Exploring the Disruptive Digital Technologies in the Metro Manila Hotel Industry Towards An Expanded Business Market Plan

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ABSTRACT

This study integrates disruptive digital technologies into your existing marketing plan, propelling your campaigns to exploring the innovative digital technologies in the Metro Manila Hotel Industry towards an expanded business market plan. Digital technologies encompass a vast array of tools and techniques that leverage advancements in artificial intelligence (AI), machine learning (ML), and data analytics. The organizations reconnect and redesign digital technologies; acquire new skills to innovate, learn, and reshape to progress digital technologies, while digital technologies change the classification of knowledge for productive and innovative projects. The objective of this study is to know the marketing demographics profile such as age, geographic location, educational level, occupation and income that will utilize information that's easily accessible in innovative digital technology; to explore the innovative digital technologies of e-commerce that being used or implemented in the Metro Manila hotel industry, such as: Artificial intelligence (AI), Virtual reality (VR), Blockchain, Internet of Things (IoT) and Hybrid or electric vehicles to use as shuttle or service vehicles; to study the impact on the innovative technologies in the hotel operations; to create market plan can be proposed in the hotel industry using innovative digital technologie; the difference of innovative digital technologies in today's global industry; and the correlation of exploring innovative digital technologies in the Metro Manila hotel industry towards an expanded business market plan. To be specific, innovative digital technologies have the potential to transform the hotel industry.

Keywords: Disruptive, Innovative, Digital Technologies, Blockchain, IoT, Digital transformation and Organizational Transformation

CHAPTER 1
THE PROBLEM AND ITS BACKGROUND
1.1 Introduction

This study integrates discruptive digital technologies into your existing marketing plan, propelling your campaigns to exploring the innovative digital technologies in the Metro Manila Hotel Industry towards an expanded business market plan. Digital technologies encompass a vast array of tools and techniques that leverage advancements in artificial intelligence (AI), machine learning (ML), and data analytics. The organizations reconnect and redesign digital technologies; acquire new skills to innovate, learn, and reshape to progress digital technologies, while digital technologies change the classification of knowledge

for productive and innovative projects. The objective of this study is to know the marketing demographics profile such as age, geographic location, educational level, occupation and income that will utilize information that's easily accessible in innovative digital technology; to explore the innovative digital technologies of e-commerce that being used or implemented in the Metro Manila hotel industry, such as: Artificial intelligence (AI), Virtual reality (VR), Blockchain, Internet of Things (IoT) and Hybrid or electric vehicles to use as shuttle or service vehicles; to study the impact on the innovative technologies in the hotel operations; to create market plan can be proposed in the hotel industry using innovative digital technologie; the difference of innovative digital technologies in today's global industry; and the correlation of exploring innovative digital technologies in the Metro Manila hotel industry towards an expanded business market plan. To be specific, innovative digital technologies have the potential to transform the hotel industry, and it is how digital technologies expand your marketing plan.

Digital technologies aren't meant to replace your existing marketing efforts. The static content with interactive experiences that grab attention and create lasting impressions; sharpshooter targeting that leverage data-driven insights to pinpoint high-value audience segments and personalize messaging for maximum impact; performance optimization that track results in real-time and make data-driven adjustments to optimize campaign performance. Also the measurable return of investment (ROI), gain a clearer picture of the return on your marketing investment through advanced analytics.

Accepting disruptive digital technologies, you can create a dynamic and results-oriented marketing plan that fosters stronger customer relationships, fuels engagement, and ultimately drives business growth. Technology's impact on the hospitality industry is magnificent and multifaceted. It has led to more efficient operations, personalized services, and sustainability efforts. As travelers and diners continue to accept technology in their daily lives, the hospitality industry must keep up to meet and exceed expectations.

Hotel digital technologies is a continuous effort in which organizations acquire new technologies and resources to create new business opportunities. Consequently, adopt artificial intelligence (AI) or machine learning processes to optimize pattern recognition in data or when implementing cloud services and about automating tasks and making processes more efficient. It is also about designing new and creative ways to provide hospitality and boost the guest experience. Innovative digital transformation plays a crucial role in this process, allowing businesses to be more agile, responsive, and customer-centric.

In the past, hotels have been slow to acquire new technologies. This is partly because the hospitality industry is a traditional one, and partly because there has been a reluctance to invest in new technologies that may not have a clear return on investment.

However, the rise of disruptive digital technologies is forcing hotels to change their ways. Guests are now increasingly demanding more personalized and seamless experiences, and hotels are using technology to meet these demands. Innovative digital technologies are rapidly transforming the hospitality industry, introducing creative solutions that enhance guest experiences, streamline operations, and optimize revenue generation. These technologies are redefining the traditional hotel model, driving a shift towards personalized, seamless, and data-driven hospitality.

The objective of this study is to know the marketing demographics profile such as age, geographic location, educational level, occupation and income that will utilize information that's easily accessible in innovative digital technology; to explore the innovative digital technologies of e-commerce that being used or implemented in the Metro Manila hotel industry, such as: Artificial intelligence (AI), Virtual reality (VR), Blockchain, Internet of Things (IoT) and Hybrid or electric vehicles to use as shuttle or

service vehicles; to study the impact on the innovative technologies in the hotel operations; to create market plan can be proposed in the hotel industry using innovative digital technologie; the difference of innovative digital technologies in today's global industry; and to know the correlation of exploring innovative digital technologies in the Metro Manila hotel industry towards an expanded business market plan.

The rationale for a hotel's disruptive digital technology is to strengthen the guest experience, refine operational efficiency, and obtain a competitive advantage. innovative digital technologies can help hotels realize these goals by strengthening the guest's experience through personalization; benefits through digital technologies can make it simple for guests to book rooms, check-in, order room service, and access other hotel services; communication through digital technologies can improve communication between guests and hotel staff; improving operational efficiency through automation, data analytics, and resource management; gaining competitive advantage through differentiation, innovation, customer loyalty. To be specific, innovative digital technologies have the potential to transform the hotel industry.

The final output of this study are the following: innovative digital technologies have expanded the business market plan by introducing new opportunities for companies to adopt innovative business models that creates a business plan that accounts for disruptive technologies and market changes, entrepreneurs and managers that assess current business model, evaluate disruptive technologies and market changes, innovative technologies impacting business operations that include cloud-based storage, the Internet of Things (IoT), big data, and artificial intelligence (AR); business models for change and require a innovative business model for the successful of the business market and digital innovations for the best business structures and best business models.

1.2 Historical Background

The historical background of disruptive digital technologies is an innovation that creates an existing market by promoting a new product or service that is cheaper, better, or more convenient. E-commerce shows how innovative digital technologies with supportive policies can contribute to inclusive economic development. Digital marketing is essential to the travel and hospitality industries. These days, it's a helpful tool for creating digital brand names and attracting and retaining clients. It has been demonstrated that using digital technology to implement marketing strategies, such as influencer marketing, social media marketing, and search engine optimization, benefits businesses. (Zertaj Fatima, et. al, 2024).

The main objective of digital marketing is attracting customers and allowing them to interact with the brand through digital media. A literature review to identify innova-tions based on information technology and to answer the research question of where digital innovation can create economic value for organizations. (Frey et.al, 2020)

Digital technologies (e.g. Industry 4.0, Internet of Things, cloud computing, big data, blockchain, etc.), are profoundly affecting companies' activities and processes, thus leading to changes in firms' value creation, value delivery, and value capture mechanisms. (Ancillai, et. al, 2023.)

Most digital-enabled transformations do not yield the benefits that leaders expect, and many executives express concerns that they are actually falling behind in making the important choices that lead to differentiation. (Leinwand and Mani, 2021)

The efficiency, innovation, and speed of a digitally connected world can expand what is possible for everyone including those who historically have been marginalized. Innovative digital technologies are rapidly transforming society, simultaneously allowing for extraordinary advances in the human condition

and giving rise to intense new challenges. Developmental potential created by the application of digital technologies are paralleled by severe abuse and unexpected consequences. Hotels strive to compete for business, technology adoption is critical to enhance the guest experience (D'Souza, E. & D'Souza, K., 2023). Continuous innovation is difficult, thus it's critical to identify long-term ideas that are difficult for competitors to copy. (Latan et al., 2020).

Technological advancements have a significant impact on the traditional hotel service process by changing the behavior, functions, and tasks of hotel managers and service staff. The level of service and the quality of the experience during the stay are now being elevated. Their happiness is determined to a large extent by management decisions regarding the type and manner of application of technology in the process of hotel services provided. Many innovations are taking place in the hospitality industry like phone-as-key-cards, mobile self-check-in, mobile booking, self-service check-in kiosks, lobby media panels, electronic luggage tags, bring-your-own devices, bring-your-own content platforms, Smartphone boarding passes, hotel service optimization systems. Hotel managers must understand how various digital technologies may affect the performance of hotels to employ the proper technology. Accordingly, prior studies have investigated the contributions of a wide range of digital technologies, such as big data analytics and virtual reality to hotel performance (Leung et al., 2020).

Contemporary innovative technology standards include e-commerce, online news sites, ride-sharing apps, and GPS systems. Hotel digital technologies such as self-service technologies, robotics, smart room technology, artificial intelligence (AI), blockchain, big data analytics, mobile apps, social media, and information systems, can transform how hotels manage their operations and value chains. (Anser et al., 2020, Choi et al., 2020, Mingotto et al., 2020).

With a focus on research in the discipline of hotel, travel, and tourism education have gained traction (O'Connor, 2021). There are five main categories of reservation systems in the hotel industry: online travel agencies (OTAs), Central Reservations Systems (CRS), booking engines, channel managers, and property management systems (PMS).

Hotels can effectively and simultaneously manage these reservations. Today's hotels, regardless of size, absolutely must have a hotel reservation system. A growing number of tourists are relying on Internet reservations, and if you don't have the tools to handle this demand, it could greatly affect the hotel's revenue. Understanding the applications of incorporating innovative digital technologies can assist hotel managers and owners in making decisions with better understanding and investing in suitable technologies. Based on evidence on past technologies and the innovation literature, we suggest that we might require a new set of stylized facts to better map the main future trajectories of digital technologies, their adoption, use, and recombination in organizations, to improve our understanding of their impact on productivity, employment and inequality. (Ciarli, et. al., 2021)

1.3 Statement of the Problem

This study aims to assess the levels of awareness of the respondents in exploring the disruptive digital technologies in the Metro Manila hotel industry, and to provide recommendations for the business market plan by introducing new opportunities for companies to adopt innovative business models.

Specifically, this study sought the answers to the following problems.

1. What are the demographic profiles of the respondents in exploring the innovative digital technologies in the Metro Manila Hotel Industry such as;

1.1. Age

1.2 Sex

1.3 Educational Attainment

1.4 Work position

1.5 Length of service,

1.6 Classification of hotel and

1.7 Classifications of room

2. What is the perception of the respondents on the innovative digital technology being used in Metro Manila hotel industry in terms of:

2.1 Artificial intelligence (AI)

2.2 Virtual reality (VR)

2.3. Blockchain

2.4 Internet of Things (IoT)

2.5 Hybrid or electric vehicles to use as shuttle or service vehicles

3. What are the marketing strategies implemented by the Metro-Manila hotel industry according to the respondents?

4. Is there a significant relationship between the perception of the respondents on the innovative technologies and marketing strategies implemented by the Metro Manila hotel industry?

5. A proposed output of innovative digital technologies in the Metro Manila hotel   industry toward an expanded business market plan.

1.4 OBJECTIVES OF THE STUDY

This research will help determine the openness of the businesses by exploring the dsiruptive digital technologies in the Metro Manila hotel industry towards an expanded business market plan.

1. To know the demographic profiles of the respondents in exploring the disruptive digital technologies in the Metro Manila Hotel Industry towards an expanded business market plan.

2. To explore the perception of the respondents on the disruptive digital technology being used in Metro-Manila hotel industry.

3. To study and create the marketing strategies implemented by the Metro-Manila hotel industry according to the respondents.

4. To know the significant relationship between the perception of the respondents on the disruptive technologies and marketing strategies implemented by the Metro-Manila hotel industry.

1.6 Significance of the Study

This study is significant to the benefit of the following stakeholders:

Academic Discipline – as a pioneering study, this will be an added value to our offering of the MASTERS IN BUSINESS ADMINISTRATION, where students and teachers will both realize and appreciate discussing pioneering topics for research.

Guest - The adoption of digital technology in the reservation system in the hotel industry increases efficiency and improves guests' service quality, since it helps hotel employees identify and build a deep understanding of customers' needs and expectations.

Hotels - rules and regulations are important in keeping everyone at a property safe. Hotels have rules and regulations around everything from check-in procedures and room usage to health and safety and security

protocols

Hotel Employees. This study provides insights for hotels and employees regarding the numerous benefits realized through the adoption of innovative technology in reservation systems.

The use of digital technology as a tool in daily tasks improves employees' performance, achieves the expected results from employees and improves the hotel's financial performance.

Hotel Owner - It reveals that the adoption of innovative technology in the reservation system has a significant effect on a firm's financial performance by enhancing revenues, decreasing costs and leading to long-term profitability.

Large-Scale Hotels - Large-scale hotels are typically defined as hotels with more than 300 rooms. They are often located in major cities or tourist destinations, and they offer a wide range of amenities and services, such as multiple restaurants, bars, pools, spas, and fitness centers. Large-scale hotels can also host conferences and events, and they often have large meeting spaces and ballrooms.

Local Government of Metro Manila - The study findings would serve as a basis that the local government of Metro Manila plays a vital role in hotel industry rules and regulations. It is responsible for providing the services and infrastructure that are essential for a thriving city.

The Future Researcher - It will be helpful to hotel organization and management if cost and security are considered in future studies. Innovative technology, for which one should consider implementing network security to help protect hotels and guests' information.

1.7 Scope and Limitations

This descriptive study aimed to determine the openness of the hotels in exploring the dsiruptive digital technologies, in the Metro Manila hotel industry towards an expanded business market plan. Such as supporting new forms of e-commerce, interaction among consumers and firms, providing new types of data that enable new analytic methods, creating marketing innovations, and requiring new strategic marketing frameworks. The study involved primary respondents of top 10 premiere hotels among 10 participants in Metro Manila.

The secondary respondents were hotel e- commerce managers, IT managers, marketing managers, data analysts, security specialists, staff and customers. This study was conducted during the academic year 2023-2024.

The scope of limitations of this study are the staff shortages, digital competition, and environmental concerns of hotels' innovative digital technologies. It also includes the cost and implementations of cutting-edge technologies that can be expensive to acquire and integrate into existing systems, and privacy concerns of data security. Guests might be apprehensive about sharing personal information, digital division of not all guests are comfortable with the innovative digital technology, the technical glitches of new technology and human touch remains vitals aspect of hospitality.

CHAPTER 2
REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents the related literature on disruptive digital technologies in the hotel industry. It also includes a comprehensive literature and gap/s bridged by the present study.

State of the Art

The state of the art in disruptive digital technology is a vast and rapidly changing landscape, but here some of the hottest areas of development are Artificial Intelligence (AI) & Machine Learning (ML); these are

arguably the most innovative digital technologies. These are just a few examples, and there are many other exciting areas of development. Here are some additional trends to keep an eye on: The Internet of Things (IoT): Connecting everyday devices to the internet, creating a vast network of data-gathering and interacting objects. Blockchain Technology: creating secure and transparent digital ledgers that could revolutionize many industries. The future of digital technology is full of possibilities, and these innovations have the potential to transform our world in many ways.

2.1 Foreign Literature

The systematic review aims to synthesize and give structure to the literature on applications of digital technologies in the hotel sector. The literature was structured based on six dimensions of performance. (Mohammad, et. al, 2022). Digital technologies, such as artificial intelligence (AI) machine learning (ML), the Internet of Things (IoT), blockchain, big data analytics, self-service technologies, mobile apps, social media, and information systems, can transform how hotels manage their operations and value chains (Anser et al., 2020, Choi et al., 2020, Mingotto et al., 2020). Hotels can use these technologies to manage service, order process, demand, capacity and resource, the customer relationship, and the supplier relationship and consequently achieve a better performance in terms of financial performance, competitiveness, quality of service, resource utilization, flexibility, and innovation (Cho et al., 2012, Dmitry Ivanov, 2021, Lenuwat and Boon-it, 2021).

To adopt appropriate technologies, hotel managers must know how various digital technologies may influence the performance of hotels. digital innovations than their middle-status counterparts. Industrial and institutional conditions moderate these effects such that industry growth enhances, whilst industry competition and state ownership weaken the effect of status on digital innovation. (Yang Liu, et. al, 2021) , Virtual reality (VR) and augmented reality (AR) technologies are evolving, with scholars highlighting important roles and potential advantages for their use, particularly in the hospitality sector. (Rab Nawaz LODHI, et. al, 2024)

Although the applications of digital technologies in the hotel sector have been elaborated on in various theoretical and empirical studies (Ivanov et al., 2020, Yadegaridehkordi et al., 2020), there is a lack of any review article that offers a comprehensive overview of the applications of digital technologies in the hotel industry. This study aims to address this gap by systematically reviewing the articles on applications of digital technologies in the hotel industry. Digital technologies are the basic technologies such as the internet and websites that facilitate the adoption of other technologies (Mendez-Alva et al., 2021). Innovative digital technologies refer to "the advanced technologies which give rise to a new market or a new avenue of business or research" (Munawar et al., 2022, p. 2).

By reviewing the studies published on digital technologies in the hotel sector after 2011 (the year that the Industry 4.0 term originated), we identified social media, mobile apps, big data and artificial intelligence, self-service technologies, robots, virtual reality, e-commerce and social commerce, information systems, smart systems, and front desk technologies as the disruptive digital technologies and their applications in the hotel sector as having attracted the attention of scholars.

The positive contributions of new technologies to society through exploring the contributions of innovative digital technologies, in the Metro Manila hotel industry: towards an expanded business market is that the current rise of innovative digital technologies in developed countries has already affected people's sense of privacy, their notions of ownership, their consumption and communication patterns, the way people work and experience leisure, how people meet other people and nurture relationships, even

peoples' attitude towards and control over their health. Customers usually adopt behaviors according to the environmental context, and recent years have shown that the disruption in worldwide markets, specifically in the hotel industry, led companies to implement tighter measures due to sanitary constraints, including innovations to face the pandemic, and they obtained positive abnormal returns immediately (Sharma et al. 2021).

2.2 Local Literature

Many Micro, Small, and Medium Enterprises (MSMEs) failed to cope with the business-related impacts of the pandemic-70.6% of which decided to shut down temporarily. Micro, Small, and Medium Enterprises (MSMEs) that rely on imported goods for production benefited from lenient customer procedures (Cambodia and the Republic of Korea) and deferred import tax payments with relaxed regulations (Indonesia). Some Asian countries encouraged Micro, Small, and Medium Enterprises (MSMEs) to adopt remote business services. Malaysia supported agri-based MSMEs in selling their products through e-commerce platforms. Singapore promoted digital solutions for Micro, Small, and Medium Enterprises (MSMEs) to retain business operations through its enhanced Go Digital program.

The PRC and the Republic of Korea encouraged the digital transformation of Micro, Small, and Medium Enterprises (MSMEs) business, and Japan established special help desks for businesses (consultation services) (Shinozaki and Rao, 2021).

Transition with the help of digital technologies, allowing them to withstand the pandemic's impacts. These businesses started adopting social media and e-commerce platforms and meeting with clients via virtual setups, to name a few. (Habaradas, et. al., 2024).

2.3 Foreign Studies

Digital transformation (DT) has emerged as an important phenomenon in society and industries through the use of disruptive digital technologies. The organizational level has been argued that firms must find ways to innovate with these technologies by devising "strategies that embrace the implications of digital transformation and drive better operational performance" Research has shown that technology itself is only part of the complex puzzle that must be solved for organizations to remain competitive in a digital world. Despite significant investments in digital technologies and digital transformation. (Ancillai et. al, 2023)

Modern information technologies, such as Business Intelligence (BI), Cloud Computing (CC), Mobile Technologies (MT), Big Data (BD), Internet of Things (IoT), Artificial Intelligence (AI), and Blockchain, are often called Innovative Digital Technologies (IDT) and are an area of interest for many researchers and organizations can achieve organizational success. It means that they can be more innovative, achieve a competitive advantage, acquire new customers, and enter new markets as well as improve the work of individual departments, and create a comprehensive information infrastructure that ensures effective collection, filtering, integrating, and analyzing of data, and conduct transformation in an organization.

The introduction of new business models focused on change management, knowledge management, and customer relationship management. The most comprehensive overview of information systems used by business firms today, while drawing connections between Management Information system (MIS), and business performance. (Laudon & Laudon, 2020)

Innovative Digital Technology (IDT)

Disruptive digital technologies are completely new technologies that have higher performance than the

dominant technologies in the market. (Parker et al., 2020) It is the advanced technologies that give rise to a new market or a new avenue of business or research. Several different technologies have been developed in recent years and have gone on to open new possibilities in various industries and research areas. These technologies include but are not limited to cloud computing, mobile phones, the Internet of Things, artificial intelligence, big data, machine learning, social media, robotics, and blockchain. (Munawar et al., 2022, p. 2)

Interest in innovative digital technology (IDT) as a factor in socio-economic development is not a new phenomenon and has long been the subject of numerous studies. Technologies that are considered groundbreaking can become a game changer for the market even if at the moment they cannot fulfill the organization's or customer's needs. The emerging technologies that promise new possibilities are defined as innovative digital technologies (IDT), used to develop modern strategies and business models, create sources of competitive advantage, make fundamental transformations in organizations, and integrate and develop the entire system.

Detailed description of artificial intelligence (AI) software with the ability to independently interpret and learn from external data to achieve specific outcomes via flexible adaptation.

With the ability to overcome shortcomings of traditional software and the potential for growth and learning, artificial intelligence (AI) can be used as a foundation for autonomous goods, such as vehicles, chatbots, translators, or medical robots. It can lead to significant cost reduction, elimination of errors, and possibilities for using a machine to conduct dangerous, tiresome, or high-precision tasks which could be difficult for a human being to perform. Financial revenues and broader production capabilities can be achieved. Constant learning and improvement of the software result in continuous growth in the effectiveness of the solution. Digital technologies are encouraging manufacturing companies in their servitization process by accelerating the offer of integrated product and service to create new value and grow relationships with customers in the Industry 4.0 era. (Boucher, et. al, 2020)

Internet of Things (IoT)

Internet of things (IoT) focuses on creating a combination of physical and digital products, thus far delivering a new product with more functionalities. The rapid growth of computer technologies, power management, and communication to enhance the functions of traditional products with information technology (IT) services. Apart from its basic functions, the product gets connected to the internet and enables real-time monitoring, notifications, remote control, and custom adjustments.

The most common areas of Internet of things (IoT) usage are smart industry and smart housing, e.g., smart home areas, intelligent thermostats, security systems, smart energy applications, or smart transportation. Apart from individual value, granted to a user of one smart product, its impact can be observed on a much larger scale in collaboration between users of smart items. Connected to related products and/or a whole system of utilities, the device can give its benefactors valuable information about possibilities for optimization and elevating effectiveness, thus converging to the success of the organization. (Vatsa, et. al, 2022)

Blockchain

A blockchain is a technology that allows its users to create stable and easily retractable sets of information about actions taken. Standard blockchain is an information technology (IT) infrastructure, consisting of data packages (blocks) that trace multiple performed operations. The chain is expanded by another block, corresponding with the previous one. Each block contains a timestamp, banking, logistics, and retail. The amount of transactions and transactional information is overwhelming in nowadays industries and a way

to run a trustworthy ledger, which is hard to sabotage, appeals to many organizations. The usage of blockchain can translate to a safer financial environment, more precise operation, and easier knowledge management.

The research shows that Blockchain is an effective technology for overcoming collaboration and trust issues among business partners, thus far leading to beneficial effects (Rejeb et al., 2021).

In other words, despite much research, there is a clear research gap regarding the impact of innovative digital technology (IDT) on the benefits organizations derive from their use. In particular, it was not possible to identify to what extent the organizational culture may influence innovative digital technology (IDT) use and the achievement of organizational success.

2.4 Local Studies

The value that can be achieved by using a well-designed business intelligence (BI) system, can be transferred into establishing cooperation, acquiring new customers, creating market opportunities, or developing new products. Many innovations are taking place in the hospitality industry like phone-as-key-cards, mobile self-check-in, mobile booking, self-service check-in kiosks, lobby media panels, electronic luggage tags, bring-your-own devices, bring-your-own content platforms, Smartphone boarding passes, hotel service optimization systems. a business intelligence (BI) system plays a very significant role in promoting the success of any organization, particularly the universities.

However, not all business intelligence (BI) system projects have been implemented successfully by the universities across the word, suggesting that only a few universities appear to have faith in business intelligence (BI) systems as strategy for success and sustainability particularly in this era where data speaks.

As a result, this study attempts to establish the relationship between business intelligence (BI) systems and university sustainability and success. (Bilal A. A A-khateeb, 2024)

The adoption of motion sensors in the hospitality industry is another way digital transformation is improving customer experience. This technology helps indicate which rooms are occupied and which are empty.

As such, it not only helps reduce friction between guests but also ensures the timely upkeep of rooms. Today, many hotels offer multi-bedrooms and villas. Previously, controlling various amenities in such an accommodation setting was somewhat challenging. Now, by using smart room apps, guests can easily and intuitively control different amenities in different rooms. They, therefore, won't have to move around a lot given the control that the smart app gives them.

The data gathered by the smart room apps can be used by hotel operators to address the specific demands of each guest and fine-tune the guest experience. (Olszak, Celina, 2020)

2.5 Synthesis of the Reviewed Literature

All aforementioned literature and studies that have been recorded and narrated are of great help to the researcher in conceptualizing the study.

Synthetically the reviewed literature focuses on innovative digital technology in the Metro Manila hotel industry: towards an expanded business market that is tackled through the systematic and comprehensive studies of the following: Lagorio, et. al, 2020; Boucher, et. al, 2020); Dimitry, Ivanov et al., 2020; Lenuwat Boon-itt, 2021; Olszak, Celina, 2020; Parker et al., 2020; Mendez-Alva et al., 2021; Mohammad, et. al, 2022; Cho et al., 2012; Ivanov et al., 2020; Lenuwat and Boon-itt, 2021; Munawar et al., 2022, p. 2,

Yang Liu, et. al, 2021; Rab Nawaz LODHI, et. al, 2024; Shinozaki and Rao, 2021; Bilal A. A A-khateeb, 2024; Habaradas, et. al., 2024; Sharma et al. 2021, Liu and Hung, 2020; Leung et al., 2020; Anser et al., 2020; Choi et al., 2020; and Mingotto et al., 2020.

Interestingly, the synthesis of literature further reflected that there were no studies conducted on exploring innovative digital technology in Metro Manila towards the expanded business market plan. Thus, this study will serve as a benchmark for current and future studies related to the subject matter.

Gap/s Bridged by the Present Study

From the review of related studies discussed in this study, various gaps were discerned namely;

1. There were limited studies conducted in exploring the disruptive digital technologies in the Metro Manila Hotel Industry towards an expanded business market plan.
2. There were limited studies yet done on the disruptive digital technologies relating to e-commerce that exploring the disruptive digital technologies in the Metro Manila Hotel Industry towards an expanded business market plan

Given the identified gaps, the study endeavored to explore the disruptive digital technologies in the Metro Manila hotel industry toward an expanded business market plan.

2.6 Research Paradigm
2.6.1 Theoretical Framework

This paper is anchored on the theory of Applications of disruptive digital technologies in the hotel industry: A systematic review by Alexandra Lagorio. Many innovative technologies have been successfully adopted in logistics and supply chain management processes to increase efficiency, reduce costs or enhance communication.

In recent years, considerable attention from both practitioners and academics has been focused on evaluating the impacts of innovative technologies adoption.

However, the current body of literature on technology adoption, implementation and evaluation in logistics is quite fragmented; thus, an updated and structured overview of the scientific literature in this field might be useful.

The goal is to increase the understanding of the trend toward new technologies in logistics and identify the main research trends and gaps. To this end, this work presents a systematic literature review (SLR) that aims to increase the understanding of the trend toward new technologies in logistics and identify the main research trends and gaps. The principal research trends that emerged from the systematic literature review (SLR) involve the technologies, their evolution over time and their relationships with the research methodologies. (Lagorio, et. al, 2020).

The marketing innovation of hotels in the innovative digital technology context of the hospitality industry, new data, and analytic methods in digital adoption refer to the integration and utilization of digital technologies and tools to enhance the overall recipient consumer firm, operational efficiency, and business strategic frameworks. The theory will be used as an information technology that helps hospitality businesses manage inventory, bookings, reservations, and customer data better. Hotel marketing innovation is the implementation of new and creative marketing strategies to attract and retain guests.

This can involve using new technologies, creating unique experiences, or developing targeted marketing campaigns. The recipient customers of the hotels can range from individuals to enterprises.

The hotel industry is facing a period of unprecedented disruption due to the emergence of new digital technologies. These technologies are changing the way guests book hotels, the way they experience their

stay, and the way hotel chains operate.

To stay ahead of the curve, hotels need to be able to collect and analyze data from a variety of sources. This data can then be used to improve guest experiences, optimize operations, and develop new products and services.

The study will help to answer the research gap, which is the perception of the hotel administrative personnel, staff, and customers. about the innovative technology in the reservation system and how these technologies contribute to the hotel's performance and quality of service.

The theoretical framework aims to highlight the unique potentials of digital technologies to expand learning activities. (Dalsgaard, et. al 2023)
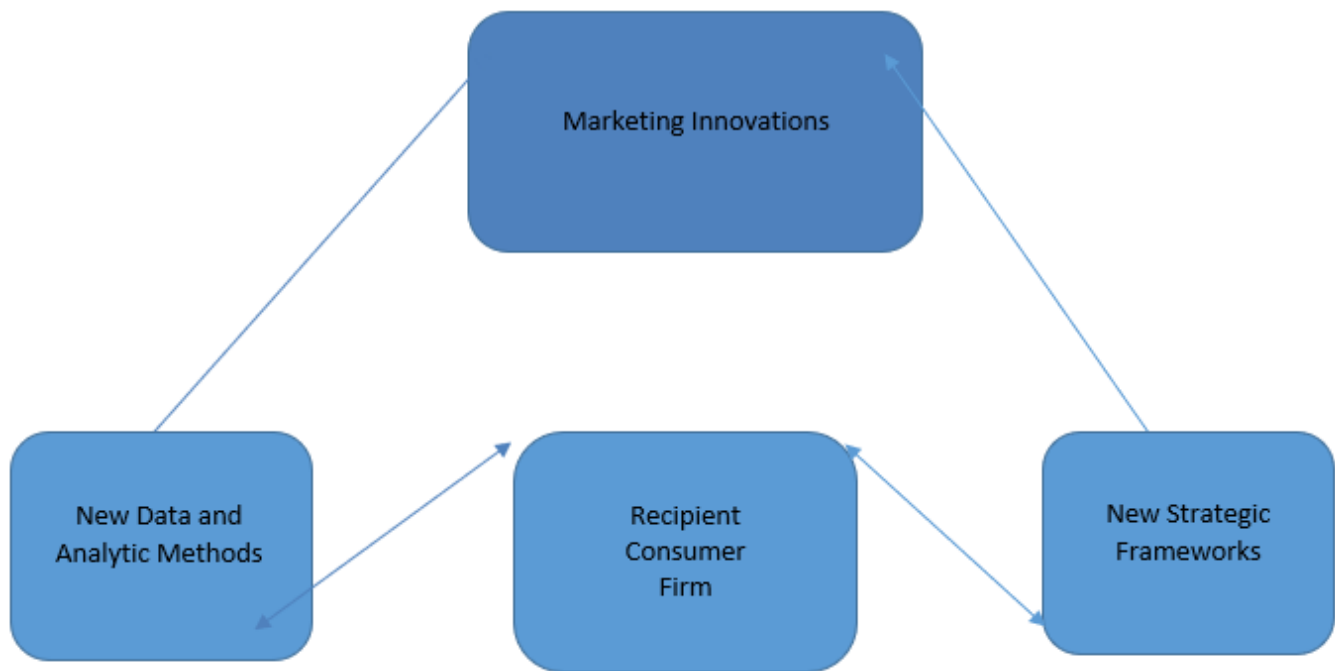

Figure 1. Theoretical Framework - Four ways new technologies impact marketing.

2.6.2 Conceptual Framework

The conceptual framework used in this research study is the Input, Process, and Output (IPO) chart to assess how disruptive digital technology can influence the hotel industry: towards the expanded business market. Innovative digital technologies are those that fundamentally alter the way we do things, often by creating new markets or dramatically changing existing ones.

The development of disruptive digital technologies requires a unique set of methods, as innovators must break through established norms and challenge the status quo. This approach allows innovators to get feedback from users early and often, and to pivot their plans as needed. Innovative digital technologies often benefit from collaboration between different organizations.

Open innovation can help to accelerate the development process and bring together complementary expertise. Innovative digital technologies are most successful when they address a real need or solve a problem that customers have. Innovators need to listen to their customers and design products and services that meet their needs. Innovative digital technologies can face significant resistance from incumbents, so innovators need to be agile and adaptable. They need to be able to change course quickly and adapt to new challenges.

CONCEPTUAL FRAMEWORK

INPUT ⇒ (PARTICIPANTS)	PROCESS ⇒ (INNOVATION)	⇒ OUTPUT
1. What are the demographic profiles of the respondents in exploring the dsiruptive digital technologies in the Metro Manila Hotel Industry towards an expanded business market plan such as; 1.1. Age 1.2 Sex 1.3 Educational Attainment 1.4 Work position 1.5 Shifting Schedule 1.6 Length of service, 1.7 Classification of hotel and Classifications of room 2. What is the perception of the respondents on the disruptive digital technology being used in Metro-Manila hotel industry in terms of: 2.1 Artificial intelligence (AI) 2.2 Virtual reality (VR) 2.3. Blockchain 2.4 Internet of Things (IoT) 2.5 Hybrid or electric vehicles to use as shuttle or service vehicles 3. What are the marketing strategies implemented by the Metro-Manila hotel industry according to the respondents? 4. Is there a significant relationship between the perception of the respondents on the disruptive digital technologies and marketing strategies implemented by the Metro-Manila hotel industry?	Instrument Statistics to correlational Methods	Market Strategies to Expanded Market Plan

Figure 2: Input-Process-Output (IPO) Workflow

Input establishes the objective of the study. A detailed data analysis, participants will be provided with a survey instrument. Data Will be subject for analysis using the quantitative research design process applied to statistical analysis resulting in marketing strategies applied to expanded market plans.

2.7 Definition of Terms

As a researcher, it is a combination of conceptual and operationally to define the terminology in this paper.

Artificial Intelligence (AI) - is the intelligence of machines or software, as opposed to the intelligence of humans or animals. It is also the field of study in computer science that develops and studies intelligent machines.

Artificial Intelligence (AI) on improving hotel booking rates - Via AI-powered virtual tours, hotels can provide potential guests with an accurate picture of the rooms and amenities on offer.

Business Intelligence System (BI) - analyzes current and historical data and presents findings in easy-to-digest reports, dashboards, graphs, charts, and maps that can be shared across the company.

Digital Technology - encompasses electronic devices, software systems, and resources that facilitate the creation, storage, and management of data.

E-commerce - are hotels that sell their rooms and other services online. This can be done through their website, through online travel agencies (OTAs), or a combination of both.

Energy-positive hotel - the innovative hotel will consume approximately 85% less energy than traditional hotels and by harvesting solar power, it will produce more energy than it uses thus making it energy-positive.

Hotel robots - represent some of the most effective forms of hotel technology, and their presence will ensure superior guest satisfaction.

Hotel virtual tour - is an immersive, interactive experience that allows potential guests to explore a hotel's premises without physically being there.

Hotels hybrid or electric vehicles to use as shuttle or service vehicles - it is an internal combustion engine for most of their power needs and uses an electric motor.

Information Technology (IT) - is a set of related fields that encompass computer systems, software, programming languages and data and information processing and storage.

Innovative Technology - is a new or improved product or process whose technological characteristics are significantly different from before.

Internet of Things (IoT) - refers to the collective network of connected devices and the technology that facilitates communication between devices and the cloud, as well as between the devices themselves.

Machine Learning (ML) - is an algorithm that uses historical data as input to predict new output values.

Virtual Reality (VR) - Applications of virtual reality include entertainment (particularly video games), education (such as medical or military training), and business (such as virtual meetings).

Voice Search Within Hospitality - tends to center around tourist information-type questions and voice-activated bookings.

CHAPTER 3
RESEARCH METHODOLOGY
3.1 Research Design

The study used quantitative descriptive research design and used researchers-made survey questionnaires and Cronbach Alpha assesses the reliability of the participating respondents from the hotel industries such as hotel e- commerce managers, IT managers, marketing managers, data analyst, security specialist, staff and customers in the Hotel Industry, Metro Manila. It will give respective answers to form part of the primary data gathered on this research. The literature search, considered secondary data, will also be used to identify the relationship of this study with other available studies and to connect with relevant issues about the research questions posed.

Sources of data

The primary source of empirical data gathered from hotels in Metro Manila through the e- commerce managers, IT managers, marketing managers, data analysts, security specialists, staff and customers. The secondary sources of data used are the following such as books, journals, internet information, and other related publications.

3.2 Participants of the Study

The participants of the study are gathered from hotel industries, managers, staff, and clients in Metro Manila. The researcher selected a sample size with a margin of error of 0.02%. The desired sample size was computed as 100. There is an additional 10% leeway for retrieval allotment.

There are 100 survey questionnaires that handed out to the respondents of Metro Manila since they are in the best position to analyze the innovative digital technologies, in the Metro Manila hotel industry: towards an expanded business market such as Hotels in Metro Manila: Okada Hotel, Bayview Park Hotel Manila, Makati Diamond Hotel, Holiday Inn Hotel, Diamond Hotel Manila, Acacia Hotel, Vivere Hotel, Crimson Hotel Filinvest City, Manila, Parque Espana Hotel, Alabang, and The Bellevue Hotel Manila.

Criteria used in Selecting Respondents in Hotel Disruptive Digital Technologies:

1. Respondents are experts or experienced with the disruptive digital technology being studied. That includes experience as a user, developer, or researcher of the technology.
2. Respondents are from hotel industries that are likely to be impacted by disruptive digital technology. They are currently using the technology or industries that are likely to be related in the field of e - commerce using digital technology.
3. Respondents represent a diverse range of demographics, including age, gender, education, and income level. This helps to ensure that the research findings are generalizable to a wider population.
4. Diversity of respondents are;

4.1 Experience level: Respondents had a range of experience levels with innovative digital technology, from beginners to experts.

4.2 Perspectives: Respondents had a variety of perspectives on disruptive digital technology, including positive, negative, and neutral perspectives.

4.3 Background: Respondents had a diverse range of backgrounds, including technical, non-technical, business, and academic backgrounds in disruptive digital technology.

5. Respondents Accessibility:

5.1 Availability: Respondents participated in the research study, either in person, online, or through other methods.

5.2 Willingness to participate: Respondents participated in the research study and provided their honest opinions about disruptive digital technology.

5.3 Language: Respondents participating are fluent in the language in which the research study is conducted.

6. Also, it is important that the specific goals of the research study chosen by respondents are to assess the impact of innovative digital technology on a particular industry, and selected respondents the hotel industry.
7. Some additional tips that respondents used for this study, researched on innovative digital technologies, such as;

7.1 Used a variety of recruitment methods for respondents to answer such as google forms and emails;

7.2 Screen respondents carefully: help to ensure that the respondents meet the criteria for the study.

7.3 Pilot tests the research instrument: help to identify any potential problems with the research instrument that the respondents administered.

7.4 Thank respondents for their participation: help to ensure that respondents willingness to participate in future research studies.

By following these guidelines, helped in gathering data to select the most appropriate respondents for the

research on exploring the innovative digital technologies in the Metro Manila Hotel Industry towards an expanded business market plan.

3.3 Sampling Technique

The sampling techniques that the researcher used are purposive sampling, given a limited population of 10 participants at 10 premiere industry hotels in Metro Manila.

3.4 Research Instruments

Instrumentation and validation

The researcher used a survey questionnaire as the primary tool in data gathering. The questionnaire has five parts.

Part I - demographic profiles of hotel admin and hotel facilities to assess the exploration of disruptive digital technologies in the Metro Manila hotel industry: towards an expanded business market plan.

Part II - To know the perception of the respondents on the disruptive digital technology being used in Metro-Manila hotel industry**.**

Part III - the learn the marketing strategies implemented by the Metro-Manila hotel industry.

The researcher used Cronbach's alpha reliability coefficient for Likert-type scales data analysis tool to test the internal consistency of the questionnaire. A high correlation signals high internal consistency.

Thus, the evaluated questionnaire certainly defines a reliable and construct valid then results of which has a Cronbach's alpha = 0.915 among one hundred (100) respondents. Therefore, the questionnaire is accepted. All items contribute to the reliability and construct validity of the questionnaire. Cronbach's alpha showed the questionnaire to reach an acceptable reliability factor, $\alpha = 0.915$.

Most items appeared to be worthy of retention, resulting in a decrease in alpha if deleted. It should be noted that an alpha of 0.915 is the results indicating that the researcher had Cronbach's alpha exceeded the test value of more than the acceptable value of 0.70 and can be observed as a reasonable goal.

The responses were gathered and tallied to determine if the responses are closely similar in two trials. To determine this, the questionnaire was tested using Cronbach's alpha. It is a test of a model or survey of internal consistency. It should be 0.7 or higher to retain an item in an adequate scale and many researchers require a cutoff of 0.80 for a good scale. The computed Cronbach alpha for this instrument was 0.914. All of the comments and suggestions of these experts will be taken into consideration. George and Mallery (2003, p.231) point out the rule of thumb, " > .9 - Excellent, > .8 - Good, > .7 - Acceptable, > .5 - Poor and, <.5 - Unacceptable". While increasing the value of alpha is partially dependent upon the number of items in the scale. Table 1 shows the Frequentist Scale Reliability Statistics used to determine whether the self-made questionnaire was valid while table 2 shows the frequentist individual item reliability statistics which was also valid.

3.5 Data Gathering Procedures

The following assigned points will be used to measure the issues mentioned above in the survey questionnaires, numerical range, categorical response, and verbal interpretation:

Part 1: Demographic Profile:

Gender   (___) Male   Age   (__) 25 to 35 years old

                (___) Female   (__) 35 to 45 years old

                                                 (__) 45 to 55 years old

(__) 55 to 65 years old

Educational Attainment

(_____) Grade-school Graduate

(_____) High-school Graduate

(_____) Vocational

(_____) College Degree

(_____) Master's Degree

Department

(_____) Front Office Department

(_____) Sales and Marketing Department

(_____) Reservations Department

(_____) Food and Beverage Department

(_____) Others

Position

(__) General Manager

(__) Director

(__) Manager/Supervisor

(__) Hotel Support Personnel/Agent

(__) Others

Classification of Hotel

(__) 5 Star

(__) 4 Star

(__) 3 Star

\

Length of Service

(__) 1 to 2 years

(__) 2 to 3 years

(__) 3 to 5 years

(__) 5 to 7 years

(__) 7 to 10 years

Part II - To know the level of perception of the respondents on the disruptive digital technology being used in Metro-Manila hotel industry.

LIKERT SCALE

Assigned Points	Numerical Range	Categorical Response	Verbal Interpretation
4	3.26 - 4.00	Strongly Agree	Very High
3	2.51 - 3.25	Agree	High
2	1.76 - 2.50	Neither Agree or Disagree	Moderate
1	1.00 - 1.75	Strongly Disagree	Low

Part III - to know the Marketing strategies implemented by the Metro-Manila hotel industry.
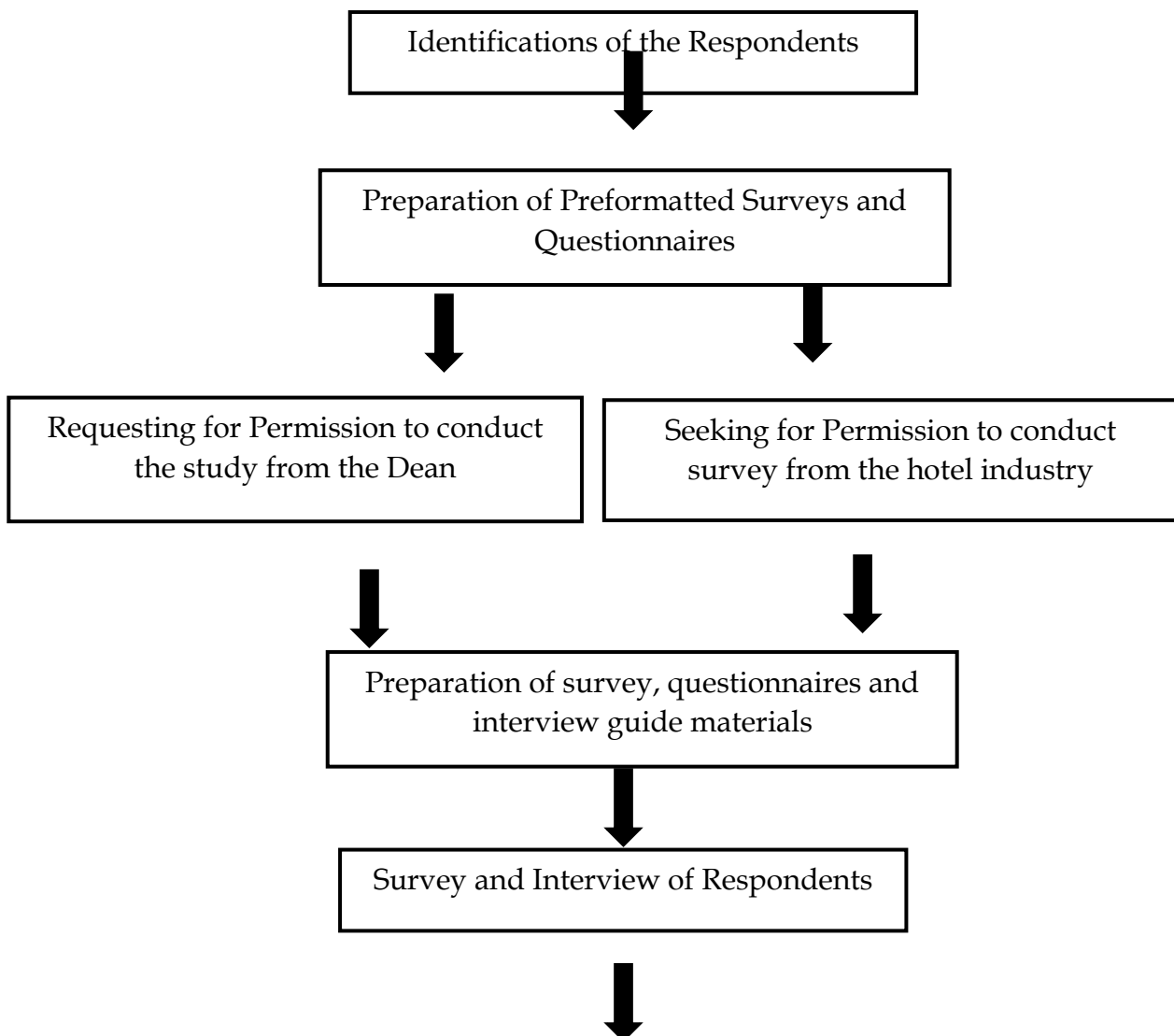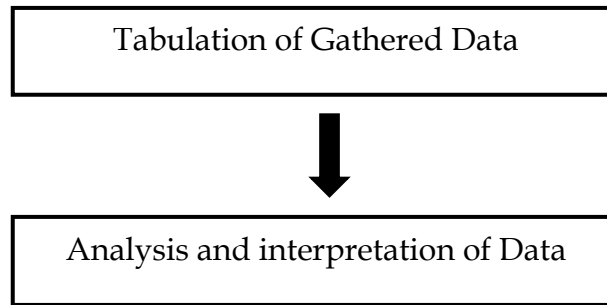
LIKERT SCALE

Assigned Points	Numerical Range	Categorical Response	Verbal Interpretation
4	3.26 - 4.00	Strongly Agree	Very High
3	2.51 - 3.25	Agree	High
2	1.76 - 2.50	Neither Agree or Disagree	Moderate
1	1.00 - 1.75	Strongly Disagree	Low

3.5 Data Gathering Procedures

The questionnaires were gathered through Google Forms and personally administered by the researcher to the respondents after explaining the purpose of the study and soliciting their consent. All accomplished questionnaires will be retrieved to ensure a 100% retrieval rate. After that, tabulation and encoding of data using excel format will follow.

The figure below demonstrates the flow chart of what are the procedures that the researchers will follow in gathering data.

Identifications of the Respondents

↓

Preparation of Preformatted Surveys and Questionnaires

↓

Requesting for Permission to conduct the study from the Dean

Seeking for Permission to conduct survey from the hotel industry

↓

Preparation of survey, questionnaires and interview guide materials

↓

Survey and Interview of Respondents

↓

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┌─────────────────────────────────────┐
│       Tabulation of Gathered Data    │
└─────────────────────────────────────┘
                   │
                   ▼
┌─────────────────────────────────────┐
│    Analysis and interpretation of Data │
└─────────────────────────────────────┘
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3.6 Ethical Considerations

The researcher personally administered to the respondents after explaining the purpose of the study and soliciting their consent, anonymity, and confidentiality. Researchers are responsible for ensuring that the research complies with all applicable ethical guidelines.

3.7 Data Analysis

Statistical treatment of data

1. Table 1 - Descriptive Statistics on demographic profiles through gender, ade, educational attainment, department, position, classification of hotel, and length of service of hotel administration and hotel facilities to assess the exploration of innovativeness of digital technologies in the Metro Manila hotel industry: towards an expanded business market plan.

2. Table 2 - Descriptive Statistics on levels of agreement based on the following statement: artificial intelligence (AI) is transforming the hotel industry by enhancing guest experiences, improving operational efficiency, and driving innovation, personalized guest experiences through artificial intelligence (AI) algorithms can analyze guest preferences, behavior, and historical data to provide highly personalized recommendations and experiences, streamlined operations through artificial intelligence (AI) is automating repetitive tasks and optimizing hotel operations, freeing up staff to focus on providing personalized service, enhanced customer service through 24/7 availability to handle guest inquiries and provide quick responses and improved operational efficiency through intelligent reservation systems that predict demand, adjust pricing dynamically and recommended room options.

3. Table 3 - Descriptive Statistics on Marketing strategies implemented by the Metro-Manila hotel industry through personalized marketing campaigns, enhanced customer experience, digital booking platforms, data-driven decision making and online reputation Management

Chapter 4

PRESENTATION AND INTERPRETATION OF DATA

This chapter is the presentation and analysis of the results of the study. The results were narrated with numerical findings and statistical analysis to make it more understandable. The results were analyzed with the help of the main concepts and ideas from the given literature, and the connections between the findings were emphasized.

Results and Discussions

Table 1

Demographic Profile of the Respondents on the Disruptive Digital Technology Being Used in Metro Manila Hotel

Profile	Frequency n = 105	Percentage
Age		
Female	54	51.40
Male	51	48.60
Sex		
25 to 34 years old	54	51.40
35 to 44 years old	34	32.40
45 to 54 years old	14	13.30
55 to 64 years old	3	2.90
Educational Attainment		
High-school Graduate	8	7.60
Vocational Courses / Diploma Holder	6	5.70
College Degree	85	81.00
Master's Degree	5	4.80
Doctorate Degree	1	1.00
Work Position		
Agent or Hotel Support Personnel	25	23.80
Director	5	4.80
General Manager	1	1.00
Manager or Supervisor	50	47.60
Others	24	22.90
Classification of Hotel		
3 – Star Hotel	10	9.50
4 – Star Hotel	25	23.80
5 – Star Hotel	70	66.70

As presented in table 1, the demographic profile of the respondent is that the data quality used in this research is to ensure data is accurate, complete, and representative of the target population of the hotel industry. The hotel industry analysis is that hotels are a complex ecosystem with a diverse customer base influenced by various demographic factors.

A comprehensive understanding of these demographics is crucial for tailoring services, marketing strategies, and overall business operations.

The frequency of the number of females are 54 with the percentage of 51.40 while the number of male are 51 with the percentage of 48.60 out of 100% and a total of 105 respondents. Sex of the respondents majority answered the question between age 25 to 34 years old, educational attainment most of the

respondents are in college degree, in work position majority of the 50/ 105 respondents are managers and hotel classifications majority are the 5 -star hotel industry.

The literature that is related in this table 1, implementation, and evaluation, during which older people are ideally actively involved in decision-making and during which progress is being monitored and measured. Make comparisons between groups or neighborhoods in a city, helping to steer much-needed actions towards disadvantaged neighborhoods or sub-populations, including older people with financial challenges or of certain minority groups.

And also possible that some of the effect of education may be due to selection factors social class disparities in physical and mental health have been well-established in the research literature. The robust development of the knowledge economy, profound globalization process, and digitalization in every corner of modern life have created an urgent need for high-quality labor. That respondents are satisfied with the compensation, promotion, benefits, recognition and rewards, training and development, and career development opportunities of their jobs.

Citation: A multi-year quantitative study of the experienced age-friendliness in The Hague: A tale of four personas. Van Hoof et al., 2022; Chui et al., 2022; Cotterell and Buffel, 2023.

Table 2

Perception of the Respondents on the Innovative Digital Technology Being Used in Metro Manila Hotel in Terms of Artificial Intelligence (AI)

Indicators	Mean	Standard Deviation	Remark
1. *Personalized Guest Experiences*. Artificial Intelligence algorithms can analyze guest preferences, behavior, and historical data to provide highly personalized recommendations and experiences.	3.01	0.956	Agree
2. *Streamlined Operations*. AI is automating repetitive tasks and optimizing hotel operations, freeing up staff to focus on providing personalized service.	3.08	0.863	Agree
3. *Enhanced Customer Service*. 24/7 availability to handle guest inquiries and provide quick responses.	3.32	0.904	Strongly Agree
4. *Improved Operational Efficiency*. Intelligent reservation systems that predict demand, adjust pricing dynamically, and recommend room options.	3.11	0.934	Agree
Grand Mean	3.13	0.792	Agree

Note: The following remarks apply to the mean interval: 4.00 - 3.26 for Strongly Agree, 3.25 - 2.51 for Agree, 2.50 – 1.76 for Disagree, and 1.75 – 1.00 for Strongly Disagree

As presented in Table 2, it shows the descriptive statistics on the perception of the respondents on the innovative digital innovative technology being used in Metro Manila hotels in terms of artificial intelligence (AI) are the following results and analysis through respondents it understand the factors influencing positive perceptions, and develop strategies to mitigate concerns about privacy, job security, and human interaction. Also to enhance AI features based on respondent feedback and also it evaluates

the effectiveness of artificial intelligence (AI) in achieving hotel objectives and to develop targeted marketing campaigns to tailor marketing messages to different demographic segments based on their artificial intelligence (AI) perceptions.

Respondents strongly agreed that the enhanced customer service 24/7 availability to handle guest inquiries and provide quick responses was strongly agreed with a highest mean score of 3.32. Respondents also agreed that it improved operational efficiency and the lowest mean, personalized guest experiences. Artificial intelligence (AI) algorithms can analyze guest preferences, behavior, and historical data to provide highly personalized recommendations and experiences with a mean score 3.01 respectively. Therefore, respondents agreed that the perception of the respondents on the innovative digital innovative technology being used in Metro Manila hotels in terms of artificial intelligence (AI) was effective with a total mean score of 3.13 and standard deviation (SD) of 0.792. and agreed. The literature that is related in this table 2 is that, exploring the innovative digital technologies in the Metro Manila Hotel Industry towards an expanded business market plan, increasing attention to the relationship between innovative digital technologies (DTs). Business model innovation is an emerging hot topic in management research.

Citation: Business Model Innovation: Identifying Foundations and Trajectories. Filser et al., 2021.

Table 3 Perception of the Respondents on the Innovative Digital Technology Being Used in Metro Manila Hotel in Terms of Virtual Reality (VR)

Indicators	Mean	Standard Deviation	Remark
1. *Immersive Previews*. VR technology provides guests with immersive virtual tours of hotel properties, allowing them to explore rooms, amenities, and nearby attractions remotely, enhancing their booking experience and aiding in decision-making.	3.32	0.882	Strongly Agree
2. *Enhanced Marketing*. VR hotel tours are a powerful marketing tool, showcasing hotel offerings interactively, attracting tech-savvy customers, and differentiating hotels in a competitive market.	3.30	0.932	Strongly Agree
3. *Guest Experiences*. Hotels are incorporating VR technology into rooms to provide guests with virtual reality entertainment options, offering immersive experiences like playing games or watching movies in a new way, setting the hotel apart from competitors.	3.17	0.925	Agree
4. *Training and Staff Development*. VR training in hospitality revolutionizes employee training by offering a safe and controlled environment for practicing tasks and procedures, leading to improved skills, confidence, and performance.	3.21	0.948	Agree
Grand Mean	3.25	0.850	Strongly Agree

Note: The following remarks apply to the mean interval: 4.00 - 3.26 for Strongly Agree, 3.25 - 2.51 for Agree, 2.50 – 1.76 for Disagree, and 1.75 – 1.00 for Strongly Disagree.

As stated in table 3, perception of the respondents on the disruptive digital technology being used in Metro Manila hotels in terms of *Virtual Reality (VR)*. The respondents are willing to accept it and adapt to the

new disruptive digital technology. And the potential insights and implications of the respondents result in data gathering are the following they understand factors influencing positive perceptions on dsiruptive digital technology that, hotels optimize their Virtual Reality (VR) strategies, enhance guest experiences, and maintain a competitive edge, to mitigate concerns about technology, privacy, and realism, enhance virtual reality (VR) experiences based on respondent feedback, Measure VR impact and Develop targeted marketing campaigns tailored marketing messages to different demographic segments based on their Virtual Reality (VR) perceptions.

The indicator for Immersive Previews. VR technology provides guests with immersive virtual tours of hotel properties, allowing them to explore rooms, amenities, and nearby attractions remotely, enhancing their booking experience and aiding in decision-making with the highest mean is 3.32, standard deviation of 0.882 with the remarks of st hotels are incorporating virtual reality (VR) technology into rooms to provide guests with virtual reality entertainment options, offering immersive experiences like playing games or watching movies in a new way, setting the hotel apart from competitors got 3.17, standard deviation of 0.925 with remarks of agree. Therefore the grand mean total computed as 3,25, with a standard deviation of 0.850 and stated that all the respondents agreed.

The literature study for virtual reality (VR) technology provides a glimpse of information about the tourist attraction with the help of VR photography and VR video. This study provides a new idea for the design of interactive cultural communication devices and uses supervised learning algorithms to make their versatility and interactivity fully reflected in the communication effect.

Citation: Research on the Application of Virtual Reality Technology in the Cultural Exchange of Tourist Attractions Under the Background of Artificial Intelligence. Hou, 2024

Table 4 Perception of the Respondents on the Discruptive Digital Technology Being Used in Metro Manila Hotel in Terms of Blockchain

Indicators	Mean	Standard Deviation	Remark
1. *Secure Identity Verification*. Blockchain can provide a secure identity verification system for hotel guests. Guest identities are stored as encrypted records on the blockchain.	3.14	0.893	Agree
2. *Transparent Pricing and Bookings*. Hotels can use blockchain to provide real-time pricing information, showing guests they are getting the best deal without hidden fees or markups.	3.17	0.893	Agree
3. *Smart Contracts*. Blockchain can automatically enforce hotel policies like cancellation terms, room availability, and payment, streamlining the booking process and reducing misunderstandings.	3.10	0.909	Agree
4. *Loyalty Programs*. Hotels can build loyalty programs on a blockchain platform, issuing tokens as rewards. Blockchain allows customers to freely buy, sell, or exchange loyalty tokens, increasing competitiveness and service quality.	3.20	0.881	Agree
Grand Mean	3.16	0.810	Agree

Note: The following remarks apply to the mean interval: 4.00 - 3.26 for Strongly Agree, 3.25 - 2.51 for Agree, 2.50 – 1.76 for Disagree, and 1.75 – 1.00 for Strongly Disagree.

As stated Table 4 the perception of the respondents on the disruptive digital technology being used in Metro Manila hotels, the impact of the guest's perceived value analysis is to assess how respondents believe blockchain can enhance the guest experience, the expectations are to explore expectations regarding blockchain-enabled services and features and willingness to pay that determine if respondents are willing to pay a premium for blockchain-based offerings. In terms of blockchain for the loyalty programs.

Hotels can build loyalty programs on a blockchain platform, issuing tokens as rewards. Blockchain allows customers to freely buy, sell, or exchange loyalty tokens, increasing competitiveness and service quality got the highest mean among the indicators stated and got 3.20 with standard deviation of 0.881 and remarks of agree; and the lowest mean is blockchain can automatically enforce hotel policies like cancellation terms, room availability, and payment, streamlining the booking process and reducing misunderstandings with mean of 3.10, standard deviation of 0.909 and remarks agreed. With the grand mean of 3.16 and standard deviation of 0.810 and remarks were agreed.

Therefore, due to the still-evolving nature of blockchain technology in hospitality, there might be limited data on guest perceptions in Metro Manila hotels specifically. However, here's a breakdown of the study might explore through areas of perception of the respondents through understanding what blockchain is and its potential applications in hotels; respondents perceive blockchain as a secure way to store or manage hotel data; respondents believe blockchain could streamline hotel processes or improve guest experiences; and respondents feel blockchain could increase trust and transparency in hotel transactions. Also, the overall analysis reveals guests perceive blockchain as a potential tool to enhance trust and transparency in areas like data privacy or loyalty programs.

Similar study of literature said that the digitized footprint practices of selected hotels in the Philippines towards implementing a safe travel experience.

Citation: Digitalized Tourism Practices of Selected Entrepreneurial. JS Marcelo, 2023

Table 5 Perception of the Respondents on the Disruptive Digital Technology Being Used in Metro Manila Hotel in Terms of Internet of Things

Indicators	Mean	Standard Deviation	Remark
1. *IoT Allows for Personalized Experiences*. Contactless solutions like check-ins, check-outs, and service bookings provide flexibility to guests, enhancing satisfaction and loyalty.	3.13	0.981	Agree
2. *Improved Operational Efficiency*. Hotels utilize IoT for room management, inventory tracking, and maintenance scheduling.	3.28	0.882	Strongly Agree
3. *Cost Savings and Sustainability*. By implementing advanced energy management systems, optimizing resource usage, and enabling predictive maintenance, IoT helps hotels reduce operational costs.	3.21	0.895	Agree

4. *Stronger Security and Safety*. Through advanced surveillance, smart control systems access, and IoT-enabled sensors, hotels enhance security measures and monitor premises	3.32	0.893	Strongly Agree
Grand Mean	3.24	0.838	Strongly Agree

Note: The following remarks apply to the mean interval: 4.00 - 3.26 for Strongly Agree, 3.25 - 2.51 for Agree, 2.50 – 1.76 for Disagree, and 1.75 – 1.00 for Strongly Disagree.

As stated in the Table 5, perception of the respondents on the disruptive digital technology being used in Metro Manila hotels in terms of internet of things (IoT), the analysis of the potential insights and implications of these results are to address concerns and misconceptions that develop communication strategies to dispel myths about the internet of things (IoT). Also to optimize internet of things (IoT) application through the enhance internet of things (IoT)-based services based on respondent feedback and to measure internet of things (IoT) impact to evaluate the effectiveness of IoT initiatives in achieving hotel objectives and develop trust-building strategies to implement measures to increase consumer confidence in internet of things (IoT) technology.

Stronger Security and Safety. Through advanced surveillance, smart control systems access, and IoT-enabled sensors, hotels enhance security measures and monitor premises with the highest mean of 3.32, standard deviation of 0.893 and remarks is strongly agreed; and the lowest mean is the contactless solutions like check-ins, check-outs, and service bookings provide flexibility to guests, enhancing satisfaction and loyalty. got mean of 3.13, standard deviation of 0.981 and remarks were agreed. With the grand mean of 3.24, standard deviation is 0.838 and remarks were strongly agreed.

Therefore, the study might show that the respondents on the disruptive digital technology being used in Metro Manila hotels in terms of internet of things (IoT) appreciate the convenience and automation offered by internet of things (IoT) devices in areas like smart homes or connected workplaces.

Literature cited that the similar study were in the age of emerging technology, various automated systems, and remote-control system applications have been implemented to make human lives comfortable.

Citation: Emerging Technologies in the Philippines: Internet of Things (IoT). Kato et. al., 2022.

Table 6 Perception of the Respondents on the Disruptive Digital Technology Being Used in Metro Manila Hotel in Terms of Hybrid or Electric Vehicles to Use as Shuttle or Service Vehicles (HEVs/EVs)

Indicators	Mean	Standard Deviation	Remark
1. *Usage*. EVs could be suitable due to their zero emissions and quiet operation.	3.29	0.867	Strongly Agree
2. *Cost Efficiency*. EVs have lower operating costs in terms of fuel and maintenance, which can be beneficial for long-term savings and sustainability goals.	3.30	0.856	Strongly Agree
3. *Environmental Impact*. EVs contribute to reducing carbon footprint and promoting sustainability, aligning with the hospitality industry's focus on eco-friendly practices	3.40	0.873	Strongly Agree

Indicators	Mean	Standard Deviation	Remark
4. *Guest Experience*. EVs contribute to guest satisfaction Quiet operation	3.33	0.875	Strongly Agree
Grand Mean	3.33	0.794	Strongly Agree

Note: The following remarks apply to the mean interval: 4.00 - 3.26 for Strongly Agree, 3.25 - 2.51 for Agree, 2.50 – 1.76 for Disagree, and 1.75 – 1.00 for Strongly Disagree.

As stated in table 6, the perception of the respondents on the dsiruptive digital technology being used in Metro Manila hotels analysis is that, the potential insights and implications are the following: to address concerns and misconceptions through the develop communication strategies to dispel myths about hotel; to optimize hotel and the usage that enhance the utilization of hotel vehicles, based on respondent feedback; to measure environmental impact through the evaluate the reduction in carbon emissions and other environmental benefits and also to develop charging infrastructure strategy that is to plan for necessary charging infrastructure to support hotel in terms of hybrid or electric vehicles to use as shuttle or service vehicles (HEVs/EVs) operations.

In terms of hybrid or electric vehicles to use as shuttle or service vehicles the following indicators that got the highest mean is Environmental Impact of Hotel in Terms of Hybrid or Electric Vehicles to Use as Shuttle or Service Vehicles (HEVs/EVs) is to contribute to reducing carbon footprint and promoting sustainability, aligning with the hospitality industry's focus on eco-friendly practices which result in 3.40, with standard deviation of 0.873 and interpreted as strongly agreed by the respondents of the study. And the last indicator is the lowest mean usage of electric vehicles (EVs) could be suitable due to their zero emissions and quiet operation with the mean of 3.29, with standard deviation of 0.867 and interpreted as strongly agreed by the respondents upon gathering data. The total grand mean with these indicators 33.33, standard deviation of 0.794 and interpreted as strongly agreed.

Similar literature cited, additionally, argues that electric vehicles (EVs) are less polluting and more energy-efficient compared to conventional fuel-powered cars. They are also more cost-effective and capable of covering nearly double the distance of a regular fuel car. Studies indicate that the adoption of electric vehicles is primarily influenced by economic, technical, social, infrastructure and policy factors that serve as both drivers and barriers to adoption.

Citation: Unlocking the market potential of electric vehicles in the Philippines: A statistical and neural network approach to customer willingness to purchase electric vehicles.
Dela Cruz, 2023.

Table 7 Marketing Strategies Implemented by the Metro Manila Hotel Industry According to the Respondents of Disruptive Digital Technology Being Used in Metro Manila Hotel

Indicators	Mean	Standard Deviation	Remark
1. *Personalized Marketing Campaigns*. Implement AI-driven tools to analyze customer data and tailor marketing messages to individual guests, enhancing engagement and conversion.	3.09	0.900	Agree
2. *Enhanced Customer Experience*. Implement chatbots and AI-powered customer service tools to provide instant responses to guest inquiries and enhance the overall customer experience	3.12	0.927	Agree

	Mean	SD	Remark
3. *Digital Booking Platforms*. Implement mobile booking apps and responsive websites to cater to the growing trend of mobile bookings and provide a seamless booking experience for guests.	3.31	0.902	Strongly Agree
4. *Data-Driven Decision Making*. Use digital adoption platforms to optimize technology solutions, improve operational efficiency, and enhance the overall guest experience through data-driven insights	3.17	0.904	Agree
5. *Online Reputation Management*. Respond promptly to guest reviews, both positive and negative, to demonstrate responsiveness and commitment to guest satisfaction, which can influence booking decisions.	3.27	0.858	Strongly Agree
Grand Mean	3.19	0.808	Agree

Note: The following remarks apply to the mean interval: 4.00 - 3.26 for Strongly Agree, 3.25 - 2.51 for Agree, 2.50 – 1.76 for Disagree, and 1.75 – 1.00 for Strongly Disagree.

As stated in table 7, marketing strategies implemented by the Metro Manila hotel industry according to the respondents of dsiruptive digital technology being used in Metro Manila Hotel is to assess respondents' perceptions of the effectiveness of current digital marketing strategies, to identify areas where respondents believe hotels can enhance their digital marketing efforts, and to explore respondents' views on measuring the return on investment (ROI) of digital marketing campaigns.

Through the digital booking platforms that Implements mobile booking apps and responsive websites to cater to the growing trend of mobile bookings and provide a seamless booking experience for guests got the highest mean of 3.31, standard deviation of 0.902 and the lowest mean is the personalized marketing campaigns that implement AI-driven tools to analyze customer data and tailor marketing messages to individual guests, enhancing engagement and conversion with a mean of 3.09, standard deviation of 0.900 and interpreted as agreed only by the respondents of this study. With the grand mean of 3.19, standard deviation of 0.808 and interpreted as agree only.

As literature cited, Tourism is a sector that has an important position for economic growth and community empowerment. One type of travel that can boost tourism growth is by optimizing the development of budget travel trends. Budget travel is a form of tourism that places the budget as an important consideration, especially by choosing accommodation and transportation at affordable prices. The needs of the digital era, to meet the needs of tourism players, it is necessary to optimize marketing by tourism managers, especially hotels with a digital strategy; therefore, we present a book entitled Hotel Marketing Strategy in Digital, The Secret Era of Improving Hotel Occupation with the Internet.

Citation: Hotel marketing strategies in the digital age. Murniati, et. al, 2020

Table 8 Significant Relationship Between the Perception of the Respondents on the Disruptive Digital Technologies and Marketing Strategies Implemented by the Metro Manila Hotel Industry.

Marketing Strategies vs	Disruptive Digital Technologies Factors	Pearson Correlation Coefficient	p-value	Decision	Verbal Interpretation
	Artificial Intelligence	0.868**	0.00	Reject H_0	Significant

	Virtual Reality	0.829**	0.00	Reject H_0	Significant
	Blockchain	0.866**	0.00	Reject H_0	Significant
	Internet of Things	0.856**	0.00	Reject H_0	Significant
	Hybrid of Electric Vehicles to Use as Shuttle or Service Vehicles	0.762**	0.00	Reject H_0	Significant

*Note: ** - Correlation is significant (S) at the 0.05 level (2-tailed). ** - Correlation is not significant (NS) at the 0.05 level (2-tailed) For the interpretation of the value of the level of relationship, 1.00 – 0.70 for Very Strong Correlation, 0.69 – 0.40 for Strong Correlation, 0.39 – 0.30 for Moderate Correlation, 0.29 – 0.20 for Weak Correlation, and 0.19 – 0.01 for No or Negligible Correlation.*

As stated in table 8, the significant relationship between the perception of the respondents on the disruptive technologies and marketing strategies implemented by the Metro Manila hotel industry is to measure the strength of the relationship between technology perception, marketing effectiveness and to discover new ways to leverage technology for targeted marketing campaigns and to strengthen brand image by using new digital technology to differentiate the hotel and build a strong brand identity.

The following are the results of data gathering that the dsiruptive digital technologies factors results of artificial intelligence (AI), pearson correlation coefficient is 0.868, interpreted as significant; Blockchain, pearson correlation coefficient is 0.866; Internet of Things (IoT) the results for pearson correlation coefficient 0.856, Virtual Reality (VR) pearson correlation coefficient is 0.829; Hybrid of Electric Vehicles to Use as Shuttle or Service Vehicles, pearson correlation coefficient is 0.762; For the interpretation of the value of the level of relationship, 1.00 – 0.70 for Very Strong Correlation.

Therefore, the significant relationship between the perception of the respondents on the disruptive digital technologies and marketing strategies implemented by the Metro Manila hotel industry and the following are the disruptive digital technologies is a very strong correlation and significant for this study.

Chapter 5
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of findings, conclusions drawn, and recommendations made by the researcher. This study was based on the results of the data gathered from the respondents' questionnaires.

Summary of Findings:

The salient findings of the study are the following:

1. The demographic profile of the respondents (table 1): age of the respondents, sex of the respondents, educational attainment of the respondents, work position of the respondents, length of service of the respondents and classification of hotel where the respondents are working are to explore the disruptive digital technologies of e-commerce that being used or implemented in the Metro Manila hotel industry; The descriptive statistics of these factors that both male and females help researchers understand who participated in the study and whether the sample is representative of the target populations that you can interpret the overall perception of disruptive digital technologies in Metro Manila hotels.

   The understanding, influence and segments of demographics of respondents through the specific technologies will help interpret how respondents perceive the value and tech-savviness.

Therefore, there are correlations between demographics and perceptions to identify areas where disruptive digital technologies of e-commerce that are being used or implemented in the Metro Manila hotel industry are well-received and areas for improvement.

2. The descriptive statistics (table 2), perception of the respondents on the disruptive digital technology being used in Metro Manila hotel in terms of artificial intelligence (AI),

respondents' perceptions of innovative digital technologies using AI in Metro Manila hotels. Therefore, respondents agreed that the perception of the respondents on the innovative digital innovative technology being used in Metro Manila hotels in terms of artificial intelligence (AI) was effective with a total mean score of 3.13 and standard deviation (SD) of 0.792. and agreed with increasing attention to the relationship between innovative digital technologies (DTs). Business model innovation is an emerging hot topic in management research.

3. The descriptive statistics (table 3), perception of the respondents on the Disruptive Digital Technology Being Used in Metro Manila Hotel in Terms of Virtual Reality (VR), The Immersive Previews of virtual reality (VR) technology that provides guests with immersive virtual tours of hotel properties, allowing them to explore rooms, amenities, and nearby attractions remotely, enhancing their booking experience and aiding in decision-making; Enhanced Marketing of virtual reality (VR) hotel tours are a powerful marketing tool, showcasing hotel offerings interactively, attracting tech-savvy customers, and differentiating hotels in a competitive market data;

Training and staff development of virtual reality (VR) training in hospitality revolutionizes employee training by offering a safe and controlled environment for practicing tasks and procedures, leading to improved skills, confidence, and performance; and Guest Experiences of hotels are incorporating VR technology into rooms to provide guests with virtual reality entertainment options, offering immersive experiences like playing games or watching movies in a new way, setting the hotel apart from competitors. With these indicators it illustrates the usefulness through the guests experiences that find virtual reality (VR) a valuable tool for planning their stay or exploring hotel offerings, to use that guests are comfortable using Virtual reality (VR) equipment and navigating virtual reality (VR) experience, immersion that creates a realistic and engaging experience for guests, the virtual reality (VR) content diverse and appealing to different guest interests, and impact on decision-making that virtual reality (VR) experiences influence guests' choices regarding activities or services within the hotel.

Therefore, the perception of the respondents on the disruptive digital technology being used in Metro Manila hotels in terms of virtual reality (VR) shows that the study of virtual reality (VR) is positively influenced by guests'/ respondents' perception of the hotel's innovation and guest-centric approach.

3. The descriptive statistics (table 4), the perception of the respondents on the disruptive digital technology being used in Metro Manila hotels in terms of blockchain for the Loyalty Programs.

Hotels can build loyalty programs on a blockchain platform, issuing tokens as rewards. Blockchain allows customers to freely buy, sell, or exchange loyalty tokens, increasing competitiveness and service quality; Transparent Pricing and Bookings. Hotels can use blockchain to provide real-time pricing information, showing guests they are getting the best deal without hidden fees or markups; Secure Identity Verification. Blockchain can provide a secure identity verification system for hotel guests. Guest identities are stored as encrypted records on the blockchain; and the last one indicator shows Smart *Contracts*. Blockchain can automatically enforce hotel policies like cancellation terms, room availability, and payment, streamlining the booking process and reducing misunderstandings. Hence, the evolving nature of blockchain technology in hospitality, there is limited data on guest perceptions in Metro Manila hotels specifically.

However, here's a breakdown of the study might explore through areas of perception of the respondents through understanding what blockchain is and its potential applications in hotels; respondents perceive blockchain as a secure way to store or manage hotel data; respondents believe blockchain could streamline hotel processes or improve guest experiences; and respondents feel blockchain could increase trust and transparency in hotel transactions. Also, the overall analysis reveals guests perceive blockchain as a potential tool to enhance trust and transparency in areas like data privacy or loyalty programs.

4. The descriptive statistics (table 5), perception of the respondents on the disruptive digital technology being used in Metro Manila hotels in terms of internet of things (IoT). Stronger Security and Safety. Through advanced surveillance, smart control systems access, and internet of things (IoT) enabled sensors, hotels enhance security measures and monitor premises;

Improved Operational Efficiency. Hotels utilize the internet of things (IoT) for room management, inventory tracking, and maintenance scheduling; Cost Savings and Sustainability. By implementing advanced energy management systems, optimizing resource usage, and enabling predictive maintenance, the internet of things (IoT) helps hotels reduce operational costs; the internet of things (IoT) allows for personalized experiences. Contactless solutions like check-ins, check-outs, and service bookings provide flexibility to guests, enhancing satisfaction and loyalty. Therefore, the study might show that the respondents on the innovative digital technology being used in Metro Manila hotels in terms of internet of things (IoT) appreciate the convenience and automation offered by internet of things (IoT) devices in areas like smart homes or connected workplaces were in the age of emerging technology, various automated systems, and remote-control system applications have been implemented to make human lives comfortable.

5. The descriptive statistics (table 6), the perception of the respondents on the dsiruptive digital technology being used in Metro Manila hotels in terms of hybrid or electric vehicles to use as shuttle or service vehicles, the following indicators that got the highest mean is *Environmental Impact* (EVs) contribute to reducing carbon footprint and promoting sustainability, aligning with the hospitality industry's focus on eco-friendly practices which result in 3.40, with standard deviation of 0.873 and interpreted as strongly agreed by the respondents of the study, and the lowest mean is usage. EVs could be suitable due to their zero emissions and quiet operation with the mean of 3.29, with standard deviation of 0.867 and interpreted as strongly agreed by the respondents upon gathering data. The total grand mean with these indicators 33.33, standard deviation of 0.794 and interpreted as strongly agreed. Therefore, their ability to reduce greenhouse gas.

6. The descriptive statistics (table 6), marketing strategies implemented by the Metro Manila hotel industry according to the respondents of disruptive digital technology being used in Metro Manila Hotel such as: *Digital Booking Platforms*. Implementing mobile booking apps and responsive websites to cater to the growing trend of mobile bookings and provide a seamless booking experience for guests got the highest mean of 3.31, standard deviation of 0.902 and interpreted as strongly agreed and the lowest mean is that of personalized marketing campaigns that implement AI-driven tools to analyze customer data and tailor marketing messages to individual guests, enhancing engagement and conversion with a mean of 3.09, standard deviation of 0.900 and interpreted as agreed only by the respondents of this study. With the grand mean of 3.19, standard deviation of 0.808 and interpreted as agree only. Environmental Impact (EVs) ability to reduce greenhouse gas.

6. The descriptive statistics (table 7), the significant rellationship between the perception of the respondents on the disruptive technologies and marketing strategies implemented by the Metro Manila hotel industry the following are the disruptive digital technologies factors results of artificial intelligence (AI), pearson

correlation coefficient is 0.868, interpreted as significant; Blockchain, pearson correlation coefficient is 0.866; Internet of Things Pearson correlation coefficient 0.856, Virtual Reality (VR) pearson correlation coefficient is 0.829; Hybrid of Electric Vehicles to Use as Shuttle or Service Vehicles, pearson correlation coefficient is 0.762; For the interpretation of the value of the level of relationship, 1.00 – 0.70 for Very Strong Correlation. Therefore, the significant relationship between the perception of the respondents on the innovative technologies and marketing strategies implemented by the Metro Manila hotel industry and the following are the innovative digital technologies is a very strong correlation and significant for this study.

7. There is a significant relationship between the perception of the respondents on the disruptive digital technologies and marketing strategies Implemented by the Metro Manila hotel industry.

CONCLUSION

By effectively integrating innovative technologies and implementing targeted marketing strategies, Metro Manila hotels can create exceptional guest experiences, drive revenue growth, and establish a strong competitive advantage. Continuous monitoring and adaptation are essential for long-term success. Based on the data gathered, the conclusion for Virtual Reality (VR) stands as a transformative force in the realm of hotel innovative digital technologies. It has redefined possibilities across various hotels offering immersive experiences that enhance both interaction and understanding. VR promotes an engaging learning environment, enabling customers and clients to explore complex concepts through simulations. Moreover, VR has significant implications for remote work, offering virtual workspaces that enhance collaboration and communication among geographically dispersed teams. As technology progresses, the integration of AI and VR could lead to even more personalized and adaptive virtual environments, enhancing user engagement and learning outcomes. Challenges remain, including issues related to accessibility, user comfort, and ethical concerns surrounding privacy and disconnection from reality.

In conclusion, Virtual Reality, as an innovative hotel disruptive digital technology, not only broadens the horizons of user experience but also presents new avenues for growth in multiple domains, reshaping how we interact with digital content and with each other in profound ways. As we navigate its complexities and potentials, VR will undoubtedly continue to be at the forefront of digital innovation.

In the light of the above findings of the study, the following conclusions were derived:

1. Both male and females help researchers understand who participated in the study and whether the sample is representative of the target populations so that you can interpret the overall perception of innovative digital technologies in Metro Manila hotels. The understanding, influence and segments of demographics of respondents through the specific technologies will help interpret how respondents perceive the value and tech-savviness. Therefore, there are correlations between demographics and perceptions to identify areas where innovative digital technologies of e-commerce that are being used or implemented in the Metro Manila hotel industry are well-received and areas for improvement.

2. The perception of the respondents on the innovative digital technology being used in Metro Manila hotels in terms of artificial intelligence (AI), respondents' perceptions of innovative digital technologies using artificial intelligence (AI) in Metro Manila hotel, agreed with increasing attention to the relationship between innovative digital technologies (DTs). Business model innovation is an emerging hot topic in management research.

3. The perception of the respondents on the innovative digital technology being used in Metro Manila hotels in terms of blockchain for the Loyalty Programs. The study might explore through areas of perception of the respondents through understanding what blockchain is and its potential applications

in hotels; respondents perceive blockchain as a secure way to store or manage hotel data; respondents believe blockchain could streamline hotel processes or improve guest experiences;

and respondents feel blockchain could increase trust and transparency in hotel transactions. Also, the overall analysis reveals guests perceive blockchain as a potential tool to enhance trust and transparency in areas like data privacy or loyalty programs.

4. The perception of the respondents on the innovative digital technology being used in Metro Manila hotels in terms of internet of things (IoT). Stronger Security and Safety. Through advanced surveillance, smart control systems access, and IoT-enabled sensors, hotels enhance security measures and monitor premises; Improved Operational Efficiency. Hotels utilize the internet of things (IoT) for room management, inventory tracking, and maintenance scheduling; Cost Savings and Sustainability. Therefore, the study might show that the respondents on the innovative digital technology being used in Metro Manila hotels in terms of internet of things (IoT) appreciate the convenience and automation offered by internet of things (IoT) devices in areas like smart homes or connected workplaces were in the age of emerging technology, various automated systems, and remote-control system applications have been implemented to make human lives comfortable.

5. The perception of the respondents on the innovative digital technology being used in Metro Manila hotels in terms of hybrid or electric vehicles to use as shuttle or service vehicles, the following indicators that got the highest mean is Environmental Impact. (EVs) have a large potential for greenhouse gas emissions reductions when coupled with a low-carbon electricity sector and research tends to focus on in-room or service-related technologies that directly impact the guest experience (e.g., mobile check-in, digital concierge). Hybrid/electric vehicles (HEVs) are a hotel sustainability practice, not a direct guest touchpoint.

The significant relationship between the perception of the respondents on the innovative technologies and marketing strategies implemented by the Metro Manila hotel industry the following are the innovative digital technologies factors results of artificial intelligence (AI), pearson correlation coefficient. This means hotels that effectively market their AI features might have guests with a more positive perception of the actual AI results. By exploring the link between technology perception and marketing, Metro Manila hotels can optimize their strategies to leverage innovative features and attract guests.

6. The significant relationship between the perception of the respondents on the innovative technologies and marketing strategies implemented by the Metro Manila hotel industry the following are the innovative digital technologies factors results of artificial intelligence (AI), Blockchain, Internet of Things, Virtual Reality (VR) pearson correlation coefficient, and Hybrid of Electric Vehicles to use as shuttle or service vehicles, states that pearson correlation coefficient is all variables are strongly correlated and significant of the study.

7. There is a significant relationship between the perception of the respondents on the innovative technologies and marketing strategies Implemented by the Metro Manila hotel industry.

RECOMMENDATION

The adoption of innovative digital technology of the hotel industry, can greatly enhance customer experience, streamline operations, and drive revenue growth. Hotels' innovative digital technologies can differentiate themselves in a competitive market, improve operational efficiency, and deliver exceptional guest experiences that drive customer loyalty and revenue growth.

In view of the findings of this study and the conclusions drawn, the following recommendations are formulated and hereby endorsed the following

1. Hotels innovative digital technology can use mobile check-in and keyless entry can implement a mobile check-in system that allows guests to check-in and check-out using their smartphones that provides convenience and enhances security.

2. Hotels innovative digital technology can use personalized guest experience and can utilize data analytics and artificial intelligence to personalize the guest experience that hotels can offer tailored recommendations, promotions, and services to enhance guest satisfaction and loyalty.
Hotels innovative digital technology using smart room technology will equip rooms with smart technology such as voice-activated assistants, smart thermostats, and automated lighting controls that provide convenience to guests but also improve energy efficiency and operational efficiency for the hotel.

4. Hotel innovative digital technology using virtual reality (VR) Tours will be able to offer virtual reality tours of the hotel facilities, rooms, and amenities to potential guests that allows guests to experience the hotel virtually and can help in increasing bookings and reducing uncertainties.

5. Hotel innovative digital technology using chatbots and artificial intelligence (AI) powered customer service can implement chatbots on the hotel website and social media platforms to provide instant assistance to guests regarding bookings, inquiries, and requests to handle routine queries efficiently, freeing up staff to focus on more complex tasks.

6. Hotels innovative digital technologies in today's generation need to use contactless payments that provide contactless payment options such as mobile wallets, NFC technology, and QR codes to streamline the payment process and enhance guest experience that will promote safety by reducing physical contact between guests and staff.

8. Hotels innovative digital technology need to promote that they use data security and privacy by prioritizing data security and privacy measures to protect guest information and comply with regulations of encryption protocols, and regular security audits to safeguard guest data.

9. Hotel digital marketing and online reputation management will be able to leverage digital marketing strategies such as social media marketing, search engine optimization (SEO), and online advertising to reach a wider audience and drive bookings to manage the hotel's reputation effectively.

Proposed Marketing Plan: Leveraging Innovative Technologies in Metro Manila Hotels Industry
Executive Summary

This marketing plan outlines strategies for Metro Manila hotels to capitalize on innovative digital technologies to enhance guest experiences, increase revenue, and strengthen brand positioning. By focusing on technology integration, data-driven insights, and personalized guest interactions, hotels can differentiate themselves in a competitive market.

Situation Analysis

Industry Overview: The Metro Manila hotel industry is highly competitive, with increasing guest expectations for technology-driven experiences.

Competitive Analysis: Identify key competitors and their digital marketing strategies.

Strength, weakness, opportunities and threats (SWOT) Analysis: Assess the hotel's strengths, weaknesses, opportunities, and threats in relation to technology adoption.

Marketing Objectives

1. Increase guest satisfaction and loyalty through technology-enhanced experiences by 20%.
2. Drive direct bookings by 15% through optimized digital channels.
3. Enhance brand image as a technologically advanced and innovative hotel by improving online reputation by 10%.
4. Optimize operational efficiency through technology integration, resulting in a 10% reduction in operational costs.

Target Audience

1. Leisure travelers seek unique experiences, convenience, and social media engagement.
2. Business travelers prioritize efficiency, productivity, and seamless connectivity.
3. Millennials and gen z through tech-savvy, value-conscious, and seeking personalized experiences.

Marketing Strategies

1. Technology Integration

- Artificial intelligence (AI) powered personalization: to implement AI-driven guest profiles to offer tailored recommendations for accommodations, dining, and amenities. Budget: PHP 500,000 for AI software and implementation.
- Virtual and Augmented Reality (VR/AR) to create immersive virtual tours, room previews, and interactive experiences. Budget: PHP 300,000 for VR/AR equipment and development.
- Internet of things (IoT) for Enhanced Guest Experience to integrate smart room technology (e.g., voice control, temperature regulation) and optimize energy efficiency. Budget: PHP 800,000 for IoT devices and installation.
- Blockchain for Loyalty Programs to develop a secure and transparent loyalty program with blockchain technology. Budget: PHP 200,000 for blockchain development and integration.

2. Digital Marketing and Social Media

- Content marketing to produce high-quality content showcasing the hotel's technology-driven offerings and local experiences. Budget: PHP 250,000 for content creation and distribution.
- Social media marketing to create engaging content for platforms like Instagram, TikTok, and Facebook, utilizing user-generated content. Budget: PHP 200,000 for social media management and advertising.
- Influencer partnerships to collaborate with tech and travel influencers to promote the hotel's innovative features. Budget: PHP 150,000 for influencer partnerships.
- Email marketing to implement personalized email campaigns based on guest preferences and behavior. Budget: PHP 100,000 for email marketing software and campaigns.

3. Digital Channels and Distribution

- Direct booking channels: to optimize the hotel website for mobile devices and offer exclusive deals for direct bookings. Budget: PHP 150,000 for website optimization and development.
- Online travel agencies (OTAs) to maintain a strong presence on OTAs while focusing on driving direct bookings through competitive rates and offers. Budget: PHP 100,000 for OTA management and advertising.
- Meta search engines to utilize meta search platforms to increase visibility and attract a wider audience. Budget: PHP 50,000 for metasearch advertising.

4. Data Analytics and Measurement

- Data collection to implement data tracking systems to gather guest information and behavior data.

Budget: PHP 50,000 for data analytics software and implementation.

- Performance measurement to track key performance indicators (KPIs) and analyze marketing campaign effectiveness. Budget: Included in overall marketing budget.
- Data-Driven Decision Making to utilize data insights to optimize marketing strategies and improve guest experiences. Budget: Included in overall marketing budget.

Implementation and Evaluation

- Timeline to develop a detailed implementation plan with specific timelines and responsibilities for each strategy.
- Budget Allocation to monitor and adjust the marketing budget based on performance and return of investment (ROI).
- Performance evaluation to regularly assess the effectiveness of marketing strategies and make necessary adjustments.

Proposed marketing plan for hotel innovative digital technology total budget: PHP 3,500,000

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