital entrepreneurship: is there a sustainable digital. *Sustainability*, 12(3). 5239.
- Blanco, C. F., Blasco, M. G., & Azorin, I. I. (2010). Entertainment and informativeness as precursory factors of successful mobile advertising messages. *Communications of the IBIMA*. 1-11.
- Bowen, J. (2018). Beware hospitality industry: the robots are coming. *Worldwide Hospitality and Tourism Themes*.
- Brookes, E. (2021). *The Theory of Planned Behavior*. Retrieved from: <https://www.simplypsychology.org/theory-of-planned-behavior.html>
- Buer, S. V., Strandhagen, J. W., Semini, M. and Strandhagen, J. O. (2021). The digitalization of manufacturing: investigating the impact of production environment and company size. *Journal of Manufacturing Technology Management*, 32(3), 621-645.
- Buhalis, D. (2019). Technology in tourism-from information communication technologies to e-Tourism and smart tourism towards ambient intelligence tourism: a perspective article. *Tourism Review*. ahead-of-print. 10.1108/TR-06-2019-0258.
- Burova, A., Palma, P. B., Truong, P., Mäkelä, J., Heinonen, H., Hakulinen, J., Ronkainen, K., Raisamo, R., Turunen, M., & Siltanen, S. (2022). Distributed asymmetric virtual reality in industrial context: enhancing the collaboration of geographically dispersed teams in the pipeline of maintenance method development and technical documentation creation. *Appl. Sci*, 12, 3728. Retrieved from: <https://doi.org/10.3390/app12083728>
- Cakar, K. (2018). Critical success factors for tourist destination governance in times of crisis: a case study of Antalya, Turkey. *Journal of Travel & Tourism Marketing*, 35(6). 786–802.
- Cambridge University Press. (2022). <https://dictionary.cambridge.org/dictionary/english/trend>.
- Caratu, M. (2022). AI, Neuro-and Smart-Retail and Employees' Comfort: Joint Technologies of Transformative Service Research. In *Advances in National Brand and Private Label Marketing*. 134-141.
- Carr, A. (2020). COVID-19, indigenous peoples and tourism: a view from New Zealand. *Tourism Geographies*, 22(3), 491–502. Retrieved from: <https://doi.org/10.1080/14616688.2020.1768433>
- Chaffey, D. a. (2008). *E-marketing Excellence: Planning and Optimizing Your Digital Marketing (E-Marketing Essentials)*. 3rd Edition, Routledge, Abingdon-on-Thames.

- Cheer, J. M. (2020). Human flourishing, tourism transformation and COVID-19: a conceptual touchstone. *Tourism Geographies*, 22(3), 1–11. Retrieved from: <https://doi.org/10.1080/14616688.2020.1765016>
- Chen, Y. V. (2021). On the road to digital servitization–The (dis) continuous interplay between business model and digital technology. *International Journal of Operations and Production Management*, 41(5), 694-722.
- Cobanoglu, C., Dogan, S., Berezina, K., & Collins, G. (2021). *Hospitality and tourism information technology*. University of South Florida M3 Center Publishing 17, no. 9781732127593.
- Corbisiero, F. (2021). Post-pandemic tourism resilience: changes in Italians' travel behavior and the possible responses of tourist cities. *Worldwide Hospitality and Tourism Themes*, 13(3). 401-417.
- Dannels, S. A. (2018). Research Design. In *The Reviewer's Guide to Quantitative Methods in the Social Sciences*. 402-416.
- Davenport, T. H. (2018). *The AI advantage: How to put the artificial intelligence revolution to work*. MIT Press.
- Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*, 48, 24-42.
- Deraman, F., Ismail, N., Hamzah, S. N., Zainudin, T.Z.A.T. (2021). Review of Hotels' Survival Strategies during COVID-19 Pandemic in Malaysia. *e-Academia Journal*, (10)2. DOI: <https://doi.org/10.24191/e-aj.v10i2.16289>
- Dhole, T. K. (2021). *The Covid-19 Pandemic: The Deadly Coronavirus Outbreak*. New York.
- Diaz, D., Lima, F., Diaz, E. (2016). Tourism management and automation: RFID applications in Brazilian maritime cruises *International Journal of Internet of Things and Web Services*, 1, 43-49.
- Dredge, D., Phi, G., Mahadevan, R., Meehan, E. & Popescu, E.S. (2018). *Digitalisation in tourism: In-depth analysis of challenges and opportunities*. Low-value procedure GRO-SME-17-C-091-A for Executive Agency for Small and Medium-sized Enterprises (EASME) Virtual Tourism Observatory. Aalborg University, Copenhagen.
- Eller, R., & Alford, P., & Kallmuenzer, A., & Peters, M. (2020). Antecedents, consequences, and challenges of small and medium-sized enterprise digitalization. *Journal of Business Research*. 112. 119-127. 10.1016/j.jbusres.2020.03.004.
- Fyall, A., Legohérel, P., Frochot, I., & Wang, Y. (2019). *Marketing for Tourism and Hospitality*. New York.
- Gabriella P., & Paol, A.D. (2022). *Handbook on Research on Advanced Research Methodologies for a Digital Society*. United States of America.
- Garczarek-Bąk, U., Szymkowiak, A., Gaczek, P. (2021). A comparative analysis of neuromarketing methods for brand purchasing predictions among young adults. *J Brand Manag* 28, 171–185. <https://doi.org/10.1057/s41262-020-00221-7>

- GetCraft. (2020, May 26). *Malaysia Digital and Content Marketing Report 2018*. Retrieved from <https://marketingcraft.getcraft.com/en-articles/malaysia-digital-and-content-marketing-report-2018>
- Giuggioli, G., & Pellegrini, M. M. (2022). Artificial intelligence as an enabler for entrepreneurs: a systematic literature review and an agenda for future research. *International Journal of Entrepreneurial Behavior & Research*. Vol. ahead-of-print No. ahead-of-print. Retrieved from: <https://doi.org/10.1108/IJEBr-05-2021-0426>
- Gurdur, D. E. K. (2019). Digitalizing Swedish industry: what is next? Data analytics readiness assessment of Swedish industry, according to survey results. *Computers in Industry*, 105. 153-163.
- Gursoy, D., Mehmet S., Nunko, R., & Bogan, E. (2021). *Covid-19 and the Hospitality and Tourism Industry*. United States of America and United Kingdom.
- Han, B. C. (2015). *The transparency society*. Stanford University Press.
- Hartford (n.d.), T. (2022). *Marketing defined: What is marketing? - the Hartford*. Business Owners Playbook. Retrieved from: <https://www.thehartford.com>.
- Hoekstra, J.C., Leeftang, P.S.H. (2020). Marketing in the era of COVID-19. *Ital. J. Mark.*, 249–260. Retrieved from: <https://doi.org/10.1007/s43039-020-00016-3>
- Hsu, C. (2018). Tourism education on and beyond the horizon. *Tourism Management Perspectives*, 25. 181-183.
- Hu, N. Z. (2019). What do hotel customers complain about? Text analysis using structural topic model. *Tourism Management*, 72. 417-426.
- Huang, A. D. (2021). COVID-19 and the future of work in the hospitality industry. *International Journal of Hospitality Management*, 97. 102986.
- Indeed Editorial Team. (2021). *What Is the Aaker Brand Equity Model? Definition and Components*. Retrieved from <https://www.indeed.com>
- Ivanov, S. (2019). Ultimate transformation: how will automation technologies disrupt the travel, tourism and hospitality industries? *Zeitschrift Für Tourismuswissenschaft*, 11(1), 25-43.
- Jeremy Arkes. (2019). *Regression Analysis*. New York.
- Jiang, Y. & Wen, J. (2020). Effects of COVID-19 on hotel marketing and management: A perspective article. *International Journal of Contemporary Hospitality Management*, 32(8), 2563-2573. <https://doi.org/10.1108/IJCHM-03-2020-0237>
- Jose Duarte Santos, O. L. (2020). *Digital Marketing Strategies for Tourism Hospitality and Airline Industries*. United States of America.
- Kanapathipillai, K. (2021). The impact of training and innovation on organisational performance in the hospitality industry in Malaysia: Job satisfaction as mediator. *European Journal of Human Resource Management Studies* 5(2). DOI: <http://dx.doi.org/10.46827/ejhrms.v5i2.1107>
- Kanapathipillai, K., & Kumaran, S. (2022). The mediating effect of relationship marketing strategy between digital marketing strategy and consumers' purchase decisions in the automotive industry in Malaysia. *European Journal of Management and Marketing Studies*, 7(2), 1-27. DOI: <http://dx.doi.org/10.46827/ejmms.v7i2.1205>

- Kanapathipillai, K., & Mahboob, N. N. (2021). The impact of relationship marketing on customer loyalty in the tour and travel companies in Malaysia during CoV-19 pandemic: Parallel mediation of social media and relationship quality. *European Journal of Management and Marketing Studies*, 6(4), 1- 30. DOI: <http://dx.doi.org/10.46827/ejmms.v6i4.1144>
- Kaur, S. (2020). *Hotels in KL partially closed for business*. Retrieved from The New Strait Times: Retrieved from: <https://www.nst.com.my/property>.
- Kaur, S., & Chourasia, S. (2021). Hotel digital marketing as a tool to enhance competitive effectiveness – post Covid-19: Model revisited. *Journal of Management and Entrepreneurship*, 15(4). 61-81. Retrieved from: <https://www.researchgate.net/publication/356439443>
- Khan, M. A. A., Hashim, H., Aziz, Y.A., & Samdin, Z. (2020). Consumer community on tourism social media and consumer perceived value: review paper. Paper presented at the 13th Asian Academy of Management International Conference 2019 (AAMC 2019), Pulau Pinang, Malaysia. *European Proceedings of Social and Behavioural Sciences EpSBS*, 88, 453-462. <https://doi.org/10.15405/epsbs.2020.10.40>
- Kohtamaki, M., Parida, V., Oghazi, P., Gebauer, H., & Baines, T. (2019). Digital servitization business models in ecosystems: a theory of the firm. *Journal of Business Research*, 104, 380-392.
- Kopalle, P. K. (2020). How legacy firms can embrace the digital ecosystem via digital customer orientation. *Journal of the Academy of Marketing Science*, 48(1), 114-131.
- Kotler, P., & Pfoertsch, W. (2010). *Ingredient branding: Making the invisible visible*. Springer.
- Kuala Lumpur Hotel Market Outlook & Prospects Report. (2022). Retrieved from: <https://www.cbrehotels.com/-/media/cbre/countrycbrehotels/images/research/kl-hotel-market-outlook-report-2022.pdf>
- Lambrecht, A. and Tucker V. (2013). When does retargeting work? Information specificity in online advertising. *Journal of Marketing Research*, 50(5). 561-576.
- Lau, A. (2020). New technologies used in COVID-19 for business survival: Insights from the hotel sector in China. *Inf Technol Tourism* 22, 497–504. <https://doi.org/10.1007/s40558-020-00193-z>
- Lee, S., Lee, Y., Lee, J. and Park, J. (2015). “Personalized e-services: consumer privacy concern and information sharing”. *Social Behavior and Personality: International Journal*, 43(5), 729-740.
- Mahmut D., Dalgic, A., & Doganay Ergen, F. (2022). *Handbook of Research on the Impacts and Implications of Covid-19 on the Tourism Industry*. United States of America.
- Malaysia Digital Economy Blueprint 2021. Retrieved from: <https://www.epu.gov.my>
- Marr, B. (2019). *Artificial Intelligence in Practice*, Bernard Marr. United Kingdom: <https://books.google.com.my/books>.
- McDonald, A. M. and Cranor, L. F. (2010). Beliefs and behaviors: internet users' understanding of behavioral advertising. <https://www.researchgate.net/publication/228237033>

- Monk, Z. (2019). London chain restaurant becomes first in the UK to hire robotic waitress. Retrieved from: <https://books.google.com.my/books>.
- Moore, R. S., Moore, M. L., Shanahan, K. J., & Mack, B. (2015). Creepy marketing: three dimensions of perceived excessive online privacy violation. *Marketing Management*, 25. 42-53.
- Moorman, C. (2021). CMOs: Adapt Your Social Media Strategy for a Post-Pandemic World. Harvard Business Review.
- Nripendra P. Rana, Emma L. Slade, Ganesh P. Sahu, Hatice Kizgin, Nitish Singh, Bidit Dey, Anabel Gutierrez, Yogesh K. Dwivedi. (2020). *Digital and Social Media Marketing*. Switzerland.
- OECD (2019). *Going Digital: Shaping Policies, Improving Lives*, OECD Publishing. Paris.
- OECD (2020). *OECD Tourism Trends and Policies 2020*. Paris: OECD Publishing. Retrieved from: <https://play.google.com/books>.
- Ortiz, J. H. (2020). *Industry 4.0: Current status and future trends*.
- Oxford English Dictionary. (2022). <https://www.researchtoaction.org/2016/02/what-do-we-mean-by-impact/>.
- Palos-Sánchez, P. R., Saura, J. R., Reyes-Menendez, A., & Esquivel, I. V. (2018). Users acceptance of location-based marketing apps in tourism sector: An exploratory analysis. *Journal of Spatial & Organizational Dynamics*, 6(3), 1-15.
- Palos-Sanchez, Pedro & Saura, José & Martín-Velicia, Félix. (2019). A study of the effects of programmatic advertising on users' concerns about privacy overtime. *Journal of Business Research*. 96. 61-72. 10.1016/j.jbusres.2018.10.059.
- Panetta, K. (2018). Gartner top 10 strategic technology trends for 2018. Retrieved from <https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technologytrends-for-2018>.
- Park, D. K. (2019). Application of social media analytics in tourism crisis communication. *Current Issues in Tourism*, 22(15), 1810–1824.
- Park, E. J. (2019). Determinants of customer satisfaction with airline services: An analysis of customer feedback big data. *Journal of Retailing and Consumer Services*, 51. 186-190.
- Park, S. A. (2020). Augmented reality experiences and sensation seeking. *Tourism Management*, 77. 104023.
- Parvez, S. J., Moyeenudin, H. M., Arun, S., Anandan, R., & Janahan, S. K. (2018). Digital marketing in hotel industry. *International Journal Of Engineering And Technology*, 7(2), DOI: <https://doi.org/10.14419/ijet.v7i2.21.12383>
- Pesonen, J. (2020). Management and Leadership for Digital Transformation in Tourism. In: Xiang Z., Fuchs M., Gretzel U., Höpken W. (eds) *Handbook of e-Tourism*. Springer, Cham. https://doi.org/10.1007/978-3-030-05324-6_68-1
- Pujol, L. (2004). "Archaeology, museums and virtual reality", *Digithum*, Vol. 6, pp. 1-9.
- Rainoldi, M., Driescher, V., Lisnevskaja, A., Zvereva, D., Stavinska, A., Relota, J. and Egger, R. (2018). "Virtual Reality: An Innovative Tool in Destinations' Marketing", *The Gaze: Journal of Tourism and Hospitality*, Vol. 9 No. 1, pp. 53-68.

- Ramli, N., & Zawawi, M. (2021). The Covid-19 Pandemic and Its Repercussions on the Malaysian Tourism Industry. *Journal of Tourism and Hospitality Management*, 9(3), 135-145. doi: 10.17265/2328-2169/2021.03.001
- Ratten, V., & Thaicon, P. (2021). *Covid-19, Technology and Marketing*. Singapore.
- Ratten, V., Tajeddini, K., & Merkle, T. (2020). *Tourism, Hospitality and Digital Transformation*. New York.
- Refsland, S. T., Ojika, T., Defanti, T., Johnson, A., Leigh, J., Loeffler, C. and Tu, X. (1998). "Virtual Great Barrier Reef: A theoretical approach towards an evolving, interactive VR environment using a distributed DOME and CAVE system", in Heudin, J.-C. (Ed.), International Conference on Virtual Worlds, Paris, France, July 1-3, 1998, Springer, Berlin, pp. 323-336.
- Rincon, F. O., Tommasini, E., Rainoldi, M. and Egger, R. (2017). "The Future of Wearable Devices On-Site: A Scenario Technique Approach" in Schegg, R. and Stangl, B. (Eds.), Information and Communication Technologies in Tourism 2017 Proceedings of the International Conference in Rome, Italy, January 24-26, 2017, Springer, Cham, pp. 285-299.
- Sampson, E. (2018). *Hospitality Management an Introduction*. United Kingdom.
- Seabra, C. (2021). *Pandemics and Travel: Covid-19 Impacts in the Tourism Industry*. United Kingdom.
- Șerban Comănescu, A. (2020). Current Consumer Behaviour.
- Sergi, B. S., Popkova, E. G., Bogoviz, A. V., & Litvinova, T. N. (Eds.). (2019). *Understanding industry 4.0: AI, the internet of things, and the future of work*. Emerald Group Publishing.
- Serravalle, F., & Ferraris, A., & Vrontis, D., & Thrassou, A., & Christofi, M. (2019). Augmented reality in the tourism industry: A multi-stakeholder analysis of museums. *Tourism Management Perspectives*. 32. 100549. 10.1016/j.tmp.2019.07.002.
- Seyitoğlu, F., & Ivanov, S. (2020). Service robots as a tool for physical distancing in tourism. Retrieved from: <https://www.researchgate.net/publication/340423279>.
- Sharma, A., Zanotti, P., & Musunur, L. (2020). Drive through robotics: Robotic automation for last mile distribution of food and essentials during pandemics. *IEEE Access*. 1-1. 10.1109/ACCESS.2020.3007064.
- Sherman, W. R. and Craig, A. B. (2003). *Understanding Virtual Reality. Interface, Application, and Design*, Morgan Kaufmann Publishers, San Francisco.
- Slater, M. and Sanchez-Vives, M. V. (2016). "Enhancing Our Lives with Immersive Virtual Reality", *Frontiers in Robotics and AI*, Vol. 3, pp. 1-47.
- Slater, M. and Usoh, M. (1993). "Representations systems, perceptual position, and presence in immersive virtual environments", *Presence*, Vol. 2 No. 3, pp. 221-233.
- Slater, M. and Wilbur, S. (1997). "A Framework for Immersive Virtual Environments (FIVE): Speculations on the Role of Presence in Virtual Environments", *Presence: Teleoperators and virtual environments*, Vol. 6 No. 6, pp. 603-616.
- Statista. (2022). Retrieved from <https://www.statista.com/statistics/809724/annual-employment-in-the-accommodation-industry-malaysia>

- Steuer, J. (1992). "Defining Virtual Reality: Dimensions Determining Telepresence", *Journal of Communication*, Vol. 42 No. 4, pp. 73-93.
- Sussmann, S. and Vanhegan, H.J. (2000), "Virtual Reality and the Tourism Product: Substitution or Complement", *Proceedings of the European Conference on Information Systems (ECIS)*, Vienna, Austria, pp. 1077-1083.
- Sutherland, Clare & Liu, Xizi & Zhang, Lingshan & Chu, Yingtung & Oldmeadow, Julian & Young, Andrew (2017). Facial first impressions across culture: data-driven modeling of Chinese and British perceivers' unconstrained facial impressions. *Personality and Social Psychology Bulletin*. 44. 10.1177/0146167217744194.
- Tavakoli, R. and Mura, P. (2015), "'Journeys in Second Life' – Iranian Muslim women's behavior in virtual tourist destinations", *Tourism Management*, Vol. 46, pp. 398-407.
- Tavakoli, R. and Mura, P. (2015). Journeys in Second Life – Iranian Muslim women's behavior in virtual tourist destinations. *Tourism Management*, 46, 398-407.
- The New Strait Times. (2020). *Malaysia's PM Muhyiddin attends briefing on state of economy, coronavirus*. Retrieved from The New Strait Times: <https://www.straitstimes.com/asia/se-asia/malaysiaspm-muhyiddin-attends-briefing-on-state-of-economy-coronavirus>
- Turow, J., King, J., Hoofnagle, C. J., Bleakley, A. and Hennessy, M. (2009). *Americans reject tailored advertising and three activities that enable it*. Annenberg School for Communication (Univ of Pennsylvania) & Berkeley School of Law, University of California, Berkeley.
- Van Doorn, J., & Hoekstra, J. C. (2013). Customization of online advertising: the role of intrusiveness. *Marketing Letters*, 24(4), 339-345.
- Verhoef, P. A. (2019). Marketing perspectives on digital business models: a framework and overview of the special issue. *International Journal of Research in Marketing*, 36(3), 341-349.
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889-901.
- Vollero, A., & Valentini, C. (2021). *Social media and consumer power: Opportunities and challenges for digital marketing activities*. *Contemporary Issues in Digital Marketing*, 105-115.
- Wirtz, J. and Lwin, M. O. (2009). Regulatory focus theory, trust and privacy concern. *Journal of Service Research*, 12(2), 190-207.
- Wirtz, J., Patterson, P.G., Kunz, W.H., Gruber, T., Lu, V. N., Paluch, S. and Martins, A. (2018). Brave new world: service robots in the frontline. *Journal of Service Management*, 29(5), 907-931.
- Wirtz, J., Pitardi, V., Paluch, S., & Kunz, W. H. (2021). Service robots, agency and embarrassing service encounters. *Journal of service management*, 33(2), <http://dx.doi.org/10.1108/JOSM-12-2020-0435>
- World Economic Forum's Future of Jobs Report. (n.d.).

World Economic Forum's Global Agenda Council. (n.d.).

Yamin, A. B. (2017) Impact of digital marketing as a tool of marketing communication: a behavioral perspective on consumers of Bangladesh. *American Journal of Trade and Policy*, 4(3), 117-122

Yang, H. (2013). Young American consumers' online privacy concerns, trust, risk, social media use and regulatory support. *Journal of New Communications Research*, 5(1). 1-30.

Yang, T. Y. (2021). Impact of COVID-19 Pandemic on Smart Tourism. In 5th Asia-Pacific Conference on Economic Research and Management Innovation (ERMI 2021). 90-93.

Creative Commons licensing terms

Authors will retain copyright to their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Management and Marketing Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).