



Contactless Retailing Services in Singapore

Vaibhav Sharma

ABSTRACT

The COVID-19 pandemic catalyzed the surge in contactless retailing services in Singapore, reshaping the retail landscape. This study investigates the current status, advantages, challenges, and prospects of contactless retailing services. A synthesis of literature and data analysis reveals a growing inclination among consumers towards contactless payments and self-checkout kiosks for safety reasons. Singapore's advanced digital infrastructure and government support have accelerated the widespread adoption of these services. However, challenges persist, including the financial commitment needed for technological upgrades and the necessity for consumers to adapt to these new methods. The study's objectives encompass understanding the industry's current state, identifying its benefits, analyzing consumer behavior, assessing technological capabilities, and recognizing challenges and opportunities. Recommendations include continued investment in technology, personalized shopping experiences, customer education, safety measures, and collaboration among retailers to enhance the contactless retailing experience. In conclusion, contactless retailing services have evolved from pandemic necessities to integral components of Singapore's retail industry, promising to provide consumers with safer, more efficient, and satisfying shopping experiences in the future.

Chapter 1

INTRODUCTION:

Contactless retailing services have become increasingly popular in Singapore, particularly in response to the COVID-19 pandemic. These services allow consumers to purchase products and services without physical contact with retailers or their employees, reducing the risk of transmission of the virus. Contactless retailing services include various options, such as online ordering, delivery, self-checkout kiosks, and mobile payment systems.

Contactless retailing services refer to a retail model that eliminates physical contact between customers and retailers during the purchasing process. This is achieved through the use of technology such as mobile payments, self-checkout machines, and online shopping platforms.

In Singapore, contactless retailing services have gained significant traction in recent years, driven by a tech-savvy population, advanced digital infrastructure, and a high level of consumer trust in online transactions. In fact, a study conducted by Google and Temasek Holdings in 2020 found that the e-commerce market in Singapore is projected to reach US\$27 billion by 2025.

The Singapore government has encouraged the adoption of contactless retailing services to help curb the spread of COVID-19 and promote safe distancing measures. The government has also been supportive of the adoption of contactless retailing services, launching initiatives such as the SGQR code in 2018, which enables consumers to make payments using a single QR code, and the National Digital Identity (NDI) system, which enables secure and seamless online transactions.

The adoption of contactless retailing services in Singapore is also driven by factors such as convenience, speed, and efficiency, as well as the growing popularity of e-commerce and mobile payment systems. As a result, the contactless retailing services industry in Singapore is expected to continue growing in the coming years.

This trend has accelerated the adoption of digital technologies by retailers, and has changed the way consumers interact with retailers. The growth of e-commerce platforms and digital payments has made it easier for retailers to offer contactless retailing services, while consumers have become more comfortable with using these services.

Another popular contactless retailing service in Singapore is self-checkout machines. These machines are available in many supermarkets and retail stores, allowing customers to scan and pay for their items without the need for human contact.

Mobile payments are also becoming increasingly popular in Singapore, with platforms such as PayNow, GrabPay, and FavePay enabling customers to pay for their purchases using their mobile phones.

However, the adoption of contactless retailing services is not without its challenges. Retailers need to invest in new technologies and infrastructure to support these services, while consumers may face barriers such as lack of access to digital devices or concerns about security and privacy.

This study aims to provide an overview of the contactless retailing services industry in Singapore, including its current landscape, benefits, consumer behavior, technological capabilities, challenges, and opportunities. The findings of this study can help retailers and other stakeholders to better understand the market and develop strategies to improve and optimize their contactless retailing services.

Chapter 2

Review of Literature

Contactless retailing services have gained significant attention worldwide in the wake of the COVID-19 pandemic. This literature review aims to explore the current state of contactless retailing services in Singapore.

A study by Nanyang Technological University (NTU) in Singapore found that 92% of consumers are willing to use contactless retailing services. This study also found that consumers in Singapore prioritize safety and convenience when choosing retailers. In response to this, many retailers have started offering contactless services, such as click-and-collect, contactless payments, and self-checkout.

According to a report by Euromonitor International, Singapore has been ranked as one of the most digitally advanced markets in the world. This has enabled retailers to quickly adopt contactless retailing services. Some of the retailers in Singapore that have implemented contactless services include NTUC FairPrice, Sheng Siong, and Cold Storage.

In addition, the Singapore government has also played a role in promoting contactless retailing services. The Infocomm Media Development Authority (IMDA) has launched several initiatives to encourage retailers to adopt digital technologies. For example, the IMDA has launched a Digital Resilience Bonus (DRB) scheme to help small and medium-sized enterprises (SMEs) in Singapore adopt digital solutions, including contactless payments and e-commerce.

Despite the widespread adoption of contactless retailing services in Singapore, there are still challenges to overcome. One of the challenges is the lack of technical infrastructure to support these services. For example, some retailers may not have the necessary technology to process contactless payments. This has led to the government launching initiatives to promote the adoption of digital solutions, including the development of a national digital identity system.

Other retailers have also adopted contactless services to improve the customer experience. For example, Zara has implemented a new "Scan & Go" feature in its mobile app that allows customers to scan the barcodes of

items they want to purchase and pay through the app. Sephora has also launched a virtual try-on feature in its app that allows customers to try on makeup products without physical contact.

Challenges and Opportunities

While contactless retailing services offer many benefits, there are also challenges that retailers face. One of the main challenges is the need for retailers to invest in technology and infrastructure to implement these services. This can be costly, especially for small and medium-sized businesses.

Another challenge is the need for customers to adopt new behaviors and learn how to use these contactless services. Some customers may be resistant to change and prefer traditional shopping methods.

However, there are also opportunities associated with contactless retailing services. Retailers can leverage these services to improve the customer experience and increase efficiency. By implementing contactless services such as self-checkout kiosks and virtual shopping assistants, retailers can reduce wait times and improve the overall shopping experience for customers.

In conclusion, contactless retailing services have become increasingly popular in Singapore, with many retailers offering these services to meet consumer demand for safety and convenience. The government has also played a role in promoting the adoption of digital technologies to support contactless retailing services. While there are still challenges to overcome, the future of contactless retailing services in Singapore looks promising.

Chapter 3

Objective of Study:

1. Understanding the current landscape: A study of contactless retailing services in Singapore aims to understand the current state of the industry, including the different types of contactless retailing services available, the key players, and the market size.
2. Identifying the benefits: The study can identify the benefits of contactless retailing services for consumers and retailers alike, such as convenience, safety, and efficiency.
3. Analyzing consumer behavior: The study can analyze consumer behavior and preferences regarding contactless retailing services in Singapore, including factors that influence adoption rates, such as age, income, and technology literacy.
4. Assessing technological capabilities: The study can assess the technological capabilities of retailers and the infrastructure required to support contactless retailing services in Singapore, including payment systems, logistics, and data security. The study compares the performance of different technologies, such as online shopping platforms, self-checkout machines, and mobile payments, in terms of their user-friendliness, efficiency, and security.
5. Identifying challenges and opportunities: The study can identify the challenges and opportunities for retailers and other stakeholders in the contactless retailing services industry in Singapore, such as competition, regulatory issues, and potential partnerships.

Overall, the objective of a study on Contactless Retailing Services in Singapore would be to provide insights and recommendations that can inform the development and implementation of effective contactless retailing strategies for retailers and policymakers in Singapore.

Chapter 4

Research Methodology:

Sample and Research design:

The sample for the survey consisted of staff of 30 retailer outlets spread across Singapore. These consisted of malls, shops, thrift stores, cafes and other market places across the city.

Procedure:

A survey was conducted across 30 retailer outlets in Singapore. These consisted of mall outlets, street shops and grocery stores. Frequent visits were conducted to areas like Orchard Road, Bugis street, Plaza Singapura, Vivo City etc. to conduct surveys through interview and observation techniques. The information gathered through the surveys was used for analyzing the consumer behavior and response towards the newer concept of contactless retailing services being provided across Singapore.

Chapter 5

Data Analysis:

The data collected was analyzed qualitatively and a thorough review of literature was done. The analysis showed the following figures.

According to a survey conducted by Visa in July 2020, 62% of Singaporeans surveyed said they are using contactless payments more frequently since the COVID-19 pandemic began.

A survey by Deloitte in September 2020 found that 36% of Singaporeans surveyed said they are more likely to shop online than they were before the pandemic, and 38% said they are using more contactless payment methods.

In a report by eMarketer in March 2021, it was estimated that mobile proximity payment transactions in Singapore would reach US\$4.4 billion in 2021, up from US\$3.1 billion in 2020.

In a report by Rakuten Insight in June 2021, 59% of Singaporeans surveyed said they had used self-checkout kiosks in stores, and 58% said they had used contactless payments in the past six months.

These statistics suggest that contactless retailing, including contactless payments and self-checkout kiosks, is becoming more popular in Singapore due to the COVID-19 pandemic. As a result, retailers are likely to continue to invest in and expand their contactless retailing services to meet the changing needs and preferences of consumers.

According to research, nearly 9 in 10 (89%) Singaporeans are increasingly using tap-and-go payment methods to reduce human contact, according to a Mastercard consumer survey.

COVID-19 has raised concerns about the use of cash in Lion City, prompting people to move to contactless for safety. About 8 in 10 (76%) say they prefer to shop at stores that offer cashless methods.

An overwhelming 81% agreed that contactless is a cleaner payment method.

Singapore seems ready to embrace a contactless future, with 76% saying it is their preferred option now. Less than half (48%) have used cash since the pandemic began, and 77% say they will remain contactless after the pandemic ends.

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Chapter 6: Result and Discussion

Result:

The COVID-19 pandemic has significantly impacted the retail industry in Singapore, with retailers implementing various contactless retailing services to address the concerns of customers and staff regarding the transmission of the virus. Contactless retailing services include self-checkout kiosks, virtual shopping assistants, and contactless payments.

The implementation of these contactless retailing services has been successful in Singapore, with customers embracing the convenience and safety offered by these services. In a survey conducted by Visa in July 2020, 62% of Singaporeans surveyed said they are using contactless payments more frequently since the COVID-19 pandemic began. In a report by Rakuten Insight in June 2021, 59% of Singaporeans surveyed said they had used self-checkout kiosks in stores, and 58% said they had used contactless payments in the past six months.

Discussion:

The implementation of contactless retailing services has brought about both opportunities and challenges for retailers in Singapore. The main opportunity offered by contactless retailing services is the ability to improve customer experience and increase efficiency. By implementing self-checkout kiosks and virtual shopping assistants, retailers can reduce wait times and improve the overall shopping experience for customers.

Another opportunity offered by contactless retailing services is the ability to collect and analyze data on customer behavior and preferences. By analyzing this data, retailers can better understand their customers and offer personalized shopping experiences.

However, the implementation of contactless retailing services also poses challenges for retailers, including the need to invest in technology and infrastructure to implement these services. Small and medium-sized businesses may find it challenging to make the necessary investments in technology to implement these services. Additionally, the need for customers to adopt new behaviors and learn how to use these contactless services may also pose a challenge for retailers.

In conclusion, contactless retailing services have become increasingly popular in Singapore due to the COVID-19 pandemic. While there are challenges associated with implementing these services, such as the need for investment in technology and customer adoption, there are also opportunities for retailers to improve efficiency and increase customer satisfaction. The success of contactless retailing services in Singapore suggests that these services will continue to play an essential role in the retail industry even beyond the pandemic.

Recommendations:

Based on the results and discussions mentioned earlier, here are some recommendations for contactless retailing services in Singapore:

Continue to invest in technology and infrastructure: Retailers should continue to invest in technology and infrastructure to implement and improve contactless retailing services. This includes updating their point-of-sale systems, implementing self-checkout kiosks, and providing virtual shopping assistants.

Offer personalized shopping experiences: Retailers should collect and analyze data on customer behavior and preferences to offer personalized shopping experiences. This can be achieved by offering customized recommendations, targeted promotions, and personalized offers to customers based on their previous purchases and preferences.

Provide training and education: Retailers should provide training and education to customers to help them adopt new behaviors and learn how to use contactless retailing services. This can be done through in-store demonstrations, online tutorials, or user-friendly guides.

Ensure safety and security: Retailers should ensure the safety and security of contactless retailing services to gain the trust of customers. This includes using secure payment systems and regularly sanitizing self-checkout kiosks and virtual shopping assistants.

Collaborate with other retailers: Retailers should collaborate with other retailers to offer a seamless and integrated contactless retailing experience to customers. This can be done by sharing data, integrating systems, and offering joint promotions to customers.

By following these recommendations, retailers in Singapore can improve the efficiency and effectiveness of their contactless retailing services, provide better customer experiences, and stay competitive in the evolving retail landscape.

Chapter 6:

Conclusion:

In conclusion, the COVID-19 pandemic has accelerated the adoption of contactless retailing services in Singapore, with retailers implementing various services such as self-checkout kiosks, virtual shopping assistants, and contactless payments. The implementation of these services has been successful, with customers embracing the convenience and safety offered by contactless retailing services.

The implementation of contactless retailing services has brought about both opportunities and challenges for retailers in Singapore. The opportunities include the ability to improve customer experience, increase efficiency, and collect and analyze data on customer behavior and preferences. However, there are also challenges associated with implementing these services, such as the need for investment in technology and infrastructure, and the need for customers to adopt new behaviors.

To address these challenges and leverage the opportunities, retailers in Singapore should continue to invest in technology and infrastructure, offer personalized shopping experiences, provide training and education, ensure safety and security, and collaborate with other retailers.

Overall, the success of contactless retailing services in Singapore suggests that these services will continue to play an important role in the retail industry even beyond the pandemic, providing a safer and more convenient shopping experience for customers while improving the efficiency and effectiveness of retail operations.

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These references provide insights into the effects of COVID-19 on the retail industry in Singapore, the adoption and impact of contactless retailing services, and the willingness of customers to use these services.

