## **SELF-CHECK-IN IN BOURNEMOUTH HOTELS**

## A dissertation by

#### XXXXXXXXXXXXXXXXX

In partial completion of the award of

MSc International Hospitality and Tourism Management

I hereby declare that the dissertation submitted is wholly the work of

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**Bournemouth University** 

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#### **ABSTRACT**

With the use of technology, hotel guests can check in utilising the self-check-in method with little to no need for in-person interaction. This study examines the benefits and challenges of self-check-in technology for hotels in Bournemouth, UK, one of the country's most popular tourist destinations. The study employed a qualitative method and inductive approach, using semi-structured face-to-face interviews with 7 hotel managers and 13 hotel users, focusing on three pre-determined questionnaires. The study found that self-check-in technology offers significant benefits to both hotel operators and guests. Hotel guests can check-in at any time of the day without waiting in long queues, and have greater control over their check-in process, resulting in enhanced convenience and efficiency. With this technology, hoteliers can potentially improve customer satisfaction, reduced contact, improve flexibility and convenience. However, the research also revealed that there are challenges associated with self-check-in technology. The implementation cost, system malfunction, and complexity with the technology were cited as potential challenges. Additionally, there is a potential for a decrease in personal interactions between staff and guests, which could affect the overall quality of customer service.

The study evaluated different types of self-check-in options used in Bournemouth hotels, which include online check-in, self-check-in kiosks, mobile apps. Each of these technologies has its own benefits and drawbacks, and hotels choose the system that best suits their needs. The research also assessed the value creation and destruction associated with the adoption of self-check-in technology. The study revealed that while self-check-in technology can create value for both hotels and guests, it can also lead to the destruction of value, particularly in terms of the potential loss of personal interaction between staff and guests. The study found that the majority of the hotels in Bournemouth do not currently use self-check-in technology. Although hoteliers have differing opinions on the deployment of self-check-in technology in their hotel, guests agreed that there is potential for expansion and adoption in the future. This study offers valuable knowledge into the benefits and challenges of self-check-in technology for hotels in Bournemouth. The study revealed that, self-check-in technology has the potential to enhance the visitor experience and increase the hotel competition, but it also has challenges that should be carefully examined.

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## **LIST OF ABBREVIATIONS**

AI- Artificial Intelligence

B&B – Bread and Breakfast

GDP – Gross Domestic Product

IAT – Intelligent Agent Technology

ICT – Information Communication Technology

IT – Information Technology

NFC - Near Field Communication

ONS - Office of National Statistic

PIN – Personal Identification Number

P4 - Participant 4

P6 – Participant 6

P14 – Participant 14

QR – Quick Response

RFID – Radio-frequency Identification

SST – Self-Service Technology

UK – United Kingdom

#### **CHAPTER ONE**

### **INTRODUCTION**

#### 1.1 Introduction

The hotel industry is increasingly using technology in its daily operations to reshape its infrastructure and concentrate on its goals to give value to its consumers (Miranda et al. 2015). One of the key sectors of the global economy is the hospitality and tourism sector, recent years revealed a significant shift in how services are delivered and received in this sector, due to the adoption of modern technology (Kansakar et al. 2019). Most United Kingdom (UK) cities continue to experience strong hotel occupancy rates, with an increase in ADR and RevPAR. According to 2017 Office of National Statistics (ONS), the yearly revenue from hotels and other lodging services was £18.4 billion, a rise of over 35% since 2008. UK hotel market has sustained positive performance with RevPAR growth. Records from regional cities that benefited from strong tourism trends obtained occupancy rate over 80% in which Bournemouth city was rated 20th city with 50% annual occupancy rate (Lambert Smith Hampton 2018). In 2019, the hospitality industry contributed £37 billion in Gross Domestic Product (GDP) to the UK economy (Statista 2020).

The hotel industry is facing an oversupply of tourism providers, which requires hoteliers to be innovative and unique in order to distinguish their hotels from others. This has led some hotels to adopt the latest Information Technology (IT) infrastructure and application systems, while others continue to use older technologies (Buhalis and Leung 2018). To increase their financial performance, competitiveness, resource efficiency, adaptability, and innovation, hotels now utilize these technologies to help them manage their operations, order processes, capacity demands, connections with customers and suppliers, and service quality (Ivanov et al. 2020; Lenuwat and Boon-iit 2022). The outbreak of Covid-19 and its precautionary measure has made the hotel sector to be increasingly reliant on technology. The Covid-19 pandemic further emphasises the value of non-contact services provided through technology (Moon et al. 2021). With the disease posing great challenge to the industry, Hoteliers were able to look for ways to lower the risk of infection for their staff and guest (Davari et al. 2022).

The hospitality industry has adopted various technological services such as contactless transactions, self-check-in kiosks, mobile check-in, chatbots etc. These services aim to meet guest expectations for convenience, safety, and efficiency (Skift and Oracle Hospitality 2022). One of these services is self-check-in which allow guests to complete automated check-in and

check-out without interacting with hotel front desk staff (Ahmad and Scott 2019). This technology is similar to those seen at airports where customers get their boarding passes without queuing (Kim et al. 2023).

#### 1.2 Rationale

The hospitality industry is undergoing a transformation due to the emergence of smart and automated technologies, such as mobile devices, smart rooms, big data, artificial intelligence, and self-service technologies. These technologies affect various aspects of hospitality operations, from reservations to check-in/out processes. Self-check-in in hotel is a type of self-service technology that allows guests to check in without interacting with hotel staff. Self-check-in has various advantages and disadvantages for hotels and guests that need to be investigated and understood. It has become more relevant and important due to the Covid-19 pandemic and the need for social distancing and hygiene measures. Most previous studies have focused on SST in general or in other contexts, but not specifically on self-check-in in hotels. This study will provide new insights and recommendations for hotel managers and guests on how to implement and use self-check-in effectively and efficiently.

## 1.3 Aims and objectives of the research.

The aim of this study is to explore the benefits and challenges of self-check-in for hotels in Bournemouth.

- To critically analyse the pros and cons of adopting self-service check-in technology in hotels.
- II. To evaluate the different self-check-in options available to hotels.
- III. To access the value destruction/co-creation in the adoption of this service.
- IV. To explore the potential future of self-check-in in hotels.

#### 1.4 Research Questions

To achieve these objectives, research questions will be addressed.

- I. What are the benefits and challenges of self-check-in system in hotels?
- II. How do hoteliers perceive the use of self-check-in on customer service, business operations and guest satisfaction in hotels
- III. How accurate and efficient are self-check-in systems compared to conventional check-in procedures?
- IV. Is the use of self-check-in a value-creator or value disruptor?

## V. What is the future acceptance and development of self-check-in?

### 1.5 Significance of the study

While interest in self-service technology has increased across a variety of service industries, a comprehensive and organised research on self-check-in in hotels is still lacking. The study will offer a unique perspective on how self-check-in processes are used and how they affect the hotel industry. This research topic will be contributing to the literature on self-service technology and its adoption in hotel by identifying the pros and cons of self-check-in, different methods of self-check-in and its effectiveness and efficiency and the success factor of the infusion of this service in the hotel. Scholars, hotel managers will likewise benefit from this research by having a better understanding of organisational acceptance of self-check-in.

## 1.6 Background of the study

Recent advancements in technology have brought about significant changes in the hospitality sector (Stylos et al. 2021). These developments have led to the transformation of operation systems through automation and enhanced connectivity (Buhalis and Leung 2018). In the context of crisis/disaster response strategies, technology is a crucial element of smart systems and plays a role in facilitating innovative solutions and strategies (Buhalis et al. 2019). Simultaneously, the concept of a smart hotel provides hotel owners with an intelligent setting that promotes increased customization and satisfaction among tourists (Buhalis 2020). Furthermore, it facilitates operational agility (Buhalis et al. 2023). Self-check-in are also considered as smart technology and self-service technology (SST) which have influenced the hotel business before and during the COVID-19 outbreak (Boo and Chua 2022). Self-check-in kiosks are becoming more popular in the hotel industry as a way of improving customer satisfaction and reducing operational costs. According to Gummerus et al. (2019), self-service technology enhances the value of service for customers by offering convenience, control, and customization. Liu et al. (2020) suggest that self-check-in kiosks can reduce labour costs and increase efficiency for hotel managers. However, not all service providers share the same perception of self-check-in kiosks. Kattara and El-Said (2014) argued that self-service technology may reduce human interaction and affect service quality. Therefore, it is important to consider the benefits and challenges of self-check-in kiosks for both customers and service providers in the UK hotel industry.

The adoption of self-check-in in hotels is a topic that needs more research, especially in Bournemouth. This town has a diverse hotel market that ranges from budget hotels to

international brands, catering to both local and international tourists. Hotels in Bournemouth are classified based on star categorization, which reflects factors such as size, number of rooms, food and beverage outlets, quality of products and services. Self-check-in could have different implications for different types of hotels and consumers. This research aims to explore the benefits and challenges of self-check-in different segments of hotel industry in Bournemouth.

### 1.7 Structure of the dissertation

This research starts by introducing the chosen topic, its background, aim and objectives with research question. The related literature from a variety of academic fields is then reviewed in the next chapter. Chapter 3 discusses the methodology fit for the research while chapter 4 analyses and discussed the research findings from the study. Chapter 5 concludes the research and highlighted how the research question were met. This chapter also discuss recommendation for future research and limitations faced during the research.

#### **CHAPTER TWO**

### LITERATURE REVIEW

#### 2.1 Introduction

The development of technology creates various possibilities to provide better customer experience and enhance service efficiency (Piccoli et al. 2017). The possibility of utilising technology to serve in hospitality industry is enormous. However, the adoption depends on how the hoteliers recognise its potential benefits together with the demand for it to decide whether it is worth the investment. This chapter focuses on the different literatures on self-check-in in hotel industry, starting with the introduction of self-service technology to critically analysing self-check-in in hotel and its different methods used in the hotel industry. This chapter discusses the hotel and guest experiences with self-check-in and value created or destroyed using this technology. The key findings from various journal and articles revealed that hoteliers are implementing self-service to satisfy and attract guest who prefer independent service and to reduce labour cost and waiting time during check-in process. This self-check-in is related to smart technology or automation technology.

## 2.2 Technological trends in the hotel industry

The hotel business is a significant part of the tourism sector, and the members of staff are essential to providing services to the clients or tourists staying in the hotels (Chen 2013). Numerous hotel brands have recognized the significance of incorporating technology and have employed inventive technological solutions to secure their competitive edge and provide exceptional services (Parr 2020). The hotel sector has a wide range of challenges to service many tourists as a result of the swiftly occurring globalisation process and frequent international travel (Ferizi and Kruja 2018). Hospitality organisations are seeking for innovative methods to improve their service procedures and generate more income through pleasant returning customers in this highly competitive marketplace. According to Lewrick et al. (2010), innovation is the invention, distribution, and application of unique and economically beneficial technology, a fundamental component for competitiveness and development. Sebel (2004) notes that innovation and technology are among the most often evaluated corporate key factors in which technology is the facilitator besides human resources, product design, service and support and product promotion. It helps to improve communication, advance commercial operations, and establish and preserve solid, enduring bonds with users. Technology has proven to be a vital element to attract and retain customers to hospitality businesses with swift and smooth advancement in processes (Kruja et al. 2019). According to Systemagic (2017), one obstacle for hotels is keeping up with the increasing customer expectation of (service gains resulting from technology use), which is a real challenge given limited IT funds.

The emergence of novel technology and business models has brought about a significant transformation in the hotel and tourism industries. Some instances of these advancements comprise mobile self-check-in, mobile reservation systems, self-service check-in kiosks, media panels in lobbies, electronic luggage tags, bring your own device policies, bring your own content platforms, smartphone-based boarding passes, systems for optimizing hotel services, tools for guest device connectivity, and voice over internet protocol phones integrated into the hotel's ecosystem, such as in-room phones enabling guests to order room service. (Rajeswari and Sathishkuwar 2019; Thakur 2022). Typically, these advancements are strategically implemented at the forefront of services, ensuring visibility and accessibility to customers. In select hospitality establishments, patrons have the convenience of making dinner reservations or accessing other services through their personal mobile devices or by seamlessly integrating with cutting-edge technologies available in hotel lobby spaces (Thakur 2022).

The trend of innovations in the hotel and tourist sectors reflects service innovation, as opposed to product innovation (Gremyr et al. 2014; Rahman and Hassan 2021). These developments have improved operational effectiveness while also generating greater value for customers (Sorescu et al. 2011). Service companies now provide better quality services and a more individualised experience as a function of design of new technologies. To achieve this, the approach involves proactively understanding and catering to the needs and preferences of clients, nurturing loyalty through diverse initiatives, expanding the customer base while minimizing wasted capacity, and enhancing efficiency and productivity. Through the utilization of technology and streamlined processes, service innovations aim to discover ways to generate and deliver additional value to consumers. To empower employees, shareholders, and customers, constant improvement and concept streamlining has led to the emergence of novel client experiences (Bilgihan and Nejad 2015).

The preliminary basis for smart hospitality has been formed through research on the creation and acceptance of hospitality technologies. The foundation examined information technology

advancements in the hotel sector as well as their application to business operations, management, and consumer engagement which bring about the concept of smartness (Buhalis and Leung 2018). Smartness is defined as the integration of a network of organisations and smart features that interact with interoperable and connected technologies to streamline and automate daily tasks while adding value throughout the ecosystem for all stakeholders (Buhalis and Amaranggana 2015; Buhalis 2020). Smart technology is increasingly preferred in hotels for basic tasks over human interaction. Due to their greater independence, hotel guests' engagement has significantly expanded owing to the usage of smart gadgets like smartphones and tablets. The automated check-in process at hotels is increasingly being considered and preferred by guests since it is quicker and more convenient than standing in line to check in with hotel front desk staff (Gupta and Sharma 2021).

Incorporating smart technology into hotel operations aids in the effective transformation of antiquated, unconnected, and incoherent procedures into workflows that are completely modern, automated, straightforward, and integrated (Lukanova and Illieva 2019). According to Spencer et al. (2012), major drivers for change are not limited to emerging technologies but also encompass the widespread dissemination of thought leadership and unconventional approaches to problem-solving. To achieve collective agility, it is essential for stakeholders to be interconnected and interoperable, which then leads to the transformation of industry sectors through innovative methods of value co-creation and business process reengineering, as stated by Buhalis et al. (2019). Leung (2019) revealed that the primary obstacles that hinder operators from fully benefiting from smart hospitality are related to leadership, perceptions, and skills. Due to a conventional approach to management education that often focuses on practical skills, many managers have a limited understanding of smart hospitality.

Using automation technology according to (Bhatnagar 2020) boosts the efficiency of the hotel and its workers by assisting them in streamlining their routine, repetitive duties, improving and smoothing out their general dependability, quality, and trustworthiness. The use of technology in the hospitality sector provides guests with a comfortable and effective overall experience. Revolution of human resource management has now taken place through smartness with variety of talents and competencies. Through smartness resources are manage more effectively by employing technologies that allow them to access unusual personnel specialisations. This allows them to manage human resources flexibly in response to variations caused by seasonal demand as well as unique events and festivals. Automation

operations in the hospitality industry can improve productivity and efficiency by reducing staff workload from manual processes and minimising human error (Buhalis and Leung 2018).

## 2.3 Self-service technology

As an alternative for human-based services, the development of SST has had a considerable influence on the hotel industry, as well as its marketing strategy and goals (Liu and Hung 2021). Recent advances in hospitality technology have resulted in more interest in and use of contactless features, self-service alternatives, personalisation, automated messaging, artificial intelligence, and virtual reality now (Skift and Oracle Hospitality 2022). SST is now a widely used operational strategy in the hospitality sector for resolving managerial issues brought on by the rising demand for customised experiences and the operational inefficiencies brought on by rising labour costs, high employee turnover, and the difficulty in filling positions with experienced employees (Gursoy 2018). The most recent technical developments have made it possible for hotel SSTs to be incorporated into internet platforms and mobile device apps (Lambert Smith Hampton 2018). Many hotels have adopted selfservice technology to take advantage of the massive potential advantages and to remain competitive in the industry (Wang et al. 2017; Tussyadiah and Wang 2016). However, the return on investment for SST is dependent on contextual factors such labour expenses, hotel age, and hotel infrastructure (Liu and Hung 2020). SST are more lucrative to implement in countries with high labour incomes than in nations with low labour incomes. Additionally, investing in self-service technology is less expensive for hotels that are currently under construction than for hotels that are fully operational (Iranmanesh et al. 2022).

The potential advantages of self-service technology may be achieved and maximized with the help of such investment, which will impact consumer satisfaction to achieve this, hotels must first identify what aspects of self-service technology might affect guest experience (Beldona et al. 2018). SSTs may be found in airport self-check-in, automated check-in and check-out in hotels and restaurant, cashless transactions, ATMs, kiosks, online services, online food ordering, online hotel booking, electronic table menus, and cashless ATMs (Chan et al. 2021). SST also aims to lessen workplace stress through self-check-in used by guests to save time and complete tasks quickly, especially during busy times (Ivanov and Webster 2019). Lack of engagement and interaction between employee and guest leads to less customer experience and satisfaction is one of the most criticised issues of utilizing SST (Yang and Chao 2017). Another obstacle to technology adoption in hotels is the cost of technology installation, which

has an impact on organisational readiness (Reino et al. 2014). The major opposition of SST are humans, as many individuals believe it diminishes the high-touch experience which is perceived to be an integral part of hospitality (Chen et al. 2021; Buhalis and Moldavska 2022).

## 2.4 Self-check-in in hotel industry

Self-check-in is an important component of smart technology that enhances guests' experience in the hospitality industry. It is also considered as part of intelligent agent technology (IAT) by Alsetoohy et al. (2022) to make travel and hospitality experience more convenient, safe, personalized, and automated leading to a reengineering process (Buhalis 2020; Buhalis et al. 2019). Hotel services are built on the concept of offering customers temporary access to service areas at a hotel property, such as access to guest spaces (such as guestrooms, suites, pools, gyms, and business centres) and guest amenities like food, drink, and Internet or entertainment items. Access and services are provided in exchange for a consumer's identity and proof of payment, after which, customers check-in and check-out at the end of their visit (Morosan 2020). Torres (2018) study explained that a guest must visit the front desk before checking into a hotel room, present identification, and make payment for the stay. After checking in, the hotel guest is given a key to their room and is personally led or guided by a staff member to his or her room. Plastic key cards have been widely used by the hotel industry for decades, and while they have shown to be quite affordable and dependable, they are also vulnerable to demagnetization, loss, theft, and hacking. As a result, hotels have embraced a variety of technology to facilitate quick and effective guest check-in.

According to Rosete et al. (2020) Self-check-in is a type of self-service technology that enables customers to check themselves in using kiosks, mobile app, or online portal into a hotel without the assistance of staff. It is used in hotel to speed up the reservation, check-in, and check-out operations as well as the facility navigation, entertainment, and room service delivery processes for visitors. This is usually done through a kiosk stand often found in the lobby and provide visitors access to their room key when guest enter their reservation number or name on the system (Awara et al. 2022). Therefore, self-check-in can be considered the reengineering and redesigning of the check-in process, incorporating technology to streamline and automate the process, while ultimately enhancing efficiency and customer satisfaction. Several hotels now encourage its guests to use the remote check-in and check-out service (Melián-González and Bulchand-Gidumal 2016). Sharma et al. (2021) stated that certain hotels are trying to eliminate human interaction by using several integrated automated technologies.

With the use of a mobile app, customers may check in using their reference information, enabling them to use their phone as key card for a mobile key system. Bookings for dining and entertainment facilities are accessed through these app and website by customers without having to interact with front-line workers, after which reservations are updated on the key cards for guest to access the facilities of their choice. Lei et al. (2019) study revealed that the advantages of self-check-in include better self-control, quicker check-in and check-out times, and more time for hotel staff to prepare for visitors' arrivals. In addition to providing consumers with over-control, it also ensures equality while interacting with visitors by providing a pleasant and dependable level of service (MENESES 2020). Consumers who know what they want and are willing to pay more for fast and customized services benefit from this innovation (Darmer and Sundbo 2008; Buhalis and Sinarta 2019).

## 2.5 Types of self-check-in in hotels

## 2.5.1 Digital kiosk

Digital kiosks offer a fully automated solution for hotel check-in and check-out processes. By employing digital kiosks, hotels grant their customers the opportunity to self-register, reducing wait times at the reception desk. Additionally, hotel guests have the flexibility to select their preferred language for the check-in process from a range of options. The selfservice programme provides the visitor the option to upgrade and displays several accommodation choices based on his needs. The visitor reads the hotel's check-in and checkout procedures, fills out the necessary forms, and provides a fingerprint for verification. The kiosk shown in figure 1 produces a visitor key card when the check-in processes are completed. The guest has the option to pay their bill at checkout while using the self-service application (Lukanova and Ilieva 2019). Digital kiosks are implemented at hundreds of locations across the world by software providers including IBM, NCR, and Clock in collaboration with some of the top hotel chains, such as Hilton, Marriott, Sheraton, Hyatt, and others. Hilton takes a step further by putting up a digital kiosk inside the baggage claim area of the airport. Customers of the Hilton Hawaiian Village Beach Resort & Spa can use this to check in at the airport before they arrive at the hotel (Avery 2008). To maximise the use of hotel kiosks, new features are added to self-service apps that are not available at the front desk. These features include interactive maps to identify various locations nearby the hotel, airline web check-in, directions to the guest room, and other amenities. The usage of digital kiosks in the hotel industry helps to enhance the visitor experience by expanding consumer

choice and convenience, cutting down on wait times, and giving customers more control over the arrival and departure process. The installation of digital kiosks in hotels provides a high possibility to boost income through upselling and one-to-one marketing offers of supplementary services (Lukanova and Ilieva 2019).

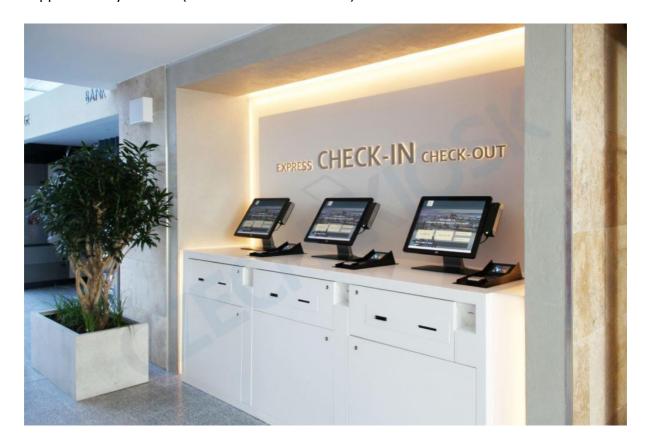


Figure 1: Figure showing the hotel digital kiosk (Rešení and Ckadmin 2021).

### 2.5.2 Mobile check-in

In 2008 Omni Hotels, a group of sixty luxury hotels with American routes across the United States, Canada, and Mexico, launched a mobile check-in app in figure 2 (Baker 2014). Several of the biggest hotel chains in the world, including Marriott (Marriott Mobile Application for Marriott Rewards members), Hilton Worldwide (Hilton HHonors members), Bread and Breakfast (B&B) Hotels, Choice Hotels, Scandic, Mövenpick, Park Inn, Radisson Blu, Louvre Hotels Group, and others, swiftly followed that lead. With mobile check-in, hotel guests complete their reservation at their own schedule. The visitor may easily access his room after checking in by obtaining their key from a key box at the front desk. Employees are relieved of certain mundane tasks when mobile check-in is used, giving them more time and opportunity to make a positive first impression by concentrating on "value-added face-to-face services (Lukanova and Ilieva 2019). Customers of the Hilton International Hotel Chain can use mobile applications to select their own rooms and check in (To Linh 2019).

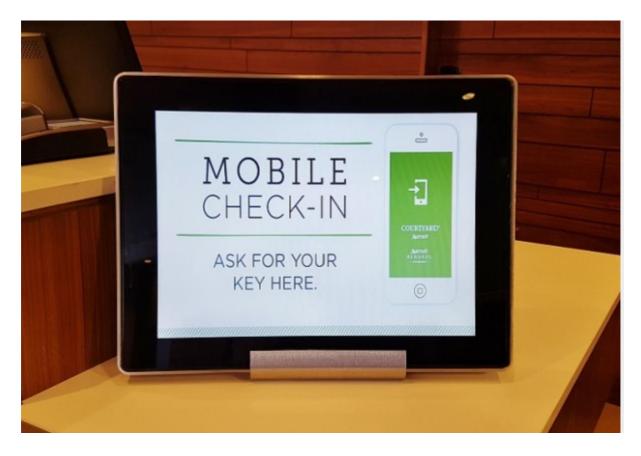


Figure 2: Showing the mobile check-in for self-check-in (Dasgupta 2017).

## 2.5.3 Digital smart key

Torres (2018) study explained that digital smart key in figure 3 is a type of self-check-in usually on a guest smartphone. Hotels allow visitors to lock and open their hotel doors using their smartphones instead of the conventional key card. It also includes other functions that may be used as a medium for communication between guests and the hotel services and amenities. Once the reservation procedure is complete, the hotel transmits the digital key card to the guest device, which eliminates the need for them to stop at reception to pick up a key and shortens the check-in process. It is more attractive to guest because they get to utilize their smartphone, they are comfortable in rather than the unfamiliar hotel device. As a result, employing a guest's smartphone application keeps hoteliers' technology update costs low and enables visitors to adapt to it far more quickly and conveniently. An example is the Clarion Hotel Stockholm which installed near-field communication (NFC) check-in and room access control systems that let visitors use specially designed NFC mobile apps to self-check in and activate hotel keys. After checking in using their NFC cell phones, visitors proceed to their reserved rooms and unlock them by swiping their phones on the door. Although the usage of mobile devices can streamline hotel check-in and room access management, certain mobile devices, including NFC smartphones and tailored software, are required before adopting the

system (Cheong et al. 2017). This method of check-in further emphasis Kruja et al. (2019) study that customers now have major influence to control their service engagement through technology, turning them to real value creators.

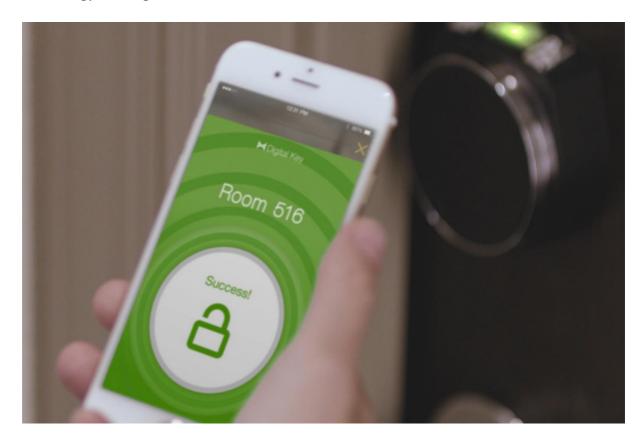


Figure 3: Showing the digital smart key for self-check-in in hotels (Shallcross 2015).

## 2.5.4 Facial recognition

Another type of self-check-in is the automated check-in through facial recognition technology that allow guest to perform hotel check-in and out process at a designated facial counter (Jiang and Wen 2020). This type of self-check-in was implemented in Swissotel the Stamford, Hertzfield (2018a), stated that it is more dependable due to its authentication methods as it can digitally identify guest and retrieve their information allowing hotel employees to deliver a customised and efficient guest service experience. Facial recognition technology shown in figure 4 has also been implemented at two Marriott hotels in China (Zlatanov and Popesku 2019). However, Morosan (2019) revealed that customers attitude and adoption behaviour towards this type of check-in in a hotel setting is relatively scant.



Figure 4: Showing facial recognition stand for self-check-in (Hertzfeld 2018b).

There are certain digital kiosks and mobile check-in options that allow guests to register digitally and avoid waiting at the front desk. Certain modern technology, including NFC, RFID (radio-frequency identification), audio, Bluetooth, PIN code (personal identifying number), and biometrics, allow guests to proceed directly to their rooms without waiting (Pesonen and Horster 2012; Gruen 2014; Keymolen 2018). The hotel chain The Starwood Hotels & Resorts Worldwide originally launched the keyless access system in 2014 through the smartphone app Starwood Preferred Guest (Mangla 2014). The mobile app enables full automation of checkin and checkout procedures as the guest automatically receives his hotel bill on his email. Another leading hotel chain when it comes to the deployment of keyless entry systems is Hilton Worldwide. The mobile-enabled room key technology allows members of its loyalty programme to access numerous areas of each property that need a room key, such as the fitness centre, executive floors, elevators, parking facilities, and so on (Lukanova and Ilieva 2019).

### 2.5.5 Quick Response (QR) codes

QR codes shown in figure 5, offer a convenient and contactless solution for check-in at hotels. These codes can be generated for the contactless form, enabling guests to fill out necessary information on their smartphone screens and automatically submit the form upon completion. Hotels include a QR code linking to the online check-in page in the reservation confirmation or provide a download link for their mobile app that allows guests to check in.

To further enhance the check-in experience, QR codes is placed on the entrance or reception table, allowing guests to quickly scan and access the hotel's check-in webpage. Streamlining the check-in process can significantly improve the guest experience (Hahn 2021). The Royal Cliff Hotel located in Pattaya, Thailand, has implemented a system for express check-in using QR codes. These codes are provided to guests in a printed format at the time of reservation and can be scanned by guests prior to checking in (Hedge 2023).

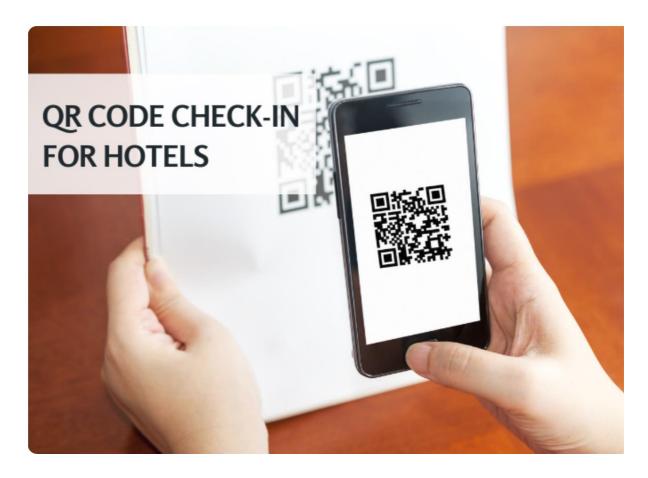


Figure 5: Showing the QR code for check in (GuestTouch 2020).

Figure 6 shows the various benefits and barriers of different types of self-check-in in hotels.

TYPES OF SELF-CHECK-IN	FEATURES	BENEFITS	BARRIERS
Digital Kiosks	Guest registration Room booking Payment option(card or cash) Check-in and Check-out Hotel guide Contact Support Maps	Convenience Quicker services Operates 24/7 Personalised experience Multilingual service	<ul> <li>Lack of human interaction</li> <li>Customer difficulties</li> <li>Risk of malfunction and error</li> <li>Difficult to operate for some guest</li> </ul>
Mobile-check-in	Virtual concierge features Room upgrades Automated workflows Guest survey/review Pre-programmed guest notification Front office Al agent	Convenient Promotes App and website Balance staff workload Enhances guest experience Check-in from anywhere Quicker services Easy to operate with guest familiar with mobile technology	<ul> <li>Internet issues</li> <li>Mobile phones out of battery</li> <li>System update</li> <li>Difficult to operate for guest not familiar with mobile technology</li> </ul>
Digital Smart Key	<ul> <li>Check-in through encrypted</li> <li>Room reservatio</li> <li>Guest communication</li> <li>Digital check-out</li> <li>Remote opening</li> <li>Guest feedback</li> </ul>	Saves time and reduce cost Intelliegent guest services Check-in/Check-out Upselling No more lost keys Seamless guest experience Provide complete contactless experience	<ul> <li>Technical issues</li> <li>Security concerns</li> <li>Expensive Installation of RFID doors</li> <li>Might not be suitable for all type of hotel</li> <li>Only one digital key created for each room limiting sharing.</li> <li>Lack of human interaction</li> </ul>
Facial Recognition	Facial image processing and matching     Payment authorization through facial scan/card     Check-in through Facial Recognition stand	Faster and convenient check-in     Enhanced security and fraud prevention     Access control based on face recognition     Enhanced user experience     Hotel staff can identify guests quickly     No more lost keys or room cards     Data driven service	<ul> <li>Privacy concern</li> <li>Ethical and social implication</li> <li>Creates data vulnerabilities</li> </ul>

Figure 6: Showing the feature, benefits, and barriers of different types of self-check-in Adapted from (Cheong et al. 2017; Xu et al. 2020; Torres 2018).

#### 2.6 Process of self-check-in in hotels

The literature review shows that the stages of self-check-in varies depending on the hotel system and technology used. In general, it is similar to the traditional check-in process as shown in figure 7 (Hollander 2023).

- Bookings/Confirmation of Reservation: The guest will receive an email or a text message from the hotel to confirm their reservation and provide them with check-in instructions.
- Arrival at Hotel: Upon arrival at the hotel, the guest proceeds to the self-check-in kiosk which can be found in the lobby and where its clearly marked.
- Verification of Identity: The guest will verify their identity by providing a valid form of such as a driver's license or passport, to verify their identity.
- Room Selection: After verifying your identity, the guests proceed to select the choice of room.
- Credit Card Information: The guest then provides their credit card information for payment to cover their stay. After confirmation of payment, the system will assign a room number and issue you a key card or a digital key.
- Optional Assistance: If the guest requires any assistance during the check-in process,
   there may be a hotel staff member available to assist.
- Check-in: Once the guest has completed the self-check-in process, they can go to their room and start enjoying their stay.

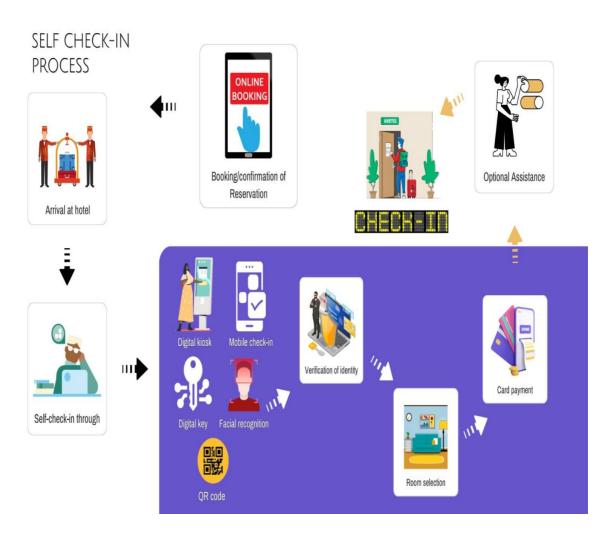


Figure 7: Showing the process of self-check-in in hotel by researcher.

## 2.7 Guest hotel experience with self-check-in

Customer service is a crucial aspect of the hotel industry that can be positively or negatively impacted by technology. Torres et al. ((2014) found that customer satisfaction is a key factor in promoting brand loyalty and repeat business for hotels. However, self-service check-in/check-out kiosks, which have become more popular, over the past five years, to reduce costs and increase the efficiency for hotels (Mulcahy 2021), can also reduce the human interaction and personalization that some guest value and expect from their hotel experience (Xiang et al. 2015; Lee and Oh 2021).

Hilton hotels introduced its first self-service check-in-kiosks in 1997, but the implementation was plagued by several problems, which ultimately led to friction points for many visitors (Griffy-Brown et al. 2008). Liu and Piccolli (2010), found out that customers willingness to revisit decreased when they had difficulties using a check-in kiosk. However, in 2015, Hilton introduced an application that enables guests to access various features and amenities with their phones, which proved to be highly convenient for guests who resided on floors without

housekeeping service (Brown 2021). The use of self-service technology in hotels changes the dynamics of the service experience, as it alters the level of the connection between consumers and service providers since it places customers in the new role of service controllers and consequently, value co-creators (Kelly and Lawlor 2021). Kim et al. (2023) found that some customers are uncertain of how to use the kiosk properly and feel pressured to complete more work than they can handle if they use it. The study suggested that it is crucial for a hotel chain to make its kiosk user-friendly and beneficial to lessen the tension that guests may experience due to this technology. Hong and Slevitch (2018) found that customers are happy with the kiosk service and are prepared to use it again based on its simplicity of use and speed of service delivery.

The hotel guest experience is diverse and encompasses both cognitive and emotional reactions to hotel services during a stay at a hotel (Walls et al. 2011). The emergence of smart hospitality highlights the concept of convergence of hospitality experience and self-check-in as one of the technologies used to implement smart hospitality. Using this type of technology, offer holistic smart experiences by empowering guests as active co-creators (Ruiz-Molina et al. 2018; Neuhofer et al. 2015). Due to higher customer engagement, self-check-in may have an impact on the visitor experience by creating or destroying value for them (Neuhofer 2016; Hilton et al. 2013). Technology offers a variety of options to hoteliers to improve, modify, and collectively build their guest experiences by increasing real-time service co-creation and unexpected levels of engagement and interaction (Buhalis and Foerste 2015). The capacity to interact in real time across several platforms has fuelled consumer desire for quick gratification. Consumers now actively engage in the process of co-creating their own experiences rather than just receiving the service. As a result, companies are given insightful information that they may use to produce highly customised services that instantly satisfy customer's expectations (Neuhofer et al. 2013; Sashi 2012; Buhalis and Sinarta 2019).

## 2.8 Impact of Covid-19 on self-service technology in hotel industry.

An example of a significant unforeseen disruptive shift in environment is the Covid-19 pandemic. Businesses are compelled to use their diverse capacities to adapt their resource configuration in response to environmental crisis (Colombo et al. 2020). Regarding health and safety, the hospitality sector is no stranger, and technology has long been used to monitor and control a variety of hotel operations, from online reservations to high-speed Wi-Fi. The

spread of the virus raised a serious concern about service safety and changed the way that service operations were conducted to promote separability and reduce contact (Berry et al. 2020). The hotel business has been significantly impacted by COVID-19, which has resulted in considerable modifications to the operations and service offered to meet a new set of requirements. The most significant new technological developments during the outbreak for hotel operations are contactless technologies. This resulted in fewer front desk check-in and lesser in person interaction as customer engagement were digital. Mobile ordering, guest self-service, staff networking, contactless payments, and many more innovative technology help hotel operators adjust to the new reality of the COVID standards and expectations (Shin and Kang 2020). With this, hotel chains of all sizes are being forced to change their operating and investment plans by streamlining operations, providing personnel with more training, reviewing internal expenses, updating real estate, altering the cancellation policy, adjusting prices, and conducting audits of the current technology infrastructure to reduce declining occupancy and temporary closures (Bartnagar 2020).

With crisis management been a major topic in the hotel sector during the coronavirus outbreak and hotels resulting to techniques such as social distance, contactless guest service, and maintenance customers are guaranteed that their stay will be safe and healthy (Morosan and DeFranco 2021). Part of the service offered are check-in and check-out services, digital keys for room entry, and the ability to purchase room services using a smartphone, mobile device, or table to reduce and manage the spread of the virus (Abd El-Kafy et al. 2022; Hao et al. 2020; Min 2020). Most hotels observe stricter cleaning and hygiene standards to maintain a healthy atmosphere, and they employ a variety of contactless services to maintain an intact environment as a means of navigating the path to recovery (Kim and Han 2022). Branded hoteliers, such as Marriot, Hilton, Hyatt said that touch-free services are the primary priority, and they have created new service manuals to provide contactless service to limit employee interaction with hotel guest (Shin and Kang 2020). Marriott International announced their dedication to offering dependable, hygienic, and contactless services (Marriot 2020). Pillai et al. (2021) study explained the use of hospitality 5.0 through contactless and mobile service to improve safety and hygiene by identifying and reducing various touch points in customer journey to create a technological shield that facilitates social distancing. Through the mobile and contactless technology, guest can connect to multiple devices in real time to utilize other services in the hotel without human interaction (Buhalis and Leung 2018). The pandemic has compelled most hoteliers to re-evaluate their core readiness, company survival, day-to-day operations, HR policies, and technological investment plans (Shin and Kang 2020).

Due to the covid-19's outbreak, there have been an increase in the awareness of infectious diseases, visitors now consider safety and security factors while making future hotel reservations. The study of Atadil and Lu (2021) on perception of safe hotel in the era of covid analysed dimensions of safe hotel for future selection of hotels by customers and the image of hotel during the pandemic. The study confirms that the availability of self-service technology had a significant impact on guest selection process due to its beneficial effect on hotel service to be infectious-safe and without jeopardising service quality. The study also correlates with Shin and Kang (2020) research that hotel technological innovation can be used as a risk-reduction strategy to influence consumer decision making. The studies prove that hotels can use innovative technology to offer contactless service to draw in more visitors and lower their perception of health concerns.

Rahimizhian and Irani (2020) study revealed that the outbreak Covid-19 presented a significant challenge in retaining visitors in hospitality and tourism with travellers experiencing anxiety and uncertainties about health risk. Consumer innovativeness and perception towards contactless technology had a strong effect on the consumer shift pattern thereby resulting in higher revisit intentions among visitors, as consumers are ready, willing, and prepared to receive the service which is compatible with the findings of Hadood and Irani (2020) that the innovativeness of the tourist industry often increases visitors' intention to return. The economic impact of COVID-19 on self-service technology in hotels has been significant. The pandemic has led to a decline in travel and tourism, hotels had to temporarily close or operate at reduced capacity, leading to a significant decrease in revenue thereby limiting hoteliers' financial resources for SST applications despite its unique acceptance (Liu and Yang 2021). This finding agrees with previous research of Liu and Hung (2021) which suggests that hospitality firms may not be able to implement SST due to limited financial capacity let alone during a period of declining performance. In the post-COVID era, technological innovation is now the driving force behind the improvements required to maintain and promote health and safety (Shin and Kang 2020).

### 2.9 Conclusion

Based on the literature review, it can be concluded that self-check-in in hotels is a timely and relevant topic that has become increasingly important in the hotel industry due to technological advancements and changing consumer preferences. The emergence of smartness and self-service technology has transformed the way hotels operate, and self-check-in has become a popular option for guests who prefer a quick and efficient check-in process. The literature review provides insights into the types of self-check-in available, including kiosks, mobile apps, and online portals. It also highlights the process of self-check-in and its impact on guest experience, including increased convenience and efficiency, as well as potential challenges such as security concerns and technical glitches. Furthermore, the review identifies the impact of the COVID-19 pandemic on self-check-in, as many hotels have implemented contactless check-in processes to ensure the safety of guests and staff. The topic is highly relevant in the current hospitality landscape, and further research could help to identify its adoption in tourist city like Bournemouth, best practices and opportunities and challenges for innovation in this area.

#### **CHAPTER THREE**

#### **RESEARCH METHODOLOGY**

### 3.1 Research Philosophy

The interpretivism approach was used in this research to help understand the perspective of hotelier's decision on the use of self-check-in and to understand the experience of guest and evaluate the impact of this service on hotel operations.

## 3.2 Research Approach

The research uses an inductive approach to collect data from hotel managers and hotel customer in Bournemouth in order to produce generalizations. An inductive approach was also selected as it begins with observations or sensory experiences and then a general conclusion is developed (Altinay et al. 2015). The inductive approach is more suitable for this research because it aligns with the research questions and aims, whereas a deductive approach involves testing assumptions and formulating hypotheses (Bryman and Bell 2015).

### 3.3 Qualitative Research Method

Qualitative research will be employed in this study to explore customer and hotelier experience with self-check-in usage which is justified by the requirement to generate an understanding of customer perspectives by revealing their nature of experience and expectations (Kvale and Brinkmann 2015). This research method focuses on analysing experience, behaviours, and relationship rather than using statistic or processing of numeric data. This method aims to understand the nature and complexity of the questions being considered from individual beliefs and experience.

#### 3.3.1 Justification for using qualitative research method.

The rationale for using qualitative data is that it offers important insights, reveal new research fields, or help clarify human behaviour. It provides answers to research questions like "what," "how," "when," and "where" by focusing on explaining and uncovering experiences and behaviours (Hennink et al. 2011). Using this method also gives interviewer critical information by asking questions on the set of topics to be discussed by the participants. This research approach is beneficial according to Baskerville et al. (2010) to evaluate and analyse technology and business issues in their natural environment for better comprehension. This method is more appropriate as it gives the researcher opportunity to identify why hoteliers will adopt this technological innovation than utilizing conventional check-in procedure.

### 3.4 Research Design

A cross-sectional design method was employed in this research to analyse the pros and cons of adopting self-check-in technology in hotels, determine the challenges of adopting this technology and examine its impact on guest satisfaction and hotel operations. According to Cummings (2018), cross-sectional approach is the best technique to find patterns, relationships, and incidence rates of a research subject within a population. This data can be utilized to describe the target audience to develop a new set of research inquiries and ideas that are more appropriate for verifying cause-and-effect interactions. This method of research design is cost effective as all factors is observed at once, and it is easy to conduct compared to the longitudinal and experimental design which makes it suitable for the purpose of this research.

### 3.5 Data Collection Method

The research emphasizes the importance of using an appropriate data collection method in a systematic and objective way. For this study, primary data collection was used through face-to-face interviews and semi-structured questionnaires with 7 hotel managers and 13 hotel users to obtain qualitative data. The researcher chose this approach to gather data directly from people, achieve a high response rate, and save costs. The study focused on both hoteliers and customers as key informants, and in-depth interviews were conducted to interact with participants and gather information. The semi-structured interview method provided a guide for questions while also allowing participants to provide detailed responses, making it a suitable method for analysis. (Bryman and Bell 2015; Braun and Clarke 2013).

### 3.5.1 Interview themes and questions

The interview theme to be used are adoption, benefits, operational efficiency, operational challenges, user experience, security and privacy, staffing, future developments. A set of questions was used as guide to allow free-flow conversation to motivate participants to fully express their opinions. The questions are focusing on the hotel manager on benefits, challenges, functionality, of using self-check-in in terms of operations, customer satisfaction and future best practice. This is in line with the aim and objective of the research and also provide answers to the research questions.

### 3.5.3 Data collection and sampling

The study used convenience and snowball sampling methods to access suitable participants. The researcher approached various hotel managers via email and visits, but few responded. A

participant information sheet and agreement form were provided before conducting the interviews. Snowball sampling was also used to access participants through referrals, with efforts to minimize bias. These sampling methods were chosen for their cost-effectiveness, time efficiency, and ability to recruit difficult-to-identify participants. Due to a low turnout of hotel managers, hotel customers were interviewed to gain insight into their perspective.

#### 3.5.4 Ethics issues

A researcher is required to address ethical concerns (appendix 1) that are crucial and pertinent to the topic (Costley et al. 2010). Doorly et al. (2017) stated that it is important for researchers to think about ways to protect the participants' anonymity and privacy during data collection. In this research, all participants were given participant information and agreement form to read and fill if they are willing to participate which is in appendix 5 and 6. All participants were briefed before the interview, and they were informed of their right to leave at any point in time.

## 3.6 Data Analysis

The data collected for this research was analysed using thematic analysis, which was selected as the best technique to identify the major themes that emerged from the gathered data set. Thematic analysis is a suitable and effective technique to understand groups of experiences, ideas, and behaviours during data collection, according to Braun and Clarke (2013). This research employs thematic analysis due to its straightforwardness in understanding its use since it does not require the use of theory to inform analysis (Nowell et al. 2017). Thematic analysis enables researchers to simplify, highlight, and evaluate a variety of data due to its effectiveness. However, the freedom that this analysis provides is also perceived as a disadvantage because it allows participants to believe that the process is not thorough (Clark and Braun 2013).

### 3.6.1 Pilot study

A pilot study (Appendix 7) was conducted to identify any potential limitations in the design and process of the interview that could affect its validity and reliability. The results of the pilot study were used to refine the questions and procedures for the main interviews. By conducting a pilot study, it was ensured that the data collected addressed the aims and objectives of the research and provided information on the duration of the interview and the comprehension level of the interviewees.

## 3.6.2 Pilot study findings

The pilot study findings shows that the study design aligns with the research question and objectives, however some of the interview questions needed more clarification and having a different questionnaire for hotels using self-check-in and hotels not using self-check-in which has been adjusted for the main interview. The pilot study revealed the feasibility and effectiveness of the sample collection method which is face-to face interview. With this finding, the researcher was able to identify areas of improvement in the study design and procedures by considering a video face to face interview or questionnaire to reach a larger participant and for convenience. The data collected is however reliable.

#### **CHAPTER FOUR**

#### **FINDINGS AND DISCUSSION**

#### 4.1 Introduction

The aim of this section is to critically examine and analyse the perspectives of both hotel managers and customers on the topic of self-check-in in hotels. The aim of this chapter was to discuss the key findings from the 20 semi-structured interviews conducted, which explored the benefits and challenges of self-check-in in Bournemouth hotels comprehensively, by complementing the feedback provided by the participants from three different questionnaires found in appendix 8 for three categories of participants and participant transcript is found in appendix 2, 3, and 4. The research results are organised thematically, aligned with the aims and objectives of the research. Interview questions were used to generate themes, and different viewpoints of the interviewees from hotel managers and customers were highlighted. Their responses were compared with the facts discussed in the literature review to provide a comprehensive analysis.

- 1. Self-check-in benefits
- 2. Self-check-in challenges
- 3. Types of self-check-in
- 4. Value creation and disruption
- 5. Self-check-in future developments
- 6. Comparison between hotels that adopt the use of self-check-in and hotels that do not use self-check-in.
- 7. Factors that influence hotels in Bournemouth not using self-check-in.

The results were obtained through 20 extensive semi-structured interviews that involved 7 hotel managers and 13 hotel customers. Table 1 displays the coding of participants, which includes a simple demographic overview.

Table 1: Showing participants coding.

PARTICIPANT	CODING	GENDER	AGE	OCCUPATION
Hotel Manager	P1	Female	30-39	Deputy Manager
Hotel Manager	P2	Female	30-39	Operations Manager
Hotel Manager	Р3	Female	20-29	Front Office Manager
Hotel Manager	P4	Male	30-39	Front Office Manager
Hotel Manager	P5	Male	40-49	Operations Manager
Hotel Customer	P6	Female	30-39	Banker
Hotel Customer	P7	Female	20-29	Receptionist
Hotel Manager	P8	Male	40-49	Operations Manager
Hotel Customer	P9	Female	30-39	Front Desk Officer
Hotel Customer	P10	Female	30-39	Nurse
Hotel Customer	P11	Female	20-29	Student
Hotel Customer	P12	Male	30-39	Nurse
Hotel Customer	P13	Male	30-39	Data Analyst
Hotel Manager	P14	Male	30-39	Operations Director
Hotel Customer	P15	Male	30-39	HR
Hotel Customer	P16	Male	40-49	IT
Hotel Customer	P17	Female	20-29	Student
Hotel Customer	P18	Male	30-39	Front Desk Manager
Hotel Customer	P19	Male	20-29	Student
Hotel Customer	P20	Female	20-29	Student

# Objective I: To critically analyse the pros and cons of adopting self-service check-in technology in hotels.

# 4.2 Theme 1: Self-check-in benefits

The data collected from managers of hotels using self-check-in systems indicate that the system provides an easy and convenient service to guests, increasing efficiency and customer satisfaction. This is in line with the study conducted by Giousmpaseglou and Hua (2020), which found that SSTs enhance hotel productivity, decrease the workload stress of hotel staff during

peak check-in hours, and result in a smoother guest experience by offering a seamless check-in process at the hotel.

I will prefer to use self-check-in over the traditional method as it permits me to check in and out at any time and pace and also with less contacts with any individual [P13].

As the process of checking in at the front desk can be stressful, self-check-in has allowed me to bypass a long queue with little interaction with staff [P10].

It improves the guest experience, as guest don't have to queue or wait during check-in, its faster and more convenient, and it reduces the cost of training staff [P8].

Hotel users' participants in the study expressed preference for using self-check-in over traditional methods because it permits them to check in and out at any time and pace and with less contact with staff. Self-check-in also allows guests to bypass long queues, reducing stress during check-in, and improving the overall guest experience.

Well, the advantages of self-check in, it saves time and saves me the trouble of explaining myself to anyone and queuing before checking in, as I know where I am going to, I know the room type I want, and the size and I am able to pick the room I want. With self-check-in I am opportune to pick the room according to my taste and desire. It saves me the stress and worry of checking in [P6].

I will prefer self-check-in as it saves time in cases where there are a lot of people trying to check-in at the same time [P13].

The results of Gupta and Sharma (2021) study support this idea, stating that self-service kiosks are advantageous in terms of convenience and efficiency. Additionally, self-check-in provides flexibility for front office staff to focus on other tasks while guests check themselves in. Kim et al. (2023) also revealed that self-service kiosks offer numerous advantages for both guests and employees. These kiosks are timesaving for guests who are fatigued or have time constraints. Each kiosk provides essential information and facilitates a quick and secure check-in process.

With self-check-in, front office personnel have flexibility to perform other tasks as guest can check themselves in whenever the front desk receptionist is not available [P3].

Self-check-in has allowed me check-in at any time not worrying about been attended to by a staff member [P10].

The system saves time for guests, allowing them to check-in at any time, without waiting in queues, and focus on other activities, including upselling and exploring hotel facilities.

Majority of our client prefer to use the online check-in as its, quick, easy and saves time to check-in at any period during check-in as they do not have to come in and start filling out forms while also giving them a competitive advantage over other hotels [P2].

It's much faster, and no need to queue to check-in [P3].

It also allows hotels to save time on paperwork, which can be used to provide personalized experiences and improve guest satisfaction. Self-check-in reduces physical contact, which has become an advantage during the pandemic when people were wary of being close to others.

The benefits are essentially time saving and sustainability. There can be quite a lot to do when checking in, which can be exhausting, if one can take away the formalities and the boring stuff, you can focus on other things and upsells to give monetary benefit. Receptionist can focus on upsell, extra services, and talking about other facilities rather than having to focus on just getting details [P14].

It is fast, easy, and convenient and reduce contact with people which was a great advantage during the pandemic as people were scared to be closer to their fellow human[P16].

# 4.3 Theme 2: Self-check-in Challenges

Although self-check-in provides a lot of benefits, there are challenges associated with it which was discussed by both hotel managers and hotel customers.

#### 4.3.1 Technical issues

P3 claimed that self-check-in systems have technical issues as they do freeze preventing guests from using it. P1 affirms this by saying 'due to technical challenges arising from check-in system, check-in is a bit slower'. P5 also said the machine breaks down a lot, with human being the problem can be solved but with computer it disrupts the whole experience of the quest using it.

The disadvantage of using self-check-in from my experience is technical difficulties which, since the check-in was solely dependent on technology which is prone to fail at times [P10].

This aligns with the findings of Giousmpaseglou and Hua (2020) that technical difficulties pose a significant challenge for hoteliers implementing self-service systems. These technical issues not only impact the hotel managers but also result in a negative guest experience.

#### 4.3.2 Lack of human interaction

Another challenge that came out from the interview was lack of human interaction as P1 said that it is more personal for guest who like to interact with people. P4 also agreed with this that 'most guest prefer to check-in over the desk as they prefer to communicate and interact with staff to give them quick orientation on their stay and about the hotel which he believes enhance the guest experience'.

P5 emphasised that personal interaction and personal service is important and must be available for guest, if customer have additional needs or wants, they can ask the staff but, on a machine, it will not be possible as the guest might get confused and lost. This statement agrees with P6 and P14 who disclosed that.

Self-check-in robs me of the opportunity to have interpersonal relationship with hotel staff. In my opinion I think when guests relate with staff, you get hands-on/additional services and information about various services offered by the hotel, with self-service, you don't have privy information to other offerings of the hotel with your room on the system although some are displayed on the system but there are some you will not get the full details and understanding until you speak to a staff member [P6].

As an independent hotel, we still need to have the touch point with people, which is important to create and maintain relationship with our guests. So, we don't want to take away the touch point which also allows the receptionist to provide other information about the hotel facilities and likewise upsell, we are in the business of people and the face-to-face interaction is very important [P14].

This assertion concurs with the study conducted by Castro et al. (2010), which states that self-service cannot be considered as a complete service offering. The human touch is absent in such situations, and customers may miss the personalized interaction that a warm welcome or farewell from a human staff member provides, resulting in a less satisfactory experience.

Zeng et al. (2020) study also confirmed that the combination of advanced technology (high-tech) along with personalized human interaction (high touch) is seen as a successful approach to meet the requirements of guests and deliver the desired experience.

#### 4.3.3 Complexity

Complexity is another challenged mentioned by the participant. The process of self-check-in can be confusing for some people, especially those who are not familiar with technology which can result in longer wait times and increased frustration for customers. Liu and Hung (2020) study, utilizing self-service technology necessitates proficiency; otherwise, it may take up hotel guests' time, decrease effectiveness, and result in unpleasant customer experiences and service mishaps.

At the moment, we do not have self-check-in system, to consider implementing the process, we have to consider a lot of scenarios as we have only 76 room in the building with different room types, for guest to check in by themselves means we have to display 14 different categories of rooms or options available which can confuse the guests as they might not know the type of room that suits them, for example, family of 4 may assume a double room will be efficient for their stay whereas it is not, as we have a different package for families [P4].

The challenge is the confusion that people tend to face when using it due to unfamiliarity with the technology [P15].

P8 explained that one of the challenges the hotel is facing with self-check-in is the capability of the system to take signature online which limits the process to be fully automated, while type of clientele and age of clientele is another challenge as some of their client do not have email which is consistent with Erdem et al. (2019) research, which suggests that age-related variances exist among different types of hotel guests regarding their attitudes towards hotel technologies. It was found that younger guests tend to be more enthusiastic about utilizing guestroom technologies. However, this contradicts Kim (2016) findings, which indicated that age did not significantly impact the relationship between four predictors (perceived usefulness, ease-of-use, credibility, and subjective norm) and the intention to use hotel tablet apps.

#### 4.3.4 Tech-phobia

This is another challenge mentioned during interview with participant, which is a fear or reluctance towards technology from their clients. The participant explained that their clients tend to be older and less comfortable with using technology, which results in them avoiding self-service options like automated check-in. Instead, these clients prefer the traditional face-to-face check-in process which agrees with P4.

Another challenge we face is a tech-phobia, most of our clients tends to be older, and less savvy with technology like this, so they shy away from it, as they will rather do face to face check-in [P14].

This is similar to the findings of Kim et al. (2023), the use of technology can lead to stress when users lack the required competence to operate it effectively. In the hotel context, guests may encounter confusion and uncertainty due to changes in the check-in/out process and the instructions displayed on kiosk screens. Tasks like scanning identification documents, making changes, and handling error messages can further contribute to this confusion. Ultimately, the introduction of check-in/out kiosks can result in a negative perception caused by the ambiguity surrounding roles and responsibilities.

#### Objective II: To evaluate the different self-check-in options available to hotels.

## 4.4 Theme 3: Types of Self-check-in

Although self-check-in has been in existence for a while, with the COVID-19 pandemic, certain hotels are currently transitioning from a focus on physical interactions to an emphasis on technological advancements (Zeng 2020). Likewise, hotels are employing technology to minimize health hazards and ensure the well-being of their guests (Shin and Kang 2020).

#### 4.4.1 Online check-in

According to P2, the self-check-in used in their hotel is online check-in which came into existence during covid to facilitate check-in and ensure social distancing among guests and staff members. This method of check-in involves guests going to the hotel's website to fill a form that will provide all the information and data needed by the hotel which include personal data, date of arrival, date of departure, type of room and services needed and number of guests coming. This information assists the hotel to prepare for the arrival of the guests and on the day of arrival and check in, guest will only need to come and get the key to the room. This method helps the hotel to store guests' data and know their preferences against another booking. The only disadvantage of this method is that it is not fully automated as some of the

information from guest is not automatically saved on the system and staff will have to input guest data manually on the system.

This response was similar to P8 and P14. P8 explained that online check-in, which was started during covid, works by sending a form to the guest via email seven days before arrival to fill in and it sent back to us to us. The process of checking in involves sending an email to the guest which has a link for the guest and the guest then login to the website with the reference number, after filing the form, they confirm and accept terms and condition, all this details in then uploaded online at the front desk. They just need to give their signature on arrival which is the challenge and limitation this check in has, in getting guest signature on the online form, therefore, on arrival, guests sign in and then check-in. But all the details such as breakfast, time of arrival, car registration vehicle number have all been taken.

Online check-in which is done by sending email to the guests 48 hours before arrival, and they can fill the form online which include providing their personal details, vehicle number, make payment, and on arrival, they only need to pick up their room key [P14].

#### 4.4.2 Self-check-in kiosk

It is the use of machine to check-in without the involvement of staff [P3]. P3 explained how self-check-in kiosk also called (speedy check-in) works for guests. Guests comes in during check-in time, go to the kiosk and enter the name the reservation was made for and reservation number which can be found on the booking confirmation email, guests can also select additional options for their stay such as breakfast and other services, pay and print out receipt. For international guests, they will need to enter their passport number during the check-in process. After inputting the required information, the machine then issues the room key card. For new users, a video tutorial on how to use the self-check-in is installed on the system to give guest clear instruction on how to use the self-check-in.

This self-check-in is promoted during booking through the website and also through email. Through the use of self-check-in we are able to keep up with other brands by keeping up with technology and other AI applications. Emails are sent to guest few days before arrival to provide awareness for the self-check-in. the only issue we have with this system is that it freezes [P3].

This is similar to Lukanova and Ilieva (2019) research that self-service kiosk present room options based on guest preferences, including upgrades. Guests can review hotel policies,

provide information, and verify their identity using fingerprint scans. After completing checkin, the kiosks issue guest key cards.

## 4.4.3 Mobile app

The response from hotel user participant supports the previous study of Kim et al. (2023) that mobile app helps to facilitate touch-free check-in and check-out processes. With the use of a mobile app, users can easily search for and book hotel rooms from anywhere at any time. The app also allows for personalized room selection based on individual preferences, which can improve the overall hotel experience for guests. Additionally, the ability to pay for the reservation through the app eliminates the need for physical payment transactions, making the check-in process faster and more seamless.

Process of check-in in with mobile app; what I do is I go online and look for hotel of my desire and book for reservation and then I am referred to options of selecting the room type, which is displayed on the app, I get to choose my desired room based on the colour which is very important for me as it calms my nerves, the bed size. Select the room and pay, so arrival, I just give my reservation details and get my room key and check in [P6].

#### Objective III: To access the value co-creation/disruption in the adoption of this service.

#### 4.5 Theme 4: Value Created and Destroyed in Service Delivery.

Customers co-create the service by integrating with the technology offerings and help themselves out which may or may not be perceived feasible for the service industry as the very crux of service is not applicable in this condition.

#### 4.5.1 Faster check-in times

Participants claimed that because this approach is quicker and doesn't require complicated steps, the user will save time. Additionally, this procedure offers chances for updates and advertising services, which may be advantageous for the consumer. Participants express the privacy the service offered, indicating that they can finish the check-in process without unwelcome interruptions or distractions. Additionally, users praise the convenience of the service, noting that they may check in at any moment, suggesting that it might be accessible around-the-clock.

It is faster and does not require long processes so, it saves time. There are also opportunities to upgrade and get promotional services [P11].

Value created for me is privacy, convenience to check-in at any time [P12].

Liu and Hung (2020) study support the idea that self-service technologies (SSTs) commonly provide enhanced novelty, safety, privacy, convenience, control, freedom, and a feeling of involvement.

#### 4.5.2 Personalization

Some participants indicated that self-check-in can simplify and lighten the stress of the check-in process for guests. This implies that self-check-in can facilitate streamlining the check-in procedure and minimise any potential delays or hassles that visitors may encounter. These participants also make notice of the personalised services that self-check-in may provide, which can improve the overall visitor experience by addressing the unique needs and preferences of each individual guest. Which aligns with Ruiz-Molina et al. (2018) study that the advancements ICT within the tourism sector have resulted in a shift in the role of tourists. Tourists now have the opportunity to actively collaborate or co-create their own experiences. Through technological platforms, tourists can now engage in activities such as creating and customizing their tourism experiences according to their preferences, and subsequently evaluating and assessing their experiences.

It creates value by allowing guests to have control of their service experience right from the point of check-in [P17].

Self-check-in makes experience more seamless and less of a burden to guests while it also offers personalized services which improves the guest experience [P11].

Buhalis and Sinarta (2019) research also supported this that the role of consumers has evolved from solely consuming services to actively participating in the co-creation process of their own experiences. The process of value creation is transforming from a product-centric to consumer-centric approach. This aims to produce personalised experience, where "informed, networked, empowered consumers increasingly co-creating value" with brands. Personalization is created by providing clear instructions and guidance on how to use the self-check-in system, ensuring that it is user-friendly and accessible, offering support and assistance as needed.

Factors that influence my decision to use self-check-in is convenience which brings easy and seamless experience from the point of check-in to the point of check-out, another factor that interests me is the opportunity to familiarise myself with digitalization thereby boosting my knowledge about different technological which are stress-free [P10].

Personalization can be considered a form of value creation as it provides a sense of accomplishment for the user. This finding is consistent with Kelly and Lawlor (2021) study, which identified accomplishment experience as a value-creating experience that reflects the sense of achievement felt by users when they can derive greater value from a service by using an SST as opposed to an alternative mode of service delivery. This is also in line with the findings of Neuhofer et al. (2013) and Buhalis and Sinarta (2019) that this conduct presents useful information for companies to design and enhance customized services that cater to individual requirements in real-time, resulting in increased value for customers.

P3 and P8 shared that their hotel employs the use of self-check-in as a means of enhancing the user experience by promoting and delivering it in a way that ensures personalization.

The website provides information about it, and also through email few days to travel to provide awareness about it [P3]. While P8 responded by email and phone call to the customers.

Buhalis and Sinarta (2019) study also found that the co-creation process is supported by social media, digital channels, and mobile applications, as they allow consumers to receive immediate responses from brands, thus satisfying their desire for instant gratification.

#### 4.5.3 Sustainability

P2 and P14 revealed that the utilization of online check-in allows the hotel to operate in a more sustainable manner since it reduces the amount of paperwork required.

The use of online check-in helps us to be more sustainable as the use of paperwork reduce[P2].

Sustainability covers social, economic, and environmental factors, and it can benefit businesses in various ways, resulting in reduced waste and energy usage, increased operational efficiency, and improved customer satisfaction. These benefits can contribute to revenue growth, cost reduction, and other advantages that enhance the overall value of the

enterprise, as stated by Mckinsey (2021). Based on the participants' responses, sustainability was identified as a value-creating aspect, as the implementation of online check-in has led to a reduction in paperwork since most of the information is stored in the hotel's database. This has eliminated the need for guests to fill out physical forms during the check-in process.

# 4.5.4 Competitive advantage

The participant's response reveals that technology is a significant aspect in the hotel business and can have an impact on a hotel's competitive position. It also says that market diversity is vital for a hotel's success and that a forward-thinking strategy is required to achieve this.

Self-check-in makes the hotel more competitive by keeping up with other brands with technology and other AI applications[P3].

Everything we have been doing in the last 5 years is about modernising the business, bringing into a new era, even though we have a lot of older clienteles, to a certain extent this older clients are moving forward and wanting more modern services, and attitudes and taste are changing and business has to move with this times, and there comes a point where you have to be seen with forward thinking to attract a new market to diversify the market. For us it's about diversifying the market [P14].

Shiwen et al. (2022) found that the adoption of self-service technology in hotel brands can have a positive impact on the perception of business travellers, enabling hotels to stand out from their rivals and create a memorable experience for their guests. This, in turn, can be considered a value-creating factor for hotels.

#### 4.6 Value Disruption

Co-destruction refers to a breakdown or failure in the process of co-creation, leading to dissatisfaction and frustration, whether due to human error or technical malfunctions (Hsu et al. 2021; Galdolage 2021). While the use of self-check-in has proven to be efficient and effective, there are potential challenges that can lead to negative service experiences resulting in value disruption.

# 4.6.1 Technological failure

While self-check-in can offer convenience and personalization, it may also come with technical challenges that could deter some guests. When technological failure occurs, it can lead to value destruction and have a negative impact on the customer experience. This suggests that

technological failures can lead to value disruption in self-service as they can results in users perceiving a loss and dissatisfaction with service (Buhalis et al. 2019).

I will prefer to check-in through the front desk with a member of staff because technical errors and glitches encountered during check-in like frozen screen, hardware malfunction, payment issues, invalid identification has reduced my intention to use self-check-in [9].

# 4.6.2 Lack of personal engagement

According to the responses, before deploying self-check-in technology, hotels should consider the demands and preferences of their visitors. While self-check-in may be quick and easy for certain visitors, it might not be appropriate for others. Hotels should strike a balance between providing self-service choices and continuing to interact with visitors on a personal level. This might increase client retention and happiness, which would ultimately improve the whole guest experience. According to Liu et al. (2020), the hospitality industry can benefit from the use of SSTs by enhancing guest experiences with efficiency and personalization. However, the study emphasizes that human interaction is still a crucial aspect of the industry. The authors suggest that technology should be used to complement and support, rather than replace, human interactions in the hospitality industry. Similarly, research conducted by Liu and Hung (2021) revealed that although guests had favourable views towards self-service kiosks in hotels, they still favoured interacting with hotel employees for some services like obtaining suggestions for nearby sights and dining places.

In this world where we need so much connectivity with people to prosper our business, interpersonal relationship is important. As a guest I will say it disrupts me from interacting with people [P6].

Self-check-in can potentially disrupt value for travellers who are not tech-savvy or prefer human interaction [P9].

I will say self-check-in has disrupt value to me as a guest due to its reduction or complete evacuation of the sense of hospitality, which is the act of being welcomed by a member of staff at the reception brings more value. It has increased the inadequacy of guest who are new to an environment to interact with people [P10].

This relates to Kelly and Lawlor (2021) the perception of discrimination resulting from a customer's lack of experience or unwillingness to use self-service technologies can have a

negative impact on value, as it may result in the customer being unable to access the time-saving benefits and lower prices that SSTs offer. Similarly, according to Giousmpaseglou and Hua (2020) study, novice or inexperienced users of SSTs may encounter difficulties in using the technology without proper guidance from staff, leading to inaccurate information and undesirable outcomes. This scenario can cause anxiety in hotel guests, resulting in frustration and a reluctance to use such technology in the future.

#### 4.6.3 Security concerns

Participants' responses indicate that the usage of self-check-in may present a security risk if the procedure is not properly controlled or monitored, as this could result in visitors checking in under fraudulent names. The reputation of the hotel as well as the safety and well-being of the visitors may be at danger because of this. Other participants (P6 and P4), on the other hand, have indicated their confidence in the security precautions taken by respectable hotels to secure visitors' personal data and have not been swayed by security worries in their choice to implement self-check-in. However, participant P14 contends that in order to assure security and reduce hazards like prostitution or human trafficking, face-to-face interaction is required during check-in. These viewpoints have the connotation that, even while self-check-in can be quick and easy, precautions must be taken to assure guests' security and safety, and some visitors may still prefer in-person interaction with hotel workers throughout the check-in process.

Self-check-in security concerns could cause hotels to lose value if they are not appropriately addressed. When visitors don't feel safe while they're there, they're more likely to have a bad time, which can lower consumer satisfaction and loyalty. A decline in word-of-mouth recommendations for the hotel may also occur as a result of customers' decreased desire to do so.

Self-check-in can create security concern if the process is not properly regulated or monitored which is a risk to guests that someone may check-in with a false identity [P9].

P6 disagree with this by stating that 'most of the times, the terms and condition of use of self-check-in is displayed on the screen, and I believe reputable hotels should have software that protects personal data of guests, so I am confident that hotels know this risk and would have the right protection of clients data'.

P4 also disagreed that breach in security influenced their decision not to adopt self-check in.

There is a risk of security with no face to face check in, if you do not see your guest check-in, there is a level of risk involved in terms of security, people can sneak extra persons in to the building, drugs, human trafficking, prostitution, if you never see your guests check -in, you have no idea who is in your building, that for me carries a high level of risk. I will never want to allow guest check in without having face to face interaction [P14].

## 4.6.4 Loss of job

According to participant responds, the use of self-check-in technology in hotels may result in the loss of hotel workers, which could have a detrimental effect on the number of employment opportunities in the hospitality sector. This could be a problem for both the people who might lose their jobs and the community at large, which might suffer economic repercussions. Despite the fact that a participant believes that self-check-in can lower staffing requirements and boost productivity, others disagree self-check-in has no influence on the number of staff used in front office. Displacement of job can be seen as value disruption because the adoption of SSTs also has a big impact on hotels' employees. Giousmpaseglou and Hua (2020) argue that hotels strive to keep operating costs low and staffing expenses represent a significant portion of overhead costs. Therefore, replacing human workers with SSTs can help control these costs. However, this adoption of SSTs can have negative effects on the labour market.

The displacement of staffs as machines takes over people's job is a concern for less job availability [P13].

The use of self-check-in may lead to job displacement for hotel workers which will have a negative impact in the community [P7].

To a certain extent, the self-check-in has reduced our staffing needs, on a really busy day in summer, we will have four staff at the reception but with self-check-in, we use 3 for check-in [P14].

This response is however contrary to P2 and P8 who claimed that the use of online check-in did not reduce their front desk staff as they maintain the use of designated staff at the front office.

## Objective IV: To explore the potential future of self-check-in in hotels.

# 4.7 Theme 5: Future Development of Self-check-in

The responses point to various viewpoints on the potential for self-check-in technologies in the hospitality sector. While technology is evolving, P3 thinks that some customers, particularly the older generation, may still prefer conventional check-in. According to P5, as the world changes, hotels must adapt as well and implement self-check-in, just like other sectors of the economy, like supermarkets. P8 predicts that self-check-in will eventually be extensively used because some people choose to avoid social interaction. According to P14, as more hotels use self-check-in, it will spread throughout the industry, and as more visitors utilise it, more people will profit from it overall. In the hospitality sector, self-check-in technology is projected to gain popularity and become a standard feature, while acceptance may differ based on factors including the target market, cost, and accessibility of acceptable solutions.

P3 believes that, as technology is developing, front office desk might ease off although that might take longer as the old generation prefer the use of traditional check-in.

P5: If it's in the right hotel, people will adopt its use just like it's in tesco for checkout and other stores. But if the world is evolving, we have to evolve and change with it. The whole of check-in.

P8: With time, self-check-in is going to be adopted everywhere as some people do not want to interact with other people socially.

I think it will grow a lot over time as more hotels starts to use it, because the bigger chains of hotel have been able to adopt it a lot as they are able to create their journey with guests digitally whereas independent hotel has to rely on third party coming up with solutions for them and can be costly. For independent hotel, it's been quite a slow journey. As people start to use it, I think it will become, the norm in the industry and many hotels will adopt it and that will increase the use from the guest, and we will get the benefit even more. It's a cycle that will grow over time [P14].

Generally, there are mixed view about the future use of self-check-in from the hotel managers as some believe that human interaction is very important to their brand and it's the sole aim of hospitality. While some agreed that as technology is evolving, hotels should also evolve

with it. From the responses from hotel users, they all agreed that self-check-in should be integrated more by hoteliers.

With recent innovations in tech world, where we have AI applications, human robots, I think technology is evolving and hoteliers will use less of human interaction to gives their customers services required. Self-check-in in the future will evolve to guests checking in to their room without keys and even having access to the room whilst not there, room doors will also be automated [P6].

There should be more adoption of this technology in hotels. Recently, I read about facial recognition self-check-in being used in some hotels and other industries. For example, where I work, we use face recognition system to check-in and out of work, this type of self-check-in can be implemented in hotels, although it might be expensive for some types of hotels, but I believe the future of self-check-in has many exciting possibilities for innovation and improvement [P7].

Yes, I think self-check-in will be a norm in the hotel industry because the current trend and advancement in technology as it benefits both the guests and the hotel. Digitalization has come to stay and its improving daily, however some hotels still have so many disagreements to investing in technology. If hotels can invest more on the usage of technology rather than depending on manpower for everything, the future will be bright [10].

In the future, I want to see, the use of generated QR codes via mobile app to access the hotel facilities after arrival to avoid the issue of technical difficulties associated with self-check-in systems and the hassle of complexities as well [P13].

# Theme 6: Comparison between hotels that adopt the use of self-check-in and hotels that do not use self-check-in.

According to the results of this study, hotel managers hold varied perspectives regarding the implementation of self-check-in shown in figure 8, while hotel customers appear to be receptive towards the adoption of self-check-in. P2, P3, P8, P14 shares favourable views regarding the implementation of self-check-in systems in hotels as guest tend to check-in online and only come in to get keys to their room on arrival. The hotel is aware that not every visitor is tech-savvy or at ease using technology, though. Some older visitors might not have email accounts, which can make using the self-check-in option challenging for them. In

addition, if a guest is a member of a group reservation made by a third party, they won't be able to receive an online form.

The feedback was positive after covid, although we have certain guest that do struggle as some of them do not have email, which is more related to the age of our guest. Not all our guest is tech-savvy, but generally, the feedback was nice. It does reduce the time[P8].

To be honest our check-in option has been very mixed (self-check-in and front desk check-in) there are certain type of clientele that use it, they tend to be the younger, under 40, they also tend to be leisure guests, most corporate check in at the desk because they do not pay for it themselves, we do a lot of group travel not organized by the hotel, we don't always have the guest email address to send the online form to them as they are organised by third party. It doesn't really work for those guests. There feedback has been good, it makes the check-in a lot easier for guest as its quicker, particularly in summer, we have a lot using it as its faster, parents also quite like it, because its faster [P14].

While P4 and P5 claim that personal attention and human interaction are essential components of their luxury experience. Self-check-in would, in the opinion of the company, eliminate the human touch, leave customers perplexed, and prevent them from having a luxurious experience. The hotel also places a lot of attention on developing relationships with its visitors. They think that by having visitors check in at the front desk, a connection is made between the visitor and the employees, which can improve the experience as a whole.

As a luxury brand, our guests prefer human interaction services delivered to them and implementing self-check-in would eradicate the human touch and feel-good factor as guests may feel confused on how to operate the system and who to approach if there are any challenges which is not good for guest looking for a luxury experience [P4].

Because the brand is customer service focused, we have a scheme to make sure our guests are well managed and fully aware of their patronage, with front desk check in, you know who is going to be in your hotel because a relationship is created once you walk through the front door but with self-check -in, there is no relationship shared between guest and staff [P5].

This response aligns with findings of Ahmad and Scott's (2019) study, which suggests that there are certain areas where human service cannot be replaced. The decision to adopt technology depends on a variety of factors, such as the needs of the customers, the needs of the organization, and its financial resources. The implementation of self-check-in/check-out kiosks may not be appropriate, as personalized service is best provided by human beings and may be more suitable for customers who are not comfortable with technology. This is also supported by Lui and Hung (2020), stating that services offered by employees involve emotions and customers tend to receive warmer, friendlier, and more empathetic service in contrast to services provided by self-service technology.

	Self-check-in	Traditional Check-in	
Reason for Adoption			
and Non adoption	To ease congestion at the front desk	Non-reliability/technical issue	
	For sustainability	Cost of investment	
	To be competitive in the industry To reduce human contact due to covid-	Legal restriction	
	19	Lack of human interaction	
		Location of the hotel	
Benefits	Time saving	Face-to-face interaction	
	Personalization	Security screening	
	Easy and convenient	Special request through personalized service	
	Flexible	Instant issue resolution	

Figure 8: Showing the comparison between self-check-in and traditional check-in by researcher

# 4.9 Theme 7: Factors that Influence Hotels in Bournemouth not Using Self-check-in. According to (Leung et al. 2015; Wang et al. 2016; Yadegaridehkordi et al. 2018) hotel technology adoption is tied to firm-related characteristics such as hotel size, chain affiliation, and financial readiness, environmental factors such as location and perceived pressure from competitors and technological characteristics (complexity and expected benefits).

#### 4.9.1 Non-Reliability/Technical issues

One reason for not implementing self-check-in by one of the participants is the concern about its reliability. Self-check-in kiosks may face technological difficulties that create delays in the check-in procedure or even a full breakdown, frustrating customers. As long as staff members are present to assist visitors, the check-in process is continuous in contrast to the typical check-in at the front desk.

It is not reliable so we have a system in place called partial check-in online before guests arrives where guest can make payment online before arriving at the hotel which makes the

process of check-in easier as only few things need to be done on arrival at the hotel. But then there is an issue with this method which doesn't allow guests have additional person on the reservation in the room on the booking, with this once they arrive, staff still needs to go through the process again [P1].

#### 4.9.2 Legal Restriction

One of the participants claimed that because of rules from the council the hotel must abide by self-service kiosks could not be implemented. These rules forbid the installation of kiosks because they might endanger the structure of the building. As a result, the hotel may have few alternatives for introducing self-service technologies that could boost productivity and the guest experience. This pertains to Liu and Hung (2021) findings that government regulations often hinder the implementation of self-check-in machines in hotels, with hotel managers frequently citing the limitations imposed by building restrictions as a major obstacle.

There are certain regulations within the council that the hotel has to adhere to preventing the installation of self-service kiosk so as not to damage the building due to the age of the building [P1].

# 4.9.3 Location of the hotel

Allowing customers to check in without employee help may be challenging in some situations due to security issues. For instance, hotels in high-crime regions could be less willing to use self-check-in to safeguard the security of their visitors.

The head office wants to implement self-check-in kiosks in our branch but due to the location of the hotel and the type of nearby stores around the hotel attracts customers who damage things always coming to the hotel to steal things, so the hotel has to adapt to the surroundings and if they see a self-check-in kiosk in the hotel, they might think that there is money there and damage it. The hotel had to cancel some facilities just to adapt to the surrounding [P1].

# 4.9.4 Lack of human interaction

Participants' responses emphasise the significance of the front desk as a hotel's first point of contact, emphasising the impact of the encounter on the whole visitor experience. This hotel promotes personal interaction since it fosters trust and a sense of home away from home, especially for its frequent visitors. Despite the apparent advantages of faster check-ins, they

express concern that self-check-in may have a negative influence on the personalised service and human connection that guests cherish, possibly weakening the trust and relationship formed with guests.

Hotels may be hesitant to adopt self-check-in technology due to concerns about losing the personal interaction between guests and staff. A study by Liu and Hung (2021) found that some hotels in China are hesitant to implement self-check-in kiosks as they worry that it may diminish the personalized services and human touch that are integral to the hospitality industry. Liu and Hung (2020) study revealed that self-service technology can impede communication between hotels and their customers by removing the direct involvement of service employees.

The front desk is the first point of contact when guests arrive at the hotel, which makes an impact for the guest experience throughout their stay. We have loyal guests that have been with us for over 20 years and these guests like to interact with staff. Human interaction makes the difference to guests by giving them the feeling that they are home away from home which improves our sense of relationship with our guests and building trust with them that whenever they want to visit Bournemouth again, they will remember and consider staying with us. Implementing self-check-in will dissociate our quests from us [P4].

With traditional check-in, guest experience more friendly and more welcome to the hotel, and the guest gets to interact with a person and not machine, its more about personal services, the smile, the warm welcome, the first impression of guests coming into the hotel is very important, yes the self-check-in might speed up the check-in process, however, guests might still have to wait as there are issues with the machine. So, there is not much difference really [P5].

This aligns with the findings of Gupta and Sharma (2021) research, which suggests that kiosks are not a replacement for human workers, but rather a supplement to human support.

# 4.9.5 Cost of investment

The expense of the investment, according to one participant response, is a big reason why hotels don't use self-check-in technology. According to P4, the hotel is hesitant to implement self-check-in since it would necessitate a substantial financial expenditure to renovate rooms

and improve property management systems. This response suggests that installing self-check-in technology necessitates a substantial commitment of resources, both financial and technological resources, which may not be practical for all hotels, particularly smaller hotels. Although self-check-in technology may have advantages like higher productivity and lower labour expenses, the upfront costs of adopting this technology may exceed these advantages, especially for smaller hotels with less resources. This aligns with Liu and Yang (2021) research, that the significant investment cost is still a major obstacle that prevents hotels from adopting self-service technologies. Even though self-check-in technology can offer long-term benefits such as time savings and reduced operational costs, hotels may incur significant upfront costs to install and maintain the technology.

Another factor that influences the non-adoption of self-check is cost of investment. P4 shared why they won't be adopting self-check-in now because they have to consider a lot of remodelling of the rooms and other technological services such as property management systems which will cost a lot for the hotel as the hotel only have 76 rooms capacity at the moment [P4].

#### 4.10 Conclusion

A variety of findings were drawn from interviews about self-check-in at hotels in Bournemouth. For both hotels and visitors, self-check-in offered enhanced efficiency, convenience, and time savings. Technical issues, security issues, and the possibility of less direct guest contact were the problems identified. In Bournemouth hotels, self-check-in acceptance was uneven, with some hotels enthusiastically adopting it and others cautious due to worries about visitor satisfaction. Self-check-in generated value through increasing operational effectiveness, generating more income, and improving the guest experience. However, value destruction could happen if visitors had technical problems or were not happy with the absence of personal contact. Future advances in self-check-in were also explored. A lot of interviewees predicted that self-check-in technology will advance and become integrated with other hotel amenities, but few hoteliers also expressed the opinion that human interaction is crucial in the hospitality industry. Self-check-in has the potential to be advantageous for Bournemouth hotels and visitors, findings also revealed that there are also challenges that can decrease its value.

#### **CHAPTER FIVE**

#### **CONCLUSION AND RECOMMENDATION**

#### 5.1 Introduction

This chapter is to be presented together with an analysis and evaluation of how the research questions were addressed and the conclusions gathered from the primary data. The study contributes to the body of knowledge by highlighting the advantages and drawbacks of self-check-in as well as the value created and destroyed when employing technology to speed up and simplify the check-in procedure. Additionally, the research supports many forms of self-check-in that hotels can use. Discussion of the research project's limitations is followed by recommendations for further research. The use of qualitative research techniques, such as semi-structured interviews has helped to highlight ways that the hotel sector communicates with management and solicits opinions of guests. The results of the study help us comprehend the advantages and difficulties of self-check-in in Bournemouth hotels. Researchers in the field and hotel management will benefit from the study's insightful findings, and it also emphasises the need for more in-depth investigation in this sector.

#### 5.2 Review of Research Questions

#### 5.2.1 Research question 1: What are the benefits and challenges of self-check-in in hotels.

The results show that self-check-in has a number of benefits for both hotels and visitors. According to the study's findings, self-check-in is quick and simple, enhances the visitor experience, gives hotel personnel flexibility, and saves time. With less interaction with workers, guests can check in and out at any time while the cost of training staff is reduced. Self-check-in also cuts down on paperwork, improving the hotel's sustainability. These advantages support earlier studies' findings that self-service kiosks are practical and boost productivity, making hotels' adoption of self-check-in a realistic alternative. The lack of human interaction that some guests prefer for a more individualised experience, technical problems like system freezes and breakdowns, and complexity that can be confusing to guests, especially those who are unfamiliar with technology, are some of the challenges of self-check-in at hotels. The efficiency of self-check-in systems in hotels can also be impacted by variables like age and clientele type. while increased wait times, greater consumer annoyance, and bad customer experiences can also contribute to these difficulties.

# 5.2.2 Research question 2: How do hoteliers perceive the use of self-check-in on customer service, business operations and guest satisfaction in hotels?

There are mixed views among hoteliers about the use of self-check-in in hotels. While some indicate that it enhances guest satisfaction and enhances business operations by speeding up check-in, others assert that it undermines the personalised service and human touch that luxury hotel brands seek to offer. Some hotel managers contend that human interaction is irreplaceable because human staff can offer individualised and compassionate services that self-service technology cannot match. Others think hotels should adopt new technologies, and self-check-in procedures will become commonplace. The usage of self-check-in technology is dependent on organisational needs, budgetary constraints, and a number of firm-related factors like location, chain affiliation, and financial stability. On the other hand, visitors generally seem open to the idea of self-check-in, while some may find it difficult to use the technology, especially elderly visitors who are less tech-savvy.

## 5.2.3 Research question 3: Is the use of self-check-in a value-creator or value disruptor?

From the findings, the service delivery of self-check-in can create value and also disrupt it. The self-check-in enables users to co-create their check-in experience by utilising technology, personalising their experience, and providing sustainability advantages. Therefore, it can be said that value created for hotel and guests includes faster check-in times, personalization, familiarity with digitalization, sustainability, and competitive advantage for the hotel brand. However, technology failure and a lack of individual interaction can both contribute to the disruption of value by leading to dissatisfaction with the service. Technical issues and malfunctions can cause problems for customers and damage their opinion of the service. In general, self-check-in can benefit both guests and hotels, but it's critical to solve any possible problems to prevent value interruption.

# 5.2.4 Research question 4: What is the future acceptance and development of self-checkin?

Participants' opinions on the adoption and growth of self-check-in in the hotel business were divided. While some think that having human interactions helps their brands, others think that hotels should keep up with technological advancements. P1 and P5 noted that their hotel brands currently stick to traditional check-in because it is the decision from the headquarters, while P4 stated that the adoption of self-check-in would incur a lot of expenses for them which they are not ready to take on. P3 believes that front office desks may ease off as technology develops, but it may take longer as older generations prefer traditional check-in. However, P8

thinks that self-check-in will be adopted everywhere in the future as some people do not want to interact with other people socially. Overall, majority of the participants (most especially the hotel users) agree that technology is evolving, and hotels should invest in it to improve services indicating that self-check-in has many exciting possibilities for innovation and improvement, such as facial recognition, automated room doors, and mobile app-generated QR codes for access to hotel facilities. The findings are consistent with recent studies showing that self-service and innovative technologies like AI, robots, and the IoT will become essential elements of the hospitality industry.

# 5.3 Concluding Statement

In conclusion, this research study aimed to explore the benefits and challenges of self-check-in in Bournemouth hotels. The study on self-check-in throws insight on the various viewpoints and experiences of various managers and hotel guests. Hotel guests generally seem to be open to the adoption of such systems, as it can shorten the check-in process and streamline it, even though hotel managers have differing opinions. However, there are challenges associated with self-check-in, such as the potential loss of human interaction and confusion among guests who are not tech-savvy which revealed that smart adoption cannot be achieved through technology alone. Instead, agility is crucial for organizations to effectively address contextual challenges and disruptive technologies, and to leverage smart interconnected products and services as described by Buhalis et al. (2023). This mindset shift toward communal value creation, as well as engagement with novel innovations and technologies, will enable hoteliers to embrace change effectively (Buhalis et al. 2023).

Additionally, the study described the various kinds of self-check-in systems and their prospects for value creation and disruption. The results indicate that self-check-in is a developing application in the hotel business, and its further growth will depend on how well the advantages and difficulties it provides are balanced. The results showed that while some hotels in Bournemouth are implementing self-check-in techniques like online check-in, mobile app, and self-service kiosk check-in, the majority are still using conventional check-in techniques because they want to maintain human interaction and build customer relationships considering its cost of implementation. However, the hotels that have adopted self-check-in procedures are enthusiastic about the prospect of further automation in the future and believe that as self-service options become more widely available, more hoteliers

will realise the convenience and efficiency they provide, and there will be a growing demand for a wider range of self-service options at every stage to enhance the guest's experience.

The study provides an in-depth understanding of hoteliers' viewpoints on self-check-in. It examines the factors behind their choices to accept or not use this technology, highlighting the various reasons inside the hotel sector. The study explores at the underlying variables that affect their decisions as well as the particular aspects that influence implementation techniques or discourage people from adopting self-check-in. This study offers insightful information about the complex landscape of hoteliers' adoption of self-check-in through an in-depth analysis of opinions and reasons. According to the study, Bournemouth's most popular self-check-in technique during the Covid-19 pandemic was online check-in. Overall, hotels must strike a balance between the demand for automation and keeping the personal touch that visitors value. The findings of this study provide useful insights for hotel managers and decision-makers on the benefits and challenges of self-check-in as well as the several types of self-check-in that may be used.

#### 5.4 Limitation

- 1. The research mainly examined the advantages and drawbacks of self-check-in technology in hotels from the viewpoints of hoteliers and guests, but it did not examine the perspectives of other stakeholders, such as workers and investors.
- 2. The study may not be generalizable to other situations or society since it was done in a specific geographic area.
- 3. Considering that there were only 20 participants, the sample size was somewhat small and might not accurately reflect the wide range of experiences and viewpoints that hotels in the area have to offer.
- 4. The research did not explore the impact of self-check-in technology on hotels' financial performance or its effect on customer loyalty and repeat business.
- 5. The influence of various self-check-in technologies, including kiosks, smartphone applications, and face recognition, on visitor experiences was not thoroughly examined in the research.
- 6. The research did not explore the potential ethical implications of self-check-in technology, such as the impact on employment opportunities, data privacy, and security concerns.

7. The study's inability to get hotels to participate in the study was one of its limitations. Seven managers made up the tiny sample size, which may have hindered the study's ability to include a diverse range of viewpoints and experiences. This restriction could have resulted from hotel staff members' hectic schedules and some of them being reluctant to take part in studies. The study's results might not accurately reflect the opinions and experiences of all hoteliers in the sector as a result. To get over these constraints and guarantee a more representative sample of participants, future research projects may need to investigate various recruiting tactics.

#### 5.5 Recommendation

- It is recommended that more research should be done to determine the effects of selfcheck-in technology on various hotel visitors, such as elderly people or those who might require special accommodations, in order to detect possible problems and find ways to make their stay more pleasant.
- 2. Hotels should make sure that the self-check-in software is user-friendly and that personnel is on hand to help visitors who might have trouble using it. Hotels should also have backup plans in place in case of technical difficulties to lessen the negative effects on guest experiences.
- 3. Hoteliers should analyse the costs and benefits of deploying self-check-in technology and determine how it will affect the perception of their brand and customer satisfaction. Hotels should try to balance using technology to improve the client experience with maintaining individualised service.
- 4. The effect of self-check-in technology on the workforce of the hotel sector and job displacement, particularly for those in customer-facing professions, should be investigated in future studies.

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### **APPENDICES**

## **Appendix 1**: Showing the Approved Ethics Checklist



# Research Ethics Checklist

About Your Checklist	
Ethics ID	48489
Date Created	25/02/2023 23:20:04
Status	Approved
Date Approved	01/03/2023 12:11:04
Risk	Low

Researcher Details	
Name	xxxxxx
Faculty	BU Business School
Status	Postgraduate Taught (Masters, MA, MSc, MBA, LLM)
Course	MSc International Hospitality and Tourism Management

Project Details	
Title	Self-check-in in Bournemouth Hotels
Start Date of Project	02/02/2023
End Date of Project	22/05/2023
Proposed Start Date of Data Collection	13/03/2023
Supervisor	xxxxxxx
Approver	xxxxxxxxx
Summary - no more than 600 words (including detail on background methodology, sample, outcomes, etc.)	

The use of self-service technology is continually being implemented by various service industries worldwide, despite the existing research, no study has investigated the use of self-check-in and its operation in Bournemouth hotels. The aim of this dissertation is to evaluate the effectiveness of self-check-in in enhancing guest experience, streamlining hotel operations and provide insight and recommendation that will assist hotel and their guest to make informed decisions on its use. The objective of this study consists of three parts which are to critically examine the pros and cons of using self-check-in. The second objective is to determine the barriers of not adopting this technology and examine its impact on guest satisfaction and hotel operations. Lastly, to access the value destruction/co- creation in the adoption of this service. A Qualitative research methodology will be employed to explore hotelier's and customer experience with self-check-in service and operations which is justified by the requirement to generate an understanding of customer perspectives by revealing their nature of experience and expectations. An inductive approach will be adopted through a face-to-face interview with 20 hotelier's and guests who visited hotels in Bournemouth with 15 semi-structured questions to create a body of qualitative data to identify the barriers of using self-check in, evaluate the value created from its operation and analyse the pros and cons of self-check-in technology. The interview will be conducted in Bournemouth city in a space of one month (from March to April 2023).

Bournemouth is a seaside resort town in the geographic county of Dorset making it a popular destination for tourists. Twenty hotels will be selected, and the selection process will be conducted in terms of star ratings by the researcher. The type of hotel segment will be from small, medium, and large-scale hotel companies with franchises. In this study, a convenience sampling will be conducted in a strategic way to reach potential participants.

Ethical issues will be considered and addressed by relevance to the research topic as human participation is involved. Focus will be on

method of communication, planning and follow-up on the study. All participants will be given information sheets with detailed description of the study before taking part in the interview with an option to withdraw anytime if uncomfortable. A consent form will be given to all participants stating an agreement in participating in the research. Awareness of personal information such as names, age, marital status, identity and opinions will be kept private. The research will address all participants with coding names as no names or personal information will be exposed.

### Filter Question: Does your study involve Human Participants?

Participants	
Describe the number of participants and specify any inclusion/exclusion criteria to be used	
For the purpose of this research, number of participants will be between 10 to 20.	
Do your participants include minors (under 16)?	No
Are your participants considered adults who are competent to give consent but considered vulnerable?	No
Is a Disclosure and Barring Service (DBS) check required for the research activity?	No

Recruitment	
Please provide details on intended recruitment methods, include copies of any advertisements.	
Recruitment method will be through email to the selected hotels human resource department to grant permission for an interview	
Do you need a Gatekeeper to access your participants?	No

### **Data Collection Activity**

Will the research involve questionnaire/online survey? If yes, don't forget to attach a copy of the questionnaire/survey or sample of questions.		
Will the research involve interviews? If Yes, don't forget to attach a copy of the interview questions or sample of questions		
Please provide details e.g. where will the interviews take place. Will you be conducting the interviews someone else?	ws or	
The interview will take place at the approved hotel premises. The researcher will be conducting the interview.		
Will the research involve a focus group? If yes, don't forget to attach a copy of the focus group questions or sample of questions.	No	
Will the research involve the collection of audio recordings?	Yes	
Will your research involve the collection of photographic materials?	Yes	
Will your research involve the collection of video materials/film?	No	
Will any photographs, video recordings or film identify an individual?	No	
Please provide details	-	
No		
Will any audio recordings (or non-anonymised transcript), photographs, video recordings or film be used in any	No	

outputs or otherwise made publicly available?	
Will the study involve discussions of sensitive topics (e.g. sexual activity, drug use, criminal activity)?	No
Will any drugs, placebos or other substances (e.g. food substances, vitamins) be administered to the participants?	No
Will the study involve invasive, intrusive or potential harmful procedures of any kind?	No
Could your research induce psychological stress or anxiety, cause harm or have negative consequences for the participants or researchers (beyond the risks encountered in normal life)?	No
Will your research involve prolonged or repetitive testing?	No
What are the potential adverse consequences for research participants and how will you minimis	e them?

# Describe the process that you will be using to obtain valid consent for participation in the research activities. If consent is not to be obtained explain why. A consent form will be given to the participant to inform them about their anonymity. Do your participants include adults who lack/may lack capacity to give consent (at any point in the study)?

# Will it be necessary for participants to take part in your study without their knowledge and consent?

No

### Participant Withdrawal

At what point and how will it be possible for participants to exercise their rights to withdraw from the study?

A withdrawal statement will be included in the participant form stating that participants can withdraw at any point during the interview.

If a participant withdraws from the study, what will be done with their data?

Participants are free to withdraw at any time and there personal information will be erased according to the ethics code of practice.

Participant Compensation	
Will participants receive financial compensation (or course credits) for their participation?	No
Will financial or other inducements (other than reasonable expenses) be offered to participants?	No

# Will identifiable personal information be collected, i.e. at an individualised level in a form that identifies or could enable identification of the participant? Please give details of the types of information to be collected, e.g. personal characteristics, education, work role, opinions or experiences Name Experience in the use of self-check-in.

Will the personal data collected include any special category data, or any information about actual or alleged criminal activity or criminal convictions which are not already in the public domain?	No	
Will the information be anonymised/de-identified at any stage during the study?	Yes	

Will research outputs include any identifiable personal information i.e. data at an individualised level in a form which identifies or could enable identification of the individual?

No

Storage, Access and Disposal of Research Data	
During the study, what data relating to the participants will be stored and where?	All interview will be voice-recorded and Research data will be digitally stored on student H drive.
How long will the data relating to participants be stored?	Data will be kept till the end of the research
During the study, who will have access to the data relating to participants?	Only the researcher and the supervisor will have access to the data
After the study has finished, what data relating to participants will be stored and where? Please indicate whether data will be retained in identifiable form.	No identifiable data of participants will be stored or retained.
After the study has finished, how long will data relating to participants be stored?	No identifiable data of participants will be stored or retained.
After the study has finished, who will have access to the data relating to participants?	All participants will be anonymised and coded in transcription.
Will any identifiable participant data be transferred outside of the European Economic Area (EEA)?	No
How and when will the data relating to participants be deleted/destroyed?	All data relating to the participants will be electronically destroyed when the information is no longer needed
Once your project completes, will your dataset be added to an appropriate research data repository such as BORDaR, BU's Data Repository?	Yes

Final Review	
Are there any other ethical considerations relating to your project which have not been covered above?	No

Risk Assessment	
Have you undertaken an appropriate Risk Assessment?	Yes

Filter Question: Does your study involve the use or re-use of data which will be obtained from a source other than directly from a Research Participant?

Additional Details	
Please describe the data, its source and how you are permitted to use it	No

### Attached documents

INTERVIEW QUESTIONS.pdf - attached on 28/02/2023 19:46:54

Participant Agreement Form.pdf - attached on 28/02/2023 19:47:12

Participant Information Sheet .pdf - attached on 28/02/2023 19:52:49

**Appendix 2:** A transcript from one of the participants of hotels that use self-check-in

**Interviewer:** What do you understand by self-check-in?

Participant 14 (P14): Someone can login into a portal, confirm their details to check-

themselves, they can print their own key or get their key on arrival.

**Interviewer:** What type of self-check-in do you use?

P14: Online check-in which is done by sending email to the guests 48 hours before arrival, and

they can fill the form online which include providing their personal details, vehicle number,

make payment, and on arrival, they only need to pick up their key. They can enter credit card

details, to set up an account.

**Interviewer:** How have your guests responded to the self-check-in system and what feedback

have you received from them?

P14: To be honest our check-in option has been very mixed (self-check-in and front desk

check-in) there are certain type of clientele that use it, they tend to be the younger, under 40,

they also tend to be leisure guests, most corporate check in at the desk because they do not

pay for it themselves, we do a lot of group travel not organized by the hotel, we don't always

have the guest email address to send the online form to them as they are organised by third

party. It doesn't really work for those guests. There feedback has been good, it makes the

check-in a lot easier for them as its quicker, particularly in summer, we have a lot using it as

its faster, parents also quite like it, because its faster. 5-10% use.

**Interviewer:** What were the key factors you considered when choosing a self-check-in system

for your hotel?

P14: the major reason was to ease congestion at the desk, particularly on busy days, the other

factor was sustainability as we want to be sustainable, so we do not have to print a lot of forms

for check-in. we are trying to come with a system that allows our guest to check-in with tab of

mobile phones.

Interviewer: How do you ensure that guests who use self-check-in have a smooth and

seamless experience?

85

**P14:** Training, as long as the reception team has the training on how to manage two different types of check-ins, although they still need to have the touch point with people, which is important to create and maintain relationship with our guests. So, we don't want to take away the touch point which also allows the receptionist to provide other information about the hotel facilities and likewise upsell. We are in the business of people and the face-to-face interaction is very important. There is a risk of security with no face to face check in , if you do not see your guest check-in, there is a level of risk involved in terms of security, people can sneak extra persons in to the building, drugs, human trafficking, prostitution, if you never see your guests check -in, you have no idea who is in your building, that for me carries a high level of risk. I will never want to allow guest check in without having face to face interaction.

**Interviewer:** What are the benefits of self-check-in over the traditional check-in in your hotel?

**P14:** The benefits are essentially time saving, sustainability. There can be quite a lot to do when checking in, which can be exhausting, if one can take away the formalities and the boring stuff, you can focus on other things and upsells to give monetary benefit. Receptionist can focus on upsell, extra services, and talking about other facilities rather than having to focus on just getting details.

**Interviewer:** What are some of the challenges you have faced while implementing and using self-check-in, and how have you addressed them?

**P14:** The biggest challenge is reaching every clientele as some of our guests are booked through OTAs, the other challenge is a tech-phobia, most of our clients tends to be older, and less savvy with tech like this, so they shy away from it, so they will rather do face to face. Another challenge is people do not read their emails to see the information about options for self-check-in.

**Interviewer:** How do you measure the success of your self-check-in system in terms of efficiency, customer satisfaction, and profitability?

**P14:** For us, because we have only have about 5-10% uptake of self-check-in, it's very difficult to measure the success of the efficiency of people using it, the times we do notice it are the peak period which is during summer. That is when we really feel the benefit as we have mostly leisure travellers and guests. You can see at the reception hoe its much quicker to check-in at the reception desk.

**Interviewer:** How has the use of self-check-in impacted your staffing needs?

**P14**: to a certain extent, the self-check-in has reduced our staffing needs, on a really busy day in summer, we will have four staff at the reception but with self-check-in, we use 3 for check-in. which quantify to about 250 pounds a week and 2500 a year, which is not massive for us. The implementation is not about the cost for us but about the ease of service and flexibility.

**Interviewer:** How do you see the use of self-check-in evolving in the future and what changes do you anticipate making to your system to adapt to these changes?

**P14**: I think it will grow a lot over time as more hotels starts to use it, because the bigger chains of hotel have been able to adopt it a lot as they are able to create their journey with guests digitally whereas independent hotel has to rely on third party coming up with solutions for them and can be costly. For independent hotel, it's been quite a slow journey. As people start to use it, I think it will become, the norm in the industry and many hotels will adopt it and that will increase the use from the guest, and we will get the benefit even more. It's a cycle that will grow over time.

**Interviewer:** How has the self-check-in added value to your brand image and reputation?

**P14**: everything we have been doing in the last 5 years is about modernising the business, bringing into a new era, even though we have a lot of older clienteles, to a certain extent this older clients are moving forward and wanting more modern services, and attitudes and taste are changing and business has to move with this times, and there comes a point where you have to be seen with forward thinking to attract a new market to diversify the market. For us it's about diversifying the market.

**Interviewer:** What advice or recommendations would you give to other hoteliers considering implementing a self-check-in system?

**P14:** to test. When we first begin, we did a lot of testing to make sure its going to work properly. We have to understand the customer journey with it. Because customers we have issues and questions and makes sure all teams that work with it has gone through the process and understand what to do.

**Interviewer:** How do you effectively communicate and promote self-check-in to guests, especially those who may be less tech-savvy or resistant to change?

**P14:** By email. It's very difficult. The only way to reach them is by email and making sure it's clearly worded and simple and direct. The messaging is key.

**Appendix 3:** A transcript from one of the hotel participants that do not use self-check-in.

Interviewer: What type of self-check-in do you use

Participant 4 (P4): We do not use self-check-in

Interviewer: What are the primary reasons why your hotel does not use self-check-in

technology?

**P4**: Most of the guest find it easy to interact with staff at the front desk.

Interviewer: How do you believe that traditional check-in processes enhance the guest

experience?

P4: Most of our guest prefer to communicate and interact with staff and we give them a quick

orientation on their stay and about the hotel. All this enhance our guest experience by letting

know where to go and how to access us.

Interviewer: Are there any specific challenges or limitations with self-check-in that you have

encountered or considered?

P4: At the moment we do not have self-check-in process, to talk about the implementation of

the self-check-in, we have to consider a lot of scenarios where it might be not be efficient as

the traditional self-check-in because we have a 76 room properties with different types of

room and for guest to check-in into the hotel that means we have to display 14 different

categories of the rooms or options available which can confuse the guests as they might not

know the type of room that suits them for example family of 2 kids may assume a double room

is efficient for their stay where as it is not, as we have a different package for families. All these

factors are one of the reasons why we have not implemented the self-check-in.

Interviewer: Do you believe that in-person interactions with guests during the check-in

process are important for building customer relationships?

P4: Yes, it is important, the front desk is the first point of contact when the guest enters the

hotel, which makes an impact for the guest throughout their stay by making sure they are

comfortable. Human interaction makes the difference by giving them the feeling that they are

home away from home and gives them sense of relationship with the guest and giving them

the trust and whenever they want to visit Bournemouth again, I believe they will consider all

this and choose to stay with us.

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**Interviewer:** How do you ensure that guests who prefer traditional check-in methods are able to receive the same level of service and attention as those who use self-check-in?

**P4**: Not sure how to answer this question as we have not implemented the self-check-in but to answer the traditional check-in method, we have other technologies that we use to ensure that our guest receive quality service, we have property management systems, reservation system and other information on the booking sites, we also have online reservation channels, we have information that can guide them in there booking on our website.

**Interviewer:** Have you considered implementing a hybrid system that combines self-check-in with in-person assistance or guidance?

**P4**: No, we would like to stick to our traditional self-check-in and we are confident about it.

**Interviewer:** What feedback have you received from guests regarding the check-in process, and how has this informed your decision to continue using traditional methods?

**P4**: We have loyal guests that have been with us for over 20 years and these guests have some kind of nostalgia and they like to interact with staff, and we feel like the implementation of self-check-in will dissociate our guests from us.

**Interviewer:** How do you ensure that the check-in process is efficient and convenient for guests, even without self-check-in technology?

**P4**: A lot goes into the checking in even before the guests arrives, such as the preferences of room for guest, getting the room ready, or the itinerary of the guests during the stay are taking into consideration by the reservation team and we make sure that all this are ready before the arrival of the guest. We then give them a brief of their stay on arrival to reassure them about their stay. We only have a check-in form signed as we have tried to implement less paperwork and we have 2 staff at the front desk to attend to our guests.

**Interviewer:** Are there any specific challenges or obstacles that have prevented your hotel from adopting self-check-in?

**P4**: We as a brand have consider our hotel to be a luxury hotel and most of our guests prefer human interaction services delivered to them. Implementing the self-check-in would eradicate the human touch and feel-good factor as guests may feel confused on who to approach if they have any challenges, and that is not good for guest looking for a luxury experience.

**Interviewer:** Are there any concerns related to security or privacy that have influenced your decision not to offer self-check-in?

**P4**: Not with security, however with privacy, self-check-in intend to have linkage to personal account, and the guest we cater to do not like it. We handle our guests' details on cloud system and data is handled well.

**Interviewer:** Have you considered implementing self-check-in technology in the future, and if so, what factors would you need to consider before making that change?

**P4**: No at the moment. We have to consider a lot of things to implement self-check-in such as remodelling of our rooms as we have a lot of different categories of room.

**Appendix 4:** A transcript from one of the hotel users' participants.

**Interviewer:** How often do you travel and stay in hotels?

Participant 6 (P6): I am not so frequent traveller, but when I travel, I sometimes stay in

hotel or stay with friends, but I will say I stay in the hotel 70% of the time.

**Interview**: In your hotel experience, do you typically prefer to check-in through the front

desk with a member of staff or use a self-check-in system?

P6: It all depends on my mood, and events I am going for, when I am going for a leisure

travel I will rather check-in through the front desk but if it's for a business trip, I will rather

go for self-check-in so as not to waste my time. So, I will say it depends on the events.

What factors would influence your decision to use a self-check-in system instead of

interacting with a staff member?

Interviewer: In your opinion, what do you think is the advantage and disadvantage of

using self-check-in over the traditional check-in?

P6: Well, the advantages of self-check in, it saves time and saves me the trouble of

explaining myself to anyone and queuing before checking in, as I know where I am going

to, I know the room type I want, and the size and I am able to pick the room I want. With

self-check-in I am opportune to pick the room according to my taste and desire. It saves

me the stress and worry of checking in. Disadvantages: it robs me of the opportunity to

have interpersonal relationship with hotel staff. In my opinion I think when guests relate

with staff, you get hands-on/additional services and information about various services

offered by the hotel, with self-service, you don't have privy information to other offerings

of the hotel with your room on the system although some are displayed on the system

but there are some you will not get the full details and understanding until you speak to

a staff member. Most of the times the terms and condition of use is displayed on the

screen, and I believe reputable hotels should have software that protects personal data

of guests, so I am confident that hotels know this risk and would have the right protection

of client's data.

Interviewer: What types of self-check-in systems have you used or are aware of?

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**P6:** Mobile app: process of check-in in with mobile app; what I do is I go online and look for hotel of my desire and book for reservation and then I am referred to options of selecting the room type, which is displayed on the app, I get to choose my desired room based on the colour which is very important for me as it calms my nerves, the bed size, fridge, bathroom, tables and chair. Select the room and pay, so arrival, I just give my reservation details and get my room key and check in.

**Interview:** Would you prefer to use self-check-in again in the future, or would you prefer a traditional check-in process?

**P6**: my use of self-check -in Is dependent on the occasion and event, so when I am going to a place I have never been before, I will prefer the self-check-in because it saves me the stress of trying to figure out so I will say I will use self-check-in in the future.

**Interviewer**: How do you think self-check-in systems in hotel will evolve and improve in the future?

**P6**: With recent innovations in tech world, where we have AI, human robots, I think technology is evolving and hoteliers use less of human interaction and gives their customers services required. Self-check-in in the future will evolve to guests checking in to their room without keys and even having access to the room whilst not there, room doors will be automated.

**Interviewer:** Do you think that self-check-in systems will become the norm in the hotel industry?

**P6:** I totally think so because in the long run, most hotel will profit from the investment.

**Interviewer**: In what ways do you think self-check-in systems can potentially create or disrupt value for you as guests?

**P6**: In this world where we need so much connectivity to prosper our business, interpersonal relationship is important. As a guest it disrupts me from interacting with people, but I will say it saves me time and stress. All in all, I would say as the world evolves, hoteliers will have to strike a balance between technology and human interaction. We need to come to a phase where technology can be used to groom human relationship.

For now, it may disrupt human relationship but in the long run tech world will find a way to blend with human interaction.

**Appendix 5**: The participant sheet given to all participants before the interviews commenced.



The title of the research project

SELF-CHECK-IN IN BOURNEMOUTH HOTEL

### Invitation to take part

You are being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

### What is the purpose of the project?

The purpose of the research is to evaluate the effectiveness of self-check-in Bournemouth hotels by analysing the pros and cons of using it, its guest experience, and the effectiveness in streamlining hotel operations and provide insight and recommendation that will assist hotel and their guest to make informed decisions on its use.

### Why have I been chosen?

You have been chosen as your position as a manager/guest in hotel in Bournemouth to provide me your opinion about the use of self-check-in in hotel, its benefits, barriers, and challenges faced in using self-check-in in hotel.

### Do I have to take part?

It is up to you to decide whether to take part. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a participant agreement form. We want you to understand what participation involves before you decide on whether to participate.

### Can I change my mind about taking part?

Yes, you can stop participating in study activities at any time and without giving a reason.

### If I change my mind, what happens to my information?

After you decide to withdraw from the study, we will not collect any further information from or about you. As regards to the information we have already collected before this point, your rights to access, change or move that information are limited. This is because we need to manage your information in specific ways for the research to be reliable and accurate. Further explanation about this is in the Personal Information section below. All data obtained from you will be removed from the study. All participants identities are anonymous in this research therefore your data are within the anonymous dataset.

### What would taking part involve?

This will involve a 30-minute face-to-face interview with a structured questions on the use of self-check-in, different types of self-check-in, advantages and disadvantages of its use, the effectiveness on customer experience.

### Will I be reimbursed for taking part?

All data obtained from you will be removed from the study.

There will be no financial or material compensation for participating in this research.

### What are the advantages and possible disadvantages or risks of taking part?

Whilst there are no immediate benefits for those people participating in the project, it is hoped that this work will provide a unique perspective on how self-check-in processes are used and how they affect the hotel industry.

### What type of information will be sought from me and why is the collection of this

### information relevant for achieving the research project's objectives?

For Hoteliers: questions such as, do you use self-check-in, if no, do you intend to use in the future, how do you balance the use of traditional check-in with the increasing demand for technological innovations in the hotel industry. if yes, what are the impact of self-check-in on operations and guest experience, what type of self-check-in did you use and why, is there an increase in customer loyalty, what security measures did you take to protect guest data and ensure a safe experience.

For guest: Question on the use of self-check-in will be asked, challenges faced using it, your preference of self-check-in to the traditional human interaction, its convenience and ease of use. Question on impact of your experience on the impression of the hotel.

### Will I be recorded, and how will the recorded media be used?

An audio recording of your interview will be made during this research and will be used only for analysis and the transcription of the recording(s) for illustration in conference presentations and lectures. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings.

### How will my information be managed?

Bournemouth University (BU) is the organisation with overall responsibility for this study and the Data Controller of your personal information, which means that we are responsible for looking after your information and using it appropriately. Research is a task that we perform in the public interest, as part of our core function as a university.

Undertaking this research study involves collecting and/or generating information about you. We manage research data strictly in accordance with

Ethical requirements; and

Current data protection laws. These control use of information about identifiable individuals, but do not apply to anonymous research data: "anonymous" means that we have either removed or not collected any pieces of data or links to other data which identify a specific person as the subject or source of a research result.

BU's Research Participant Privacy Notice sets out more information about how we fulfil our responsibilities as a data controller and about your rights as an individual under the data protection legislation. We ask you to read this Notice so that you can fully understand the basis on which we will process your personal information.

Research data will be used only for the purposes of the study or related uses identified in the Privacy Notice or this Information Sheet. To safeguard your rights in relation to your personal information, we will use the minimum personally identifiable information

possible and control access to that data as described below.

### **Publication**

You will not be able to be identified in any external reports or publications about the research without your specific consent. Otherwise, your information will only be included in these materials in an anonymous form, i.e., you will not be identifiable.

### Security and access controls

BU will hold the information we collect about you in hard copy in a secure location and on a BU password protected secure network where held electronically.

Personal information which has not been anonymised will be accessed and used only by appropriate, authorised individuals and when this is necessary for the purposes of the research or another purpose identified in the Privacy Notice. This may include giving access to BU staff or others responsible for monitoring and/or audit of the study, who need to ensure that the research is complying with applicable regulations.

### Further use of your information

The information collected about you may be used in an anonymous form to support other research projects in the future and access to it in this form will not be restricted. It will not be possible for you to be identified from this data.

Keeping your information if you withdraw from the study.

If you withdraw from active participation in the study, we will keep information which we have already collected from or about you, if this has on-going relevance or value to the study. This may include your personal identifiable information. As explained above, your legal rights to access, change, delete or move this information are limited as we need to manage your information in specific ways for the research to be reliable and

accurate. However, if you have concerns about how this will affect you personally, you

can raise these with the research team when you withdraw from the study.

You can find out more about your rights in relation to your data and how to raise

queries or complaints in our Privacy Notice.

Retention of research data

**Project governance documentation**, including copies of signed participant agreements:

we keep this documentation for a long period after completion of the research, so that

we have records of how we conducted the research and who took part. The only

personal information in this documentation will be your name and signature, and we

will not be able to link this to any anonymised research results.

Research results:

STATEMENT 1 – Use if you have provided details of how you will anonymise information

during the active period of the research study.

As described above, during the study we will anonymise the information we have

collected.

information about you as an individual. This means that we will not hold your personal

information in identifiable form after we have completed the research activities.

Contact for further information.

If you have any questions or would like further information, please

contact: Prof Dimitrios Buhalis

dbuhalis@bournemouth.ac.uk

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Folasade Adeyemo

s5403190@bournemouth.ac

.uk

*In case of complaints* 

Any concerns about the study should be directed to the research and ethics committee at Bournemouth University. You may also contact the faculty of management at Bournemouth University via email: <a href="mailto:researchgovernance@bournemouth.ac.uk">researchgovernance@bournemouth.ac.uk</a>.

**Finally** 

If you decide to take part, you will be given a copy of the information sheet and a signed participant agreement form to keep.

Thank you for considering taking part in this research project.

**Appendix 6:** The participant agreement from which was completed before the interviews commenced.



### **Participant Agreement Form**

Full title of project: SELF-CHECK-IN IN BOURNEMOUTH HOTELS

Name, position and contact details of researcher: Folasade Adeyemo

s5403190@bournemouth.ac.uk

Name, position and contact details of supervisor: Dimitrios Buhalis

dbuhalis@bournemouth.ac.uk

To be completed prior to data collection activity

### Section A: Agreement to participate in the study.

You should only agree to participate in the study if you agree with all the statements in this table and accept that participating will involve the listed activities.

		TICK HERE
I have read and understood the Participant Information Sheet (insert PI S Version) and have been given access to the BU Research Participant Prival which sets out how we collect and use personal information (https://www1.bournemouth.ac.uk/about/governance/access-information protection-privacy).  I confirm that I have had an opportunity to ask questions.	acy Notice	
I understand that my participation is voluntary. I can stop participating in activities at any time without giving a reason and I am free to decline to a question(s) or amend sentence as appropriate.  I understand that taking part in the research will include the following		
activity/activities as part of the research. being audio recorded during the project my words will be quoted in publications, reports, web pages and other re output [without using my real name].	esearch	
I understand that, if I withdraw from the study, I will also be able to with from further use in the study <b>except</b> where my data has been anonymise be identified) or it will be harmful to the project to have my data remove	d (as I cannot	
I understand that my data may be used in an anonymised form by the reto support other research projects in the future, including future publicator presentations.		
	Initial box to agree	
I consent to take part in the project on the basis set out above		

# I confirm my agreement to take part in the project on the basis set out above.

Name of participant (BLOCK CAPITALS)	Date (dd/mm/yyyy)	Signature	
		Signature	
Name of researcher	Date	- <b>y</b>	
(BLOCK CAPITALS)	(dd/mm/yyyy)		

### Appendix 7: Pilot Study Questionnaire

- 1. What do you understand by self-check-in?
- 2. What were the key factors you considered when choosing a self-check-in system for your hotel?
- 3. How has self-check-in impacted your guest experience?
- 4. How do you measure the success of your self-check-in system in terms of efficiency, customer satisfaction, and profitability?
- 5. How do you ensure that guests who use self-check-in have a smooth and seamless experience?
- 6. What are some of the challenges you have faced while using self-check-in, and how have you addressed them?
- 7. How do you see the use of self-check-in evolving in the future and what changes do you anticipate making to your system to adapt to these changes?
- 8. How do you see the role of technology in the hospitality industry and how do you plan to stay competitive in a rapidly changing landscape?
- 9. How has the use of self-check-in impacted your staffing needs?

# **Appendix 8**: Interview questions for participants

	General Question
	What is your name?
	What age range do you belong?
	Age range:
	20-29
	30-39
	40-49
	50-59
	60-69
	What is your gender?
	What is your occupation?
	FOR HOTELS THAT USE SELF-CHECK-IN
1.	What do you understand by self-check-in?
2.	What type of self-check-in do you use?
3.	How have your guests responded to the self-check-in system and what feedback have you

received from them?

4.	What were the key factors you considered when choosing a self-check-in system for your hotel?
5.	How do you ensure that guests who use self-check-in have a smooth and seamless experience?
6.	What are the benefits of self-check-in over the traditional check-in in your hotel?
7.	What are some of the challenges you have faced while implementing and using self-check-in, and how have you addressed them?
8.	How do you measure the success of your self-check-in system in terms of efficiency, customer satisfaction, and profitability?
9.	How has the use of self-check-in impacted your staffing needs?
10.	How do you see the use of self-check-in evolving in the future and what changes do you anticipate making to your system to adapt to these changes?
11.	How has the self-check-in added value to your brand image and reputation?

12.	What advice or recommendations would you give to other hoteliers considering implementing a self-check-in system?
13.	How do you effectively communicate and promote self-check-in to guests, especially those who may be less tech-savvy or resistant to change?

### FOR HOTELIERS NOT USING SELF-CHECK-IN

- What are the primary reasons why your hotel does not use self-check-in technology?
- 2. How do you believe that traditional check-in processes enhance the guest experience?
- 3. Are there any specific challenges or limitations with self-check-in that you have encountered or considered?
- 4. Do you believe that in-person interactions with guests during the check-in process are important for building customer relationships?
- 5. How do you ensure that guests who prefer traditional check-in methods are able to receive the same level of service and attention as those who use self-check-in?
- 6. Have you considered implementing a hybrid system that combines self-check-in with in-person assistance or guidance?
- 7. What feedback have you received from guests regarding the check-in process, and how has this informed your decision to continue using traditional methods?
- 8. How do you ensure that the check-in process is efficient and convenient for guests, even without self-check-in technology?
- 9. Are there any specific challenges or obstacles that have prevented your hotel from adopting self-check-in?
- 10. Are there any concerns related to security or privacy that have influenced your decision not to offer self-check-in?
- 11. Have you considered implementing self-check-in technology in the future, and if so, what factors would you need to consider before making that change?

### **For Hotel Users**

- 1. How often do you travel and stay in hotels?
- 2. In your hotel experience, do you typically prefer to check -in through the front desk with a member of staff or use a self-check-in system?
- 3. What factors would influence your decision to use a self-check-in system instead of interacting with a staff member?
- 4. In your opinion, what do you think is the advantage and disadvantage of using self-check-in over the traditional check-in?
- 5. What type of self-check-in systems have you used or aware of?
- 6. Would you prefer to use self-check-in again in the future, or would you prefer a traditional check-in process?
- 7. How do you think self-check-in systems in hotel will evolve and improve in the future?
- 8. Do you think self-check-in system will become the norm in the hotel industry?
- 9. In what ways do you think self-check-in systems can potentially create or disrupt value for you as a guest?