



UNIVERSITI PUTRA MALAYSIA

***CONSUMERS' REPURCHASE INTENTION IN ONLINE GROCERY
SHOPPING IN MALAYSIA***

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**CONSUMERS' REPURCHASE INTENTION IN ONLINE GROCERY
SHOPPING IN MALAYSIA**

By

ANIS SHAIRA SULASTRI

**Thesis Submitted to School of Graduate Studies, Universiti Putra Malaysia, in
Fulfillment of the Requirements for the Degree of Master of Science**

April 2017

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of
the requirement for the degree of Master of Science

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By

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April 2017

Chairman: Nolila Mohd Nawi, PhD
Faculty: Agriculture

The fast technological process and development of information and communication technology (ICT) has made our lives easier in many ways especially in online business transaction. As online business continues to grow, shopping habit among Malaysian consumer has also shifted from brick and mortar stores to brick and click including grocery shopping. The trend of having grocery delivered to the doorstep is due to its convenient and time saving. Besides that, online grocery shopping has encouraged consumers to shop online to fulfill their daily household needs because people claimed that grocery shopping activity at traditional stores is stressful. Therefore, the advancement of Internet is supposed to enhance consumer loyalty and encourage them to continuously using online grocery shopping in Malaysia. Unfortunately, previous studies have shown that online groceries are not consistently purchased by Malaysian consumers due to some reasons such as inconsistent quality, high delivery charges and lack of sensory characteristics. Despite the problems faced by consumers, there are still number of them that have continuously performed online grocery shopping and the demand in the industry is still growing. Thus, this research is focused on experienced online grocery shoppers with the aim to investigate Malaysian consumers' repurchase intention in online grocery shopping.

This study was conducted in Klang Valley area with a total of 521 respondents. The primary data was collected using online structured questionnaire and were distributed via electronic mail and private message to the targeted respondents. The data collected was analysed using descriptive analysis, chi-square analysis, factor analysis, and binary logistic regression analysis. First, descriptive analysis was used to determine consumers' socio-demographic characteristics and their experience in online grocery shopping. Chi-square analysis was used to test the association between socio-demographic characteristics and repurchase intention in online grocery shopping. Next,

factor analysis was used to explore factors influencing Malaysians' repurchase intention in online grocery shopping. Lastly, binary logistic regression analysis was applied to investigate the most influential factors of consumers' repurchase intention in online grocery shopping.

The findings of descriptive analysis showed that most of the online grocery shopper is female and the reasons why they choose to shop grocery via online is because convenient and time saving. The results of chi-square analysis showed that consumers' gender, age, marital status, occupational sector, job title and number of household have significant association with their repurchase intention in online grocery shopping. Besides that, factor analysis results identified five factors namely *perceived usefulness*, *satisfaction*, *perceived risk*, *perceived information accessibility* and *perceived ease of use* as the factors influencing consumers' repurchase intention in online grocery shopping. Further, results of binary logistic regression analysis revealed that satisfaction is the most influential factor of consumers' repurchases intention in online grocery shopping.

In conclusion, results from this study shows and proves that Malaysians are keen to continue repurchase grocery through online on their next visit. As per discussion, the analysis results revealed that the most important factor that influenced Malaysian consumers' repurchase intention in online grocery shopping is satisfaction. Therefore, the results of this study could provide online grocery retailers an understanding on how Malaysian consumers response to online grocery shopping and allow them to improve their service so that consumer will gain more confidence to continue shopping groceries via online platforms.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Master Sains

NIAT PEMBELIAN SEMULA PENGGUNA TERHADAP PEMBELIAN BARANGAN RUNCIT DALAM TALIAN DI MALAYSIA

Oleh

ANIS SHAIRA SULASTRI

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Proses teknologi yang pesat dan perkembangan teknologi komunikasi dan maklumat (ICT) telah menjadikan kehidupan seharian kita lebih mudah dengan pelbagai cara terutamanya dengan adanya transaksi perniagaan dalam talian. Ketika perniagaan dalam talian terus berkembang, tabiat membeli-belah di kalangan pengguna Malaysia juga telah beralih daripada di kedai tradisional kepada kedai alam maya termasuk membeli-belah barangan runcit. Trend penghantaran barangan runcit terus ke depan pintu disebabkan ianya mudah dan dapat menjimatkan masa. Selain itu, pembelian barangan runcit dalam talian telah mengalakkan pengguna untuk membeli-belah dalam talian bagi memenuhi keperluan barangan isi rumah mereka kerana pengguna mendakwa aktiviti membeli barangan runcit di kedai tradisional dianggap sebagai suatu tekanan. Oleh itu, kemajuan Internet sepatutnya dapat meningkatkan kesetiaan pengguna dan menggalakkan mereka untuk terus membeli barangan runcit dalam talian di Malaysia. Namun, kajian sebelum ini telah menunjukkan bahawa barangan runcit dalam talian tidak dibeli secara konsisten oleh pengguna di Malaysia disebabkan beberapa alasan seperti kualiti yang tidak konsisten, caj penghantaran yang tinggi dan kekurangan ciri-ciri deria. Walaupun terdapat beberapa masalah yang dihadapi oleh pengguna, masih ada di antara mereka tetap meneruskan pembelian barangan runcit dalam talian dan permintaan bagi industri ini masih berkembang. Justeru, kajian ini memberi tumpuan kepada pengguna yang telah berpengalaman membeli barangan runcit dalam talian dengan tujuan untuk mengetahui niat pembelian semula pengguna di Malaysia terhadap pembelian barangan runcit dalam talian.

Kajian ini dijalankan di kawasan Lembah Klang dengan responden berjumlah 521 orang. Data dikumpul dengan menggunakan soal selidik dalam talian yang diedarkan melalui mel elektronik dan mesej peribadi kepada responden yang terpilih. Data yang telah dikumpul kemudiannya dianalisis menggunakan analisis deskriptif, analisis kuasa dua, analisis faktor dan analisis regresi berganda. Pertama, analisis deskriptif

digunakan untuk menentukan ciri-ciri sosio-demografi pengguna dan pengalaman mereka membeli-belah barangan runcit dalam talian. Analisis khi-kuasa dua digunakan untuk menguji hubungan antara ciri-ciri sosio-demografi dengan niat pembelian semula terhadap membeli-belah barangan runcit dalam talian. Seterusnya, analisis faktor digunakan untuk mengetahui faktor-faktor penentu yang mempengaruhi niat pembelian semula terhadap membeli-belah barangan runcit dalam talian. Akhir sekali, analisis regresi logistic binari digunakan untuk mengkaji faktor yang paling mempengaruhi pengguna dalam niat pembelian semula terhadap membeli-belah barangan runcit dalam talian.

Hasil analisis deskriptif menunjukkan bahawa kebanyakan pembeli barangan runcit dalam talian adalah wanita dan sebab mereka memilih untuk membeli-belah barangan runcit dalam talian adalah kerana mudah dan menjimatkan masa. Hasil analisis khi-kuasa dua menunjukkan bahawa jantina, umur, status perkahwinan, sektor pekerjaan, jawatan dan bilangan isi rumah mempunyai hubungan yang signifikan dengan niat pembelian semula pengguna terhadap membeli-belah barangan runcit dalam talian. Selain itu, keputusan analisis faktor mengenal pasti lima faktor iaitu *persepsi kegunaan, kepuasan, persepsi risiko, persepsi akses maklumat dan persepsi kemudahan penggunaan* sebagai faktor yang mempengaruhi niat pembelian semula pengguna terhadap membeli-belah barangan runcit dalam talian. Selanjutnya, hasil analisis regresi logistik binari menunjukkan bahawa *kepuasan* adalah faktor yang paling mempengaruhi niat pembelian semula pengguna terhadap membeli-belah barangan runcit dalam talian.

Kesimpulannya, hasil dari kajian ini menunjukkan dan membuktikan bahawa pengguna di Malaysia berminat untuk terus membuat pembelian semula barangan runcit dalam talian pada masa akan datang. Seperti yang telah dibincangkan, keputusan analisis mendedahkan faktor utama yang mempengaruhi niat pembelian semula pengguna terhadap pembelian barangan runcit dalam talian di Malaysia adalah *kepuasan*. Oleh itu, hasil kajian ini membolehkan peruncit dalam talian memahami tindak balas pengguna Malaysia terhadap pembelian barangan runcit dalam talian dan memberi peluang kepada mereka untuk menambah baik perkhidmatan supaya pengguna berasa lebih yakin untuk terus membeli-belah barangan runcit dalam talian.

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I certify that a Thesis Examination Committee has met on 21 April 2017 to conduct the final examination of Anis Shaira binti Sulastris on her thesis entitled "Consumers' Repurchase Intention in Online Grocery Shopping in Malaysia" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Master of Science.

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LIST OF ABBREVIATIONS

B2B	Business-to-Business
B2C	Business-to-Consumer
EPP	Entry Point Project
ETP	Economic Transformation Program
FAMA	Federal Agricultural Marketing Authority Malaysia
FMCF	Fast Moving Consumer Goods
GDP	Gross Domestic Product
ICT	Information and Communications Technology
ICTGDP	Information and Communications Technology Gross Domestic Product
ISP	Internet Service Provider
KMO	Kaiser-Meyer-Olkin
MCMC	Malaysian Communications and Multimedia Commission
OGS	Online Grocery Shopping
TAM	Technology Acceptance Model
WWW	World Wide Web

CHAPTER 1

INTRODUCTION

This chapter begins with a background of the study on online grocery shopping. It will cover online groceries in general and the development of online groceries around the world especially in Malaysia perspective. This chapter also includes the problem statement, research objectives and questions, and followed by the significance of this study and summary of this chapter.

1.1 Background of the Study

In this era of globalization, the term “world at your fingertips” is often being used to describe how powerful and important the Internet is in connecting people across the globe. As of June 2016, there were 3.6 billion Internet users worldwide with an estimate of 50.1% of the total world population (Miniwatts Marketing Group, 2016). The revolution of information and communication technology (ICT) particularly the Internet has significantly affected the society’s lifestyle and creates new opportunities in the business world. Hence, a cyberspace business has existed whereby all business transactions, goods and services marketing as well as supply chain management are done online with just a click. Besides, the increasing numbers of Internet users have created consumers’ attention and shifting their purchasing power to shop online.

E-business and e-commerce are some of the commercial terms that are commonly used to describe online business or online retail activities. According to Omar and Anas (2014), e-commerce is described as the process of buying, selling, transferring or exchanging products, services or information via computer networks, including Internet. The most well-known e-commerce among people is business-to-consumer (B2C) category. Therefore, the changing lifestyle of consumers and increasing urbanization have contributed to the online shopping phenomenon. The online platform nowadays has started to replace the traditional market and this requires consumers to change their buying habits and patterns extensively from searching for products’ information to transaction and purchasing process as well as logistic issues. As online business continues to grow, online shopping among Malaysian consumers is ready for a significant growth whereby the popularity is rising and increasingly adopted by the society. A survey from Statista (2016) has shown the top three most popular online shopping categories that have been purchased by Malaysian online consumers in 2014 were flight tickets followed by hotels and apparels. Among products purchased online, grocery retailers have received the most attention in the past few years (Morganosky and Cude, 2000; Kurnia and Chien, 2003; Kurnia and Schubert, 2004) and one of the embarking trends growing in Malaysia.

According to Kurnia and Chien (2003), online grocery shopping can be referred as consumers by simply clicking the mouse button to purchase grocery products via retailers’ websites and subsequent delivery process will be made by these retailers. The

United States (US) is the first country that was introduced with online grocery shopping in the late 1980s and later it spread into other countries in Europe, Australia and Asia (Morganosky and Cude, 2000; Galante *et al.*, 2013; Cosseboom, 2015). Online grocery shopping had been enjoying a strong growth in Western countries and it is predicted to continue to grow more rapidly in the future. The trend of having groceries delivered at doorsteps is gaining popularity due to its convenience and time saving especially among urban dwellers and young generations who are facing busy routines, apart from the increasing usage of mobile devices that can connect to the Internet. Meanwhile, in Malaysia, it can be considered to be at infant stage of development in online grocery shopping and the acceptance among consumers is still slow even though most of them have experience in online shopping for other products or services. Many consumers are still indifferent about the concept of online grocery shopping as a substitute of their traditional way of purchasing groceries. However, experienced users of this modern facility especially those whom are purchasing fresh agricultural products generally have received positive reviews (Safari and Masdek, 2015).

1.2 Online Grocery Shopping: Global History

Online grocery shopping has become a part of consumers' lifestyles due to hectic routines, especially for those who work and live in urban areas. This fact is being supported by the report from Euromonitor (2012) which indicated that the availability of online business often located in urban areas of developed countries because of sufficient Internet infrastructure facilities and supplies. In Western countries such as United States (US) and United Kingdom (UK), online grocery has been practiced since the past few decades. Since then, the other nations such as France, Sweden, Australia and a few Asian countries have followed the market trend and many big grocery retailers have appeared. According to Halzack (2015), the annual growth rate of online grocery across the world is quite small compared to other online segments but still on the rise with 14% over the last five years. Meanwhile, Conroy *et al.* (2013) reported that online grocery sales are expected to grow from 67% to 158% in 2016 regardless of the fact that there are consumers who still prefer to get fast moving consumer goods (FMCG) through traditional shopping alternative.

In the US, Peapod.com was the first successful online grocery store in 1989 and later multiple companies have ventured as pure web-based grocers such as Streamline, Netgrocer.com and Webvan.com (Kurnia, 2003). However, the great optimism towards online grocery industry in the US had been replaced with skepticism when Webvan.com has dealt with failure and bankruptcy during 2001 due to financial problem and inability to sustain the business model (Ghazali *et al.*, 2006; Kee and Wan, 2004 & Al-Nawayseh, 2012). Currently, the US online grocery market generated sales worth about 6.5 billion US dollars in 2013, up from 6 billion US dollars in 2012 (Statista, 2016). The statistics also show that 14% of the US consumers have shopped groceries online in 2012. As compared to UK, US are still catching up with this concept.

In contrast with US, grocery and food delivery companies in UK are linked with their customers by using the Internet effectively. The Institute of Grocery Distribution (2016) reported that online grocery market in UK is the world's second largest and growing to reach \$28bn (£17.2bn) by 2020. This was driven by the grocery retailer innovation to make this shopping alternative more convenient as well as demand from the shoppers. A research from Mintel (2016) also revealed that 29% of UK online grocery shoppers are increasing their groceries shopping via online recently. Major players of online grocer in UK are Tesco, Asda, Sainsbury's and Ocado, where currently Tesco is the biggest online grocery retailer in the world and the most successful in the UK (Warschun, 2012; Al-Nawayseh, 2012). Meanwhile, other European countries are also beginning to follow its lead. For example, in Sweden, there is a growth of online grocery shopping penetration among Swedish from 17% in 2013 to 22% in 2014 (Statista, 2016), while Dutch grocery shoppers reported that 15% of them had occasionally purchase groceries online in 2014 with a rise of 4% in 2013 ("Online grocery shopping", 2015). In 2013, 1.9% of Australians did their groceries shopping online in average of four week period, up from 1.6% in 2012 (Morgan, 2014). There are two major supermarket chains in Australia that are offering an online grocery shopping service to consumers such as Woolworths (Safeway) and Coles (Kurnia and Schubert, 2004).

E-commerce and online grocery market industry in Asia-Pacific region are the largest online market in the world. The top 10 online grocery markets are in Asia, with China at the top, followed by Japan on the third place and South Korea on sixth (Institute of Grocery Distribution, 2016). China has lead over US and UK as the world's biggest online grocery market and is set to be worth almost \$180bn by 2020 (Institute of Grocery Distribution, 2016). Easy access to Internet through smart phones and other electronic devices have encouraged Chinese people closer to grocery websites and commit to online shopping. Besides that, most online sales in China take place through digital marketplaces such as Alibaba's business to consumer site known as Tmall. In Japan, online grocery services have become available in most parts of the country, including rural areas (Kashiwagi, 2014). Seiyu Inc's "Net Super" is the first online grocery in Japan, was launched in 2000. It then was followed by (Ito-Yokado) Net Super and an entrepreneurial online grocery known as Oisix which focuses on organic and low-pesticide products. (Ito-Yokado) Net Super is the biggest and most successful online grocer in which currently they are expanding their operations to urban and rural areas (Kashiwagi, 2014). While in South Korea, the frequency of buying groceries online is proceeding to rise from seven times a month to nine times a month in South Korea with 80% of their grocery shoppers which have purchased groceries online regularly in 2012 (Kinthaert, 2014). An innovative online grocery shopping called Home Plus, co-owned by Tesco and Samsung, offers a virtual grocery store on the walls of subway stations in 2011 (Desai *et al.*, n.d.). This concept allows consumers to scan codes on display item by using their smart phones and automatically drop products into their carts via online (Warschun, 2012).

Southeast Asia countries also have started operating their local online grocery shopping sites. For example, Singapore has created the first online grocery store in 1997 known as Cold Storage followed by other local online grocery market such as NTUC FairPrice and E-Mart (Leng, 2001). Online grocery shopping in Singapore has experienced a rise of demand in 2003 due to the H1N1 flu or SARS infection (Junhong, 2009). It was

reported that the online grocer, NTUC FairPrice, has an increase in their online sales as much as 300% within a week at the peak of the outbreak (Kee and Wan, 2004). Recently, Redmart is the established online grocery company in Singapore. Indonesia is also among Asian countries that have no exception in developing online grocery industry. According to Cosseboom (2015), an Indonesia-based grocery delivery mobile application known as HappyFresh has boost online grocery in Asia by rising up to US\$12 million and decided to expand the service to Taiwan and Thailand.

1.3 Internet, E-commerce and Online Shopping in Malaysia

In Malaysia, the Internet age began in 1990 by the first Internet Service Provider (ISP), known as JARING. Later in 1996, a subsidiary company of Telekom Malaysia Berhad called TMNET has took over and became the second ISP in Malaysia that was launched in the year 1995 (Khatibi *et al.*, 2006). During the 8th Malaysian plan, the government has announced to make Malaysia as a major global ICT hub by upgrading infrastructures especially in rural areas to speed up the transmission. Besides that, Malaysian government has planned to give special attention in promoting and encouraging e-commerce as a new way to conduct business through digital network. Since then, the use of ICT in all sectors has been promoted aggressively by the government and the National Transformation Programme or Digital Malaysia was implemented to stimulate the development of the digital economy by 2020. In order to encourage Malaysians to use the Internet, the government had even set up 1 Malaysia Internet Centre, 1 Malaysia Community Broadband Library, 1 Malaysia Wireless Village and mini community broadband centre both in the West and East Malaysia (Malaysian Communications and Multimedia Commission, 2013).

According to Internet Live Statistics (2016), the number of active Internet users in the country has now exceeded 21 million, with penetration rate growth of 68.6% out of total Malaysia population. Thus, this has opened up opportunities and interest for Malaysian businesses to venture online as a part of their marketing strategies for either business-to-business (B2B) or business-to-consumer (B2C). In 2015, the Department of Statistics Malaysia reported that the most popular Internet activities by the users were participating in social networks with 84.3% and only 16.1% of them were doing e-commerce including purchasing or ordering goods or services.

The e-commerce in Malaysia is still considered as a new phase whereby the community still prefers to conduct business transactions directly without using ICT technologies. E-commerce is one of the government initiatives in Economic Transformation Program (ETP) which aims to promote the internet-based retail market, provide better broadband services, taking advantage on higher disposable income of the Malaysian population, and rapid growth of mobile devices in the country. According to the Department of Statistics (2016), the share of ICT to the economy is augmented to 17.8% in 2015 with ICTGDP and e-commerce contributed 13.1% and 4.7% respectively as can be seen in Table 1.1.

Table 1.1: Share of ICT Industry and E-Commerce to the Economy, 2010-2015

Year	2010	2011	2012	2013	2014	2015
ICT Industry	12.9	11.9	11.7	12.0	12.4	13.1
e-Commerce*	3.6	4.0	4.2	4.4	4.6	4.7
Contribution of ICT to economy	16.5	15.9	15.9	16.4	17.0	17.8

**Non ICT industry*

(Source: Department of Statistics, Malaysia (2016))

According to Figure 1.1 and 1.2, the value added of e-commerce also grew by 7.3% in 2015 which contributed RM68.3 billion compared to RM63.8 billion in 2014. In terms of Gross Domestic Product (GDP), the e-commerce amounted at 5.9% of share in 2015 compared to 5.8% in 2014. Furthermore, the non-ICT industries had dominated local e-commerce with 4.7% of market share, while 1.2% is from the ICT industry.

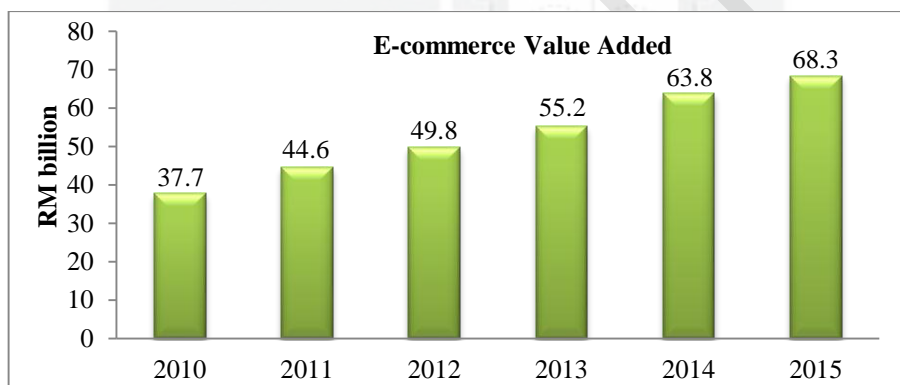


Figure 1.1: E-commerce Value Added, 2010-2015

(Source: Department of Statistics, Malaysia (2016))

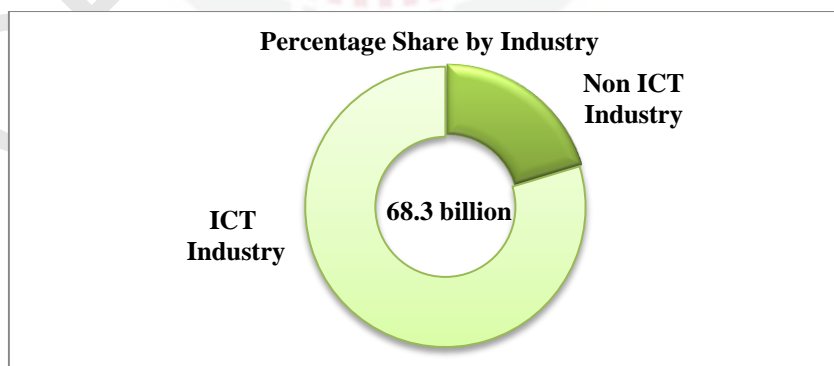


Figure 1.2: Percentage Share by Industry in 2015

(Source: Department of Statistics, Malaysia (2016))

Malaysian government is now targeting to double e-commerce contribution to the economy to RM211 billion within three years (New Straits Times, 2016). Through the 2017 budget, the Malaysian government had announced its intention to set up the first Digital Free Zone in the world. It is a plan to combine physical and virtual zones, with the addition of online and digital services to facilitate international e-commerce, and stimulate internet-based innovation (New Straits Times, 2016).

The development of e-commerce has opened new ways of doing business and brought many changes in consumers' shopping lifestyles. They are now increasingly becoming on-the-go- consumers. Thus, online shopping was introduced. Online shopping is gradually becoming a new trend for Malaysians since nearly three-fifths (3/5) of Malaysian consumers have purchased online within the last three years and almost half of them had done online shopping at least once a month (PwC Total Retail, 2016). Also, the total value of online shopping sales rose from RM1.82 billion in 2010 to RM5.76 billion in 2015. A statistic from postal delivery service in Malaysia, Pos Malaysia Berhad reported that online products that are delivered to customers have increased to 40 million in 2013 as compared to 29 million in 2011. There were 25-30% had been seen increased during festive seasons especially Hari Raya.

A survey from Malaysian Communications and Multimedia Commission (MCMC) (2016) had reported that the top three most preferred online shopping categories that are being purchased among Malaysian online consumers in 2016 are clothing, jewelries and accessories with 73.9% of respondents, followed by travel arrangements with 58.6% of respondents and top-up prepaid phone with 48.4% of respondents (Figure 1.3). Some of the online consumers were also interested in purchasing housewares including furniture and electrical appliances with percentage of 31.4% as well as groceries with 10.6% of respondents.

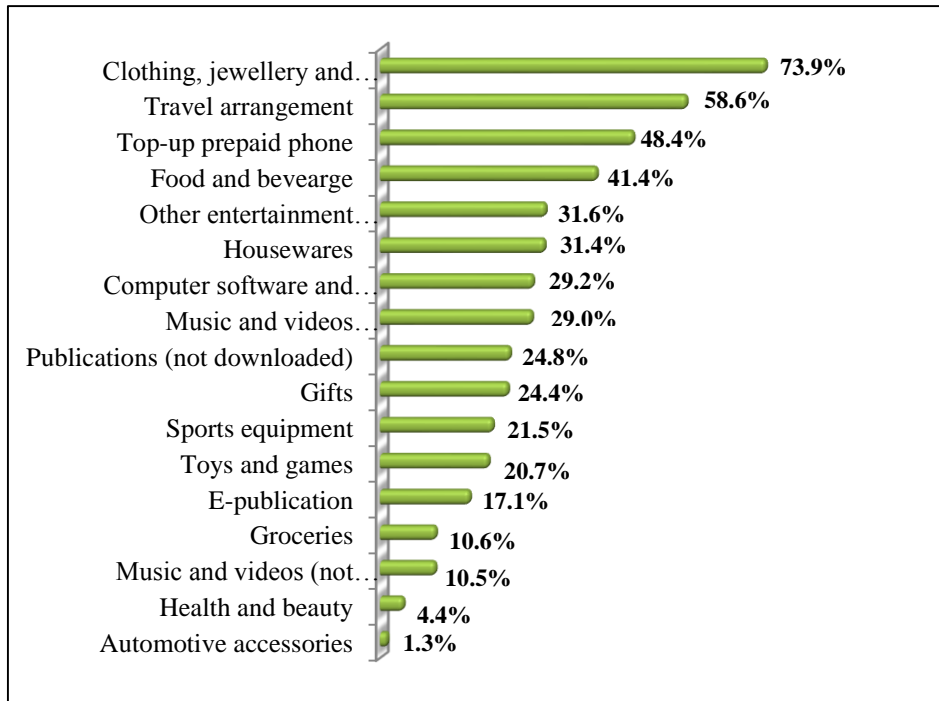


Figure 1.3: Percentage of Online Shopping Categories

(Source: Malaysian Communications and Multimedia Commission (MCMC) (2016))

Malaysians are found to obtain the product information by doing some researches before committing the actual purchase. This fact is consistent with the research done by Wong (2015), whereby it shows that 56% of consumers are found to have done research on groceries. Currently in 2016, mobile commerce (m-commerce) had booms in Malaysia and is set to grow 300% faster than e-commerce. Smart phones continue to lead as the device choice for Malaysian consumers to shop online (The Sun Daily, 2016). The online purchases can be done through bricks-and-mortar retailers such as Tesco as well as from pure-click online retailing corporations such as 11street.my. Overall, it can be seen that online retailing acts as a compliment or substitute to offline retailing (Rezaei *et al.*, 2014).

1.4 Online Grocery Shopping: Malaysian Context

The grocery retail industry in Malaysia has undergone a significant development and changes in order to continuously satisfy the consumers' basic needs for groceries. Currently, traditional supermarkets are being challenged by the wave of Internet grocery retailers. Consumers are embracing technologies that enable them to buy groceries with just a click rather than having to walk to bricks-and-mortar stores to get their daily grocery supplies. In Malaysia, the development of Internet has introduced a few grocery retailers and consumers to the concept of online grocery shopping. Such concept enables consumers to place their orders wherever they are and receive their

orders accordingly, while grocery retailers or marketers could expand their market without increasing the amount of brick store.

Specifically, the trend began in Malaysia in the mid-2000 whereby early e-grocer that has started this concept is known as PasarBorong.com (Paynter and Lim, 2001). This company provides service in delivering fresh seafood, meat produce and staple grocery goods straight to the customers' door steps within 24-hours of ordering. While other online grocers such as SubangGrocer.com, CGdeMart.com and Citraspicemart.com also following the footsteps by offering purchase perishable products (vegetables, meats, poultrys and fishes) and spices via Internet medium (Ghazali *et al.*, 2006; Zaini *et al.*, 2011). Unfortunately, online grocery shopping in Malaysia did not get off to a good start. This has been proved by the failure of the early online grocer, PasarBorong.com. During 2009, an online grocer that specifically delivers groceries to the residents and offices in the Klang Valley area was launched known as Presto Grocer. In 2010, Malaysian government had introduced the Economic Transformation Programme (ETP) which has 13 entry point project (EPP) and one of them is a virtual mall. Doorstep.com.my has been enlisted to be part of the EPP. However, both of the online grocers had stopped their operation and closed the websites. Year by year, advancement in mobile adoption and broadband penetration, increasing ICT knowledge among Malaysians as well as changing in consumer lifestyle, has provided an opportunity to boost local grocery market and motivate consumer to utilize online grocery shopping.

Online grocers in a present day offered much better services to their customers in terms of product quality, delivery area, promotions, security and safety of personal information and transactions as well as creating mobile applications. Tesco is one of the established e-grocery in Malaysia that offered online grocery home shopping service to the consumers. The service was launched on April 2013 which allowed consumers to purchase groceries directly from home. Currently, they have expanded their service not just in Klang Valley area but also in Johor Bharu, Penang and Seremban. Tesco Malaysia also provides website platform and mobile application make it easier for consumers to buy groceries online wherever they are, considering the domination of m-commerce which received much attention now. Other online grocery players are RedTick, GrocerExpress, HappyFresh and PasarTap. For example, RedTick is one of the pioneers of online grocery for Klang Valley dwellers since 2010. It offers personal shopper service to pick the groceries and provide 24 hours groceries delivery in specific areas such as Petaling Jaya, Kuala Lumpur, Sri Kembangan and Puchong. Meanwhile, HappyFresh was founded in year 2015 where they have become partners with offline supermarkets and enabled consumers to easily order via website and mobile apps. Currently in 2016, HappyFresh and Tesco have collaborated and joined aims to expand their grocery delivery service to the consumers. The joint venture occurs because HappyFresh is the first online grocery shopping platform and the fastest growing in Southeast Asia and Tesco Malaysia also is the leading hypermarkets in the country. Another on-demand grocery delivery service is known as PasarTap was launched on December 2015 which supplies consumers with farm-fresh produce and non-perishable products. PasarTap was partnering with Pasar Chow Kit, Mydin and AEON to obtain grocery supplies.

Online business for agro-based product has also entered the scenario. For example, Agrobazaar Online is a virtual marketing platform to find manufacturers, producers, suppliers and consumers of agro-based products, fisheries, livestock, crops, agro-services and agro-tourism. It was launched on December 2014 by the Minister of Agriculture and Agro-based Industries and managed by Federal Agricultural Marketing Authority Malaysia (FAMA). Buyers and sellers can make any business transactions involving agricultural products and obtain information about the latest market as well as entrepreneurship training and guidance through online.

Until today, most of the online grocers are trying hard to keep up with the trend and it is still possible to change the way consumers acquire their daily groceries instead of going to supermarkets, hypermarkets, wet markets or convenience stores. The process, mode of transactions and services of online grocery shopping also are the same with many other online shopping which considered as easy and hassle-free.

1.5 Advantages of Online Grocery Shopping

Shopping groceries in-store is often perceived as tiresome and stressful (Baheti and Kaushal, 2015) by consumers because of the daily basis process (Geuens *et al.*, 2003). There are a lot of advantages when consumers use online grocery shopping.

1.5.1 Convenience and Time saving

Convenience and time saving benefits are often associated with the use of online grocery shopping among consumers. For example, consumers in the US and Europe claimed that they purchase groceries online because of convenience and time-saving option (RetailNet Group, 2015; Burt *et al.*, 2015 & Statista, 2016). In addition, most Japanese also shop groceries online due to the convenience and comparable prices offered by the online grocers. A study conducted by Aylott and Mitchell (1998) stated that convenience when shopping online is related with non-monetary costs such as time, stress, effort and psychological cost. Online grocery store enables consumers to shop groceries from anywhere at any time because of the 24-hours daily operation (Noor *et al.*, 2011). Consumers who are busy with their schedules and who simply do not enjoy traditional shopping may value the convenience of online shopping. Online grocery shopping would release consumers' stress, as ordering groceries can be completed directly from home, office, on travel as well as mobile device and the transportation of goods will be done by the grocery store (Freeman, 2009 & Seitz, 2013).

E-groceries shopping are also convenience consumers in terms of hassle-free experience (Noor *et al.*, 2011). Consumers do not need to go through several processes that usually occur when making trips to physical store such as dressing up, worrying about traffic, finding parking space, dealing with crowds and queuing, and carrying heavy groceries home from the supermarket (Ramus and Nielsen, 2005; Arce-Urriza and Cebollada, 2009 & Noor *et al.*, 2011). While in terms of cost, it can reduce

consumers' travelling costs including petrol fuel, toll and parking charges (Bell *et al.*, 1998) although delivery charge often associated with the costs to be incurred by consumers when purchasing groceries online. Besides that, Morganosky and Cude (2000) also found shopping groceries via online is convenient for consumers who are facing physical or constraint issues such as disabilities and handicapped people. Consumers are now willing to pay extra for the convenience as long as they do not have to visit the physical store (Burt *et al.*, 2015).

Online grocery shopping has the potential to develop time saving features to ensure consumers are easy to repeat purchases. Most online grocers enable consumers to create their own list once they place order and the list can be brought up the next time they shop (Rousu, n.d.). Bannister (2002) also state that the online shopping carts allow consumers to recognize the items they have visited before and easily access previous purchases on their repeat visit. Furthermore, busy consumers who have ordered repeat items through Internet will have more time for shopping specialty items at the supermarket (Ghazali *et al.*, 2006). This shopping alternative also saves consumers time by avoiding several processes such as planning, parking, transportation and waiting time (Al-Nawayseh, 2012). Huang and Oppewal (2006) claimed that consumers do not mind paying more for a delivery charge rather than they have to waste time going to the grocery store.

1.5.2 Wide Selection

Some of the benefits of using grocery shopping online are that consumers are offered a wide selection of grocery products and in-depth product information by the grocery websites. According to Yunus *et al.* (2016), the main reasons online grocery shopping are raising up among consumers not just convenience and time saving factors but also because of variety product selections. Generally, all items in the supermarket shelves are sold online from range of fresh produces such as fishes, fruits and vegetables to household products including baby food and laundry. In addition, online grocery sites also have emphasized on selling imported and organic produce besides fresh local grocery products.

A survey conducted by Warschun (2012) indicated that more than 40% of respondents shop online to get a product that is rarely found in traditional grocery store. Besides offering wide range of products, online grocery shopping also allow consumers to seek, compare, gather and access information more easily and detailed as compared to physical grocery store (Lynch and Ariely, 2000). Also Mintel (2015) reported that 32% of British preferred shopping groceries online because of wider variety of delivery slots available.

1.5.3 Avoidance of Impulse Buying

Impulse buying refers to an unplanned decision on purchasing a product. Online grocery shopping benefits consumers in reducing the tendency of impulse purchase that

usually happens when shopping groceries at retail stores. It will allow consumers to focus strictly on their grocery lists and reduce the total cost of their groceries (RetailNet Group, 2015). According to Swedowsky and Burmaster (2009), the total in groceries shopping online carts could avoid consumers in making unnecessary purchases and help them to stay on budget. This happens to Europeans whereby they choose to shop groceries online as an effort to cut costs in terms of avoiding impulse purchases.

E-grocery shopping also helps consumers in planning and organising their grocery products that they need before making a purchase. This is also supported by Morganosky and Cude (2000) whereby the primary reason for buying groceries online because of inability to avoid impulse buying when shopping grocery in-store. In addition, many consumers find that online grocery shopping will save their money not just in reducing petrol fuel cost, but also saves them from spending on unnecessary items on impulse which usually happen when going to physical stores (Institute of Grocery Distribution, 2016). However, in some cases, impulse buying considered an important attributes for some consumers where they can purchase grocery products spontaneously and immediately (Ramus and Nielsen, 2005).

1.6 Disadvantages of Online Grocery Shopping

Compared to shopping at supermarkets, online environment presents consumers with different challenges when using online shopping system. The reasons that inhibit consumers to use online environment to get their groceries are sensory and product quality, delivery concern, security and privacy.

1.6.1 Sensory and Product Quality

Groceries especially fresh produce items like fishes, meats and fruits are considered as tangible and perishable products. Organoleptic experience (see, touch, smell, feel, taste) (Ghazali *et al.*, 2006) occurs in selecting those items which consumers generally prefer to physically examine the quality of the products. This however is difficult to evaluate via online because it depends on their freshness (Seitz, 2013; Scott and Scott, 2008). Due to the lack of availability of certain sensory attributes of grocery products in online grocery web stores, the adoption of online grocery shopping among consumers is relatively less popular (Tsydybey, 2014). Ghazali *et al.* (2006) also indicated that Malaysian consumers were still doubtful about buying fish online due to “high-touch” item where consumers need to determine the freshness, the colour and the redness of the fish by themselves. Even though the product freshness and quality may guarantee by some online grocery retailers, preferences still vary among different consumers (Huang and Oppewal, 2006).

Qualitative research made by Ramus and Nielsen (2005) also stated consumers expressed a concern for the inability to sense and select the product of interest. They also added consumers perceived the service as negative because they cannot supervise the quality of the goods and the safety of the transportation by themselves, thus the risk of getting damaged or wrong goods delivered are higher. Thus, quality, losses, cost of

operation and logistics are among the concern if grocery retailers decide to sell fresh products throughout the country (Safari and Masdek, 2015). However, for less perishable grocery goods the sensory characteristic is not so important when evaluating the quality of product because most of the goods are sold in standardized packaging compared to fresh products (Kang *et al.*, 2016).

1.6.2 Delivery Concern

There is no doubt that additional delivery charges of the product purchased always occur in any online shopping. According to Huang and Oppewal (2006), the delivery fee that is charged by grocery retailers is one of the reason consumers hesitate to shop groceries online. Zaini *et al.* (2011) also agreed that the low uptake of online grocery shopping because of the delivery charge and it is hard to change the consumers shopping habits. In addition, consumers are not willing to pay extra and the price are unlikely to be competitive on the online grocery web due to the high operational cost in the delivery charged compared to regular supermarkets (Kamarainen *et al.*, 2001; Zaini *et al.*, 2011). Thus, consumers who are conscious of their budget and low spending groups would not easily embrace the online grocery shopping.

Besides delivery charges, consumers also have a great concern towards the delivery process of online grocery shopping. In brief, consumers expect speedy delivery of groceries and other perishable products because they do not always plan their meals ahead and it is hard to predict daily schedules (Choi, 2013). According to Hand *et al.* (2008), the main reasons consumers discontinuing online grocery shopping is because of unsatisfactory deliveries (delayed delivery process) and incorrect orders. Ghazali *et al.* (2006) added a large percentage of consumers do not buy online because they cannot get their orders immediately as expected.

1.6.3 Privacy and Security

Consumers are also concern about online security and privacy which can affect them to do online shopping. According to Kempiaik and Fox (2002), generally, security issues over the internet involve transfer of personal and financial information such as addresses, telephone numbers and credit cards while privacy concern relate to the use of online consumers' demographic and taste-related data. As a consequence, those marketing firms will use such information for marketing analysis. These kinds of issues can limit consumers' intention to purchase from the website as they claimed that there are a number of online shoppers who have been trying to avoid purchase online due to security of their sensitive information. A research done by Ghazali *et al.* (2006), shows that consumers are concerned about the security and giving personal details when purchasing fish online. Other research found that online grocery shoppers not just concerned about online payment security system, but they also worry on the strangers who deliver their groceries to their homes (Morganosky and Cude, 2000).

1.7 Consumers' Online Repurchase Intention

E-commerce market in Malaysia has been showing impressive growth due to the escalating number of internet services and use of mobile device among consumers. Evidence shows that online retail sales in 2016 has boost to RM 2.4 billion compared to RM 1.0 billion in 2011 with 18.5% of average annual growth rate (Euromonitor, 2016). The growth rate of online sales is significantly higher than store-based retail sales although it only accounted for 1-2% of Malaysia's total retail sales. According to Mainspring and Bain & Company (2000), the particular online store can gain their profit if the customer makes purchase at least four times from them. The profit may possibly increase from 25% to 75% based on the growth rate of 5% in consumer's repurchase intention (Lee *et al.*, 2009). Hence, the success of business is based on the consumer's loyalty because it is known that the cost of keeping present consumers is much lesser than attracting new consumers. From the marketing point of view, one of the critical success factors for business or retailer is relying on consumers' repurchase intention. This is because it helps the marketing manager to forecast sales in several marketing activities such as introduction of new products, consumers' demand for current products, the effectiveness of advertising and service management (Ibzan *et al.*, 2016).

Consumers' repurchase intention has become the main target for companies in order to further strengthen the long-term relationship with customers. It occurs when consumers have the tendency to repurchase a product or service from the same company primarily based on loyalty or having a great experience from their previous purchase. While, Seiders *et al.* (2005, p. 26) defined repurchase intention as "Consumers' engaging in next repurchase behavior according to their self-reported likelihood". Therefore, it can be said that consumers' online repurchase intention being considered as contributing to the success and evolution of online shopping. The formation of consumers' online repurchase intention is based on combination of information system theory and marketing theory whereby the user acts as a consumer as well as an electronic commercial website user (Wen *et al.*, 2011). In the nature of online shopping, consumers evaluate their online repurchase intention according to the various perception such as satisfaction, enjoyment, usefulness, trust, loyalty, navigation and the ease of using website. Referring to Ibzan *et al.* (2016), previous researchers had discussed a good quality service offered by an organization was the major influence of consumer repurchase intention. While Voss *et al.* (2010) claimed firms believe that their ability to deliver with good service to customer and make them satisfied are the major contribution to consumer's intention to repurchase.

Particularly, online grocery shopping is an alternative way of getting daily grocery requirement because it can reduce physical effort, time saving, convenience and so forth. A report from Unata (2016) on forecasting grocery e-commerce indicated that there is an increasing rate of online grocery shopping repurchases intention whereby nine out of ten shoppers who bought groceries online in 2015 are planning to order again in 2016. Online grocery shopping has come a long way in a short time but the grocery retailers are still facing the challenge to convert those online grocery shoppers as regular buyers even though they have registered with the few main online grocery players (Kesharwani *et al.*, 2017). A longitudinal study by Morganosky and Cude

(2000) has found that one-third of online grocery shoppers refused to continue an online purchase due to such causes; delay online system, delivery concern, the cost of services and the consumer moves to another neighborhood. Anyhow, a study on consumers' repeat online grocery buying by Hansen (2007) found that experienced consumers may continue to do online grocery shopping in future when they obtain positive attitude towards using the system such as enjoyment, reduced physical effort, satisfaction and low online complexity. All in all, consumers' intention or willingness to repurchase online in the future is driven by the positive experience in online purchase and positive attitude towards online shopping.

1.8 Problem Statement

Online grocery shopping has encouraged consumers to shop online to fulfill their daily grocery needs because people claimed that grocery shopping activity at retail stores is stressful and tiring (Kaushal and Baheti, 2015). Besides, consumer also recently has changed the way they think and behave towards buying decision. Yee (2016) indicated that there are 15 online grocers who actively provide their services to consumers. Undoubtedly, online grocery shopping has delivered various benefits to consumers, especially in getting perishable and non-perishable products without having to physically present at the store.

However, previous studies have shown that online groceries are not purchased consistently by consumers compared to other online products or services. There are a few factors that have been observed as reasons for the low uptake in online grocery shopping. Consumers might have some skepticism about the quality of products, the delivery charges and sensory characteristics problem. It is supported by The Nielsen Company (2015), reported that only 9% of Malaysian consumers are willing to use the virtual supermarket for their grocery shopping. In e-commerce industry, many internet retailers are facing the challenges to retain their existing online customers as well as to attract the new ones to reach sales growth. This happened to the online grocery retailers whereby the issues of maintaining and developing loyalty among online consumers is still the biggest consideration even though they have provided convenient services to the consumers. Meanwhile, they are also trying to widen their opportunities and create a competitive advantage over competitors. Furthermore, the cost of finding new customer is much more expensive than keeping the current customer according to previous study (Gefen, 2000).

The above mentioned online grocery environment manifests a steady demand for online grocery services, albeit the slow growth. There exist certain segments of consumers who purchase and repurchase online. Thus far, it is unclear what demographically characteristics of consumers that represent this segment are. At the same time, factors that are influencing them to engage in online grocery purchase and repurchase need to be explored and identify. Hence, this research attempts to address the above knowledge gaps which findings could help online grocers to formulate effective marketing strategies to attract more consumers towards using online grocery and maintain the consumer's loyalty as well as helping the government to develop appropriate interventions to expedite the growth of the sector.

1.9 Research Questions

In this study, there are four specific research questions being raised which include:

- a) What is the consumers' experience regarding online grocery shopping?
- b) What is the association between the consumers' socio-demographic characteristics and their repurchase intention in online grocery shopping?
- c) What are the factors influencing the consumers' intention to repurchase online grocery shopping?
- d) What are the most influential factors that influence consumers' repurchase intention in online grocery shopping?

1.10 Objectives of the Study

The main objective of this study was to determine consumers' repurchase intention in online grocery shopping in Malaysia.

The specific objectives of this study are:

1. To analyse consumers' socio-demographic characteristics and their experience in online grocery shopping.
2. To test the association between socio-demographic characteristics of consumers' and their repurchase intention in online grocery shopping.
3. To explore factors that influence consumers' repurchase intention in online grocery shopping.
4. To investigate the most influential factors of the consumers' repurchase intention in online grocery shopping.

1.11 Significance of the Study

In terms of e-commerce studies in Malaysia, most of the researchers are basically conducting a research regarding online shopping but not many are narrowed down to online grocery shopping. This type of research is uncommon in Malaysia, might be because online grocery shopping has not really taken off among consumers'. Besides, there are not much grocery retailers that are providing services and online grocery retailers are currently facing the challenge to get people to adapt to online grocery shopping. However, these studies are often conducted in countries such as US, Europe and Australia because of its tremendous growth in online grocery shopping. Therefore, this research hopefully will give contribution to the online grocery industry in Malaysia by providing useful insight for the consumers, online grocery retailers and the policy makers. Information obtained will be significant to the following group:

1.11.1 The Consumer

Most consumers would rather do their grocery shopping in traditional way by visiting the store, pick the groceries by themselves and make the transaction face-to-face. Hence, this study will build consumers' confidence to use the online grocery shopping system and educate consumers on how to fully utilize this system. Besides that, this study will benefit consumers to have more knowledge about online grocery shopping from experience consumers.

1.11.2 The Grocery Retailer

The result can guide existing online grocery retailers to understand how Malaysian consumers respond to online grocery shopping. In addition, it allows retailers to meet consumers' need and improving service by identifying issues and the benefits consumers derived from the use of online grocery system. This will lead to better solutions for online grocers to gain the consumers' confidence. Besides that, this research can encourage local grocery retailers, supermarkets and even hypermarkets to expand business to online grocery service.

1.11.3 The Policy Maker

Normally, grocery goods involve essential commodities with categories consisting of food and non-food items. In order to emphasize modern technology and widen the market access of grocery products to all urban and rural consumers, new policies related to online grocery shopping can be set up or improve by incorporating various ministries such as Ministry of Communications and Multimedia Malaysia, Ministry of Agriculture and Agro-based Industry, and Ministry of Domestic Trade, Co-Operatives and Consumerism.

1.11.4 The Theoretical Framework

Since there is a little empirical research on online grocery shopping in Malaysia especially those related to consumers' experience and repurchase intention, thus, the proposed framework or model can extend for further research and contribute to the body of knowledge on consumers' behaviors towards online grocery shopping.

1.12 Summary

This chapter provides details of the background of the research study on brief information regarding online grocery shopping in Malaysia and the other parts of countries, issues and pros and cons of using online grocery system among consumers as well as the online repurchase intention itself. Besides, it describes the problem

statement which shall be answered in research questions and objectives of the study. The development of hypotheses shall be tested and tallied to the results from the surveys that have been carried out.



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