

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter begins with the research framework on the consumer adoption of online grocery shopping. There is followed by the literature review for each of the constructs, namely perceived convenience, perceived information accessibility, perceived order accessibility, perceived risk, perceived enjoyment and social factors. This chapter also reviews the relationship between the constructs and consumer behaviour of online grocery shopping. It also includes the development of hypotheses for each of the constructs.

2.1 Research Framework

The rationale behind the research framework is to examine the factors influence consumer attitude towards online grocery shopping and identify the future online grocery buying intention

In general, a research framework has been proposed combining several theoretical concepts which include the technology of acceptance model (TAM)

(Liu, X. and Wei, K-K., 2003), theory of adoption of innovation (Verhoef, P. C. and Langerak, F., 2001; Black, N.J., Lockett, A., Winklhofer, H., and Ennew, C., 2001), the transaction cost perspective (Keen, C., Wetzels, M., Ruyter, K., and Feinberg, R., 2004; Liang, T-P. and Huang, J-S., 1998), the perceived risk perspective (Lim, N., 2003; Forsythe, S.M. and Shi, B., 2003), the theory of reasoned action (Cho, J., 2004) and the theory of planned behaviour (Shim, S., Eastlick, M. A., Lotz, S. L., and Warrington, P., 2001). At the same time, another two additional constructs have been proposed which are called perceived enjoyment and social factors (derived from the theory of reasoned action) (Cho, J., 2004).

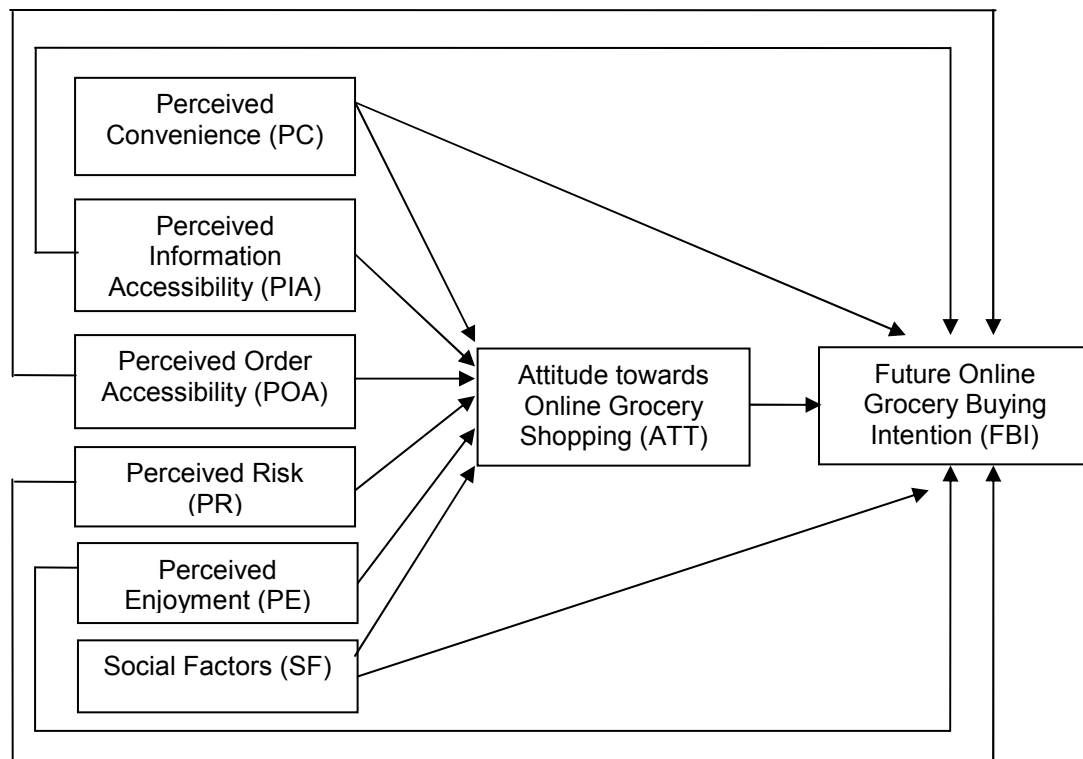


Figure 2.1 Research framework for understanding consumer online grocery shopping behaviour

Davis, F.D., Bagozzi, R.P. and Warshaw, P. R. (1989) developed the technology acceptance model (TAM) based on the theory of reasoned action (Ajzen, I. and Fishbein, M., 1975) to describe technologies usage behaviour. The technology acceptance model (TAM) is the most influential and widely adopted to foresee the consumer acceptance of technologies among all the theoretical concepts (Saga, V. L. and Zmud, R. W., 1994). Thus, this study has adopted the technology acceptance model (TAM) with minor modifications to examine the consumer acceptance of online grocery shopping in Malaysia.

The research framework is adopted from the study by Hansen T. (2005). The researcher established a framework for understanding consumer adoption of online grocery shopping to study the impact of future online grocery buying intention and consumer attitudes towards online grocery shopping in Sweden. The model suggested that perceived convenience (PC), perceived information accessibility (PIA), perceived order accessibility (POA), perceived risk (PR) are the factors that influence consumer attitude towards online grocery shopping (ATT) and future online grocery buying intention (FBI).

The research framework, as shown in Figure 2.1 is proposed in this study where perceived convenience, perceived information accessibility, perceived order accessibility, perceived risk, perceived enjoyment and social factors are the determinants of consumer attitude towards online grocery shopping while future online grocery buying intention is the consequences of attitude towards online

grocery shopping. Every element in each of the factors will be discussed in more depth in the following section.

2.1.1 Perceived convenience

Convenience involves monetary cost and other forms of non-monetary cost such as time, effort and stress (Aylott, R. and Mitchell, V-W., 1998; Cassill, N.L., Thomas, J.B. and Bailey, E.M., 1997). Berry, L.L., Seiders, K. and Grewal, D. (2002) divides convenience into service convenience and shopping convenience. The purpose of both type of convenience is to reduce the opportunity cost of effort and time which involved in shopping activities. According to Ramus, K. and Nielsen, N. A. (2005), consumers normally think that online grocery shopping is a new way to purchase grocery products. Online grocery fits the consumer's life-style and everyday life (Kuuva, S., 1998). Consumers always believe that purchase via online normally provide convenience and increase the level of job performance (Davis et al., 1989).

Based on the large scale research tracking studies in the supermarket industry which conducted by Ring, L. J. and Tigert, D. J. (2001), price is always the most important and top consideration when they choose the retail store. Consumers normally compare the price of groceries offered by online retailers and traditional retailers. Based on previous research, groceries from the virtual store have the possibility of having lower price than the traditional retail store due to low

operation costs and the simplification of the operation activities (economic advantage) (Anckar, B., Walden, P. and Jelassi, T., 2002; Kaufman-Scarborough, C. K. and Lindquist, J. D., 2002; Keh, H. T. and Shieh, E. 2001; Raijas, A. 2002).

Besides the price, consumers are concerned about the travelling costs such as petrol and parking charges when travelling from home to the retail stores (Bell, D. R., Ho, T-H. and Tang, C. S., 1998). The other costs incurred in the online grocery shopping are the delivery cost. Bell et al. (1998) agreed that delivery costs playing an important role in order to create the shopper's inherent preference and historic loyalty to the store. Besides that, consumers are not willing to pay premium for delivery of everyday necessities such as groceries (Baker, M., 2000).

An other important factor influencing the consumer's choice on the retail store include customer service, location of the store and product assortment offered by the stores (Raijas, A., 1997; Marjanen, H., 1997; Spare, H. and Pulkkinen, M., 1997). Online groceries basically provide the convenience to customers where the buying process of grocery products can be done at home and they only have to log on to particular webpage and click on it to make order, selection, transportation and packaging on grocery products (Ramus, K. and Nielsen, N. A., 2005).

When the ordering process is completed, the groceries will be delivered at the consumers' doorstep and consumer will judge the quality of the products and decide on accept or return the delivered goods. Obviously, the whole process provides the benefit of convenience and time saving when consumers procure via online groceries when compared with the physical store (Morganosky, M. A. and Cude B. J., 2000; Ramus, K. and Nielsen, N. A., 2005; Park et al., 1998).

Based on the focus group interview performed by Ramus, K. and Nielsen, N. A. (2005), consumers mentioned that the important benefit of online store is the operation hours. Online grocery stores are open 24 hours a day and 7 a week and consumers can shop anytime of the day or night and anywhere. Online shopping also allowed consumers to avoid the traffic jam during rush hours, trolley raids and long queue while make payment, carrying the grocery goods from supermarkets and look for parking space when driving the car to supermarket (Ramus, K. and Nielsen, N. A., 2005). Consumers can manage their time easily based on their flexibility. Anckar et al. (2002) argued that most consumers dislike shopping for groceries and they are not willing to spend time on grocery buying process.

Based on the concept of convenience as discuss earlier, perceived convenience can be considered as a silent determinant of individuals' acceptance and willing to purchase groceries via online (Yoon, C. and Kim, S., 2005). The researcher also mentioned that perceived convenience basically is the extended model of

technology acceptance model (TAM). Based on technology acceptance model (TAM), it proposes that perceived usefulness and perceived ease of use are important factors for the usage of a technology innovation (Davis et al., 1989). Perceived usefulness is defined as “the degree to which a person believes that using a particular system would enhance his or her job performance” while perceived ease of use refers to “the degree to which a person believes that using a particular system would be free of effort” (Davis et al., 1989, p.320). Perceived convenience is adapted from the attributes of perceived usefulness.

According to Yoon, C. and Kim, S. (2005, p.104), three dimensions of perceived convenience has been defined and explained as below:

- Time dimension: The degree of perception held by someone that he/she can use internet to complete their job at a time that is more convenience for them.
- Place dimension: The degree of perception held by someone that he/she can use internet to complete their job at place that is more convenience for them.
- Execution dimension: The degree of perception held by someone that he/she finds internet convenience in the process of completing his/her work.

2.1.1.1 The relationship between perceived convenience and attitude towards online grocery shopping

Online grocery not only brought the advantages for the consumers, retailers basically enjoy the benefits since they are using advanced technologies to support the online groceries. Retailers can keep track on consumer buying process, understand consumer behaviour, shopping frequency and strengthen good relationship with customers to maintain and increase the sales volume (Raijas, A., 2002).

Consumers strongly belief that time and energy were saved when the goods was delivered to their doorsteps (Ramus, K. and Nielsen, N. A., 2005). Convenience and time savings become primary motivation for consumers to purchase groceries via online (Morganosky, M. A. and Cude, B. F., 2000). Based on Liu, X. and Wei, K. K. (2003), consumers' perceived convenience using internet for shopping purpose have positive effects for consumer attitude towards online grocery. Hence, it is highly relevant to investigate the consumer's attitude towards online grocery shopping where we hypothesize as follows:

H1: Perceived convenience will positively influence attitude towards online grocery shopping.

2.1.1.2 The relationship between perceived convenience and future online grocery buying intention

Individual form behavioural intentions towards online shopping normally based on a consumer's cognitive appraisal to evaluate and justify the benefits obtained from online shopping (Davis et. al, 1989). According to Huang, Y. and Oppewal, H. (2006), perceived convenience is one of the factors affect online grocery shopping preference. Since perceived convenience is adapted from perceived usefulness, the study which conducted by Kurnia, S. and Chien, A. J. (2003) mentioned that perceived usefulness were positively influences the behavioural intention to use online grocery shopping. However, based on Hansen, T. (2005), perceived convenience do not related to future online grocery buying intention. Therefore, it is important to examine the relationship between perceived convenience with future online grocery buying intention:

H2: Perceived convenience will positively influence future online grocery buying intention.

2.1.2 Perceived information accessibility

Perceived information accessibility is proposed as a combining concept for the design and evaluation of a wide variety of information systems and services (Culnan, M. J., 1985). Based on Culnan, M. J. (1985), consumers will evaluate the source of information which provided via website based on their perceptions,

attitudes and prior experience before they believe the source of information is valid.

The “economics of information approach” (Nelson, P., 1970) urges that consumers are always facing the difficulties to appraise the value of the product choices. Nelson, P. (1970) suggested two methods to judge the values of the products i.e. search and experience. In general, consumers used to search for information of the selected products from the web before make decision to purchase it (Peterson, R.A., Balasubramanian, S., and Bronnenberg, B.J., 1997). Online grocers are also concerned about the consumer’s shopping experience since it involves the process to search for needed products.

Different kinds of website software solution have been introduced to simplify the searching process and create a positive online shopping experience. For example, Nettimarket – virtual grocery store designed the layout of the website with hierarchical product category list to simplify the customer’s search for products (Anckar et al., 2002).

On the other hand, online grocers are also facing the difficulties to display and explain what kind the information should be presented in the website. Most grocery products, such as fresh vegetables, fruits, raw foods can be categorised as perishable products (Keh, H.T. and Shieh, E., 2001). Consumers generally prefer to physically evaluate the quality of grocery products before purchase it

(Canedy, D., 1999; Baker, M., 2000). Consumers used to see, touch and smell the foods in order to determine the freshness and quality of the foods (Ring, L. J. and Tigert, D. J., 2001).

Based on the study by Odekerken-Schroder, G. and Wetzels, M. (2003) and Raijas, A. (2002), they argue that online consumers attach a high importance to product-related information. Online consumers not only are concerned about the issues on the quality of products, they also intend to know more about the characteristics, features and further information of the products. Odekerken-Schroder, G. and Wetzels, M. (2003) believe that the information which are readily available in the internet are more details with the traditional grocery stores. Most of the online stores have support salesperson to interact with the customers and provide the product-related information. Online retailers have to ensure their support salesperson can provide the accurate product-related information and handle the problem and questions from their potential customers (Semeijin, J., van Rie, A.C.R. 1, van Birgelen, M. J. H. and Streukens, S, 2005).

2.1.2.1 The relationship between perceived information accessibility and attitude toward online grocery shopping

Most online grocers choose to build their corporate brand name and provide high quality products to build the consumer's trust and confidence on their online grocery stores. But, they still face the challenges to change consumer's buying

behaviour and habits especially on grocery products (Keh, H.T. and Shieh, E., 2001). According to Dornbusch J. (1997), consumers are not easy to change their behaviour to see, touch and smell the grocery products before purchasing it and they have the perception that this kind of attitude is the basic part of their live.

Based on the Ernst & Young's second annual Internet shopping study (1999), consumers choose to not purchase via internet due to the reason that they can't see, touch and smell the products to determine the quality of the products. In this case, online retailers are facing challenges to develop a website that meet user's needs for information (Culnan, M. J., 1985). It is important to examine the relationship between perceived information accessibility and attitude towards online grocery shopping. Consequently, we hypothesize that:

H3: Perceived information accessibility will positively influence attitude towards online grocery.

2.1.2.2 The relationship between perceived information accessibility and future online grocery buying intention

According to Peterson et al. (1997), consumers used to search the information on selected products via online retail stores before purchase it. At this situation, search attributes become an important attributes for consumers to search for information and it also influenced the consumer's online purchase intention (Shim et al., 2001).

Consumers are not willing or intend to purchase via online grocery stores if they have a perception of the complexity on online grocery shopping (Verhoef, P.C. and Langerak, F., 2001). Perceived complexity may arise when consumers perceived difficulties in finding the needed information via online grocery stores (Odekerken-Schroder, G. and Wetzels, M. 2003; Shim et al., 2001; Klein, 1998). Based on the study conducted by Hansen, T (2005), perceived information has significant effect on future online grocery buying intention. Therefore, the following hypothesis is proposed:

H4: Perceived information accessibility will positively influence future online grocery buying intention

2.1.3 Perceived order accessibility

Since online grocery stores have potential to grow, retailers basically can use different strategies to penetrate different markets and market segments. One of the strategies is providing wide range of product assortments (Ramus, K. and Nielsen, N. A., 2005). Online store creates the value to their customers by offering customers to search and browse a specialized assortment or customised products (Anckar, et al., 2002). Online store easily becomes a specialty store to offer specific products and their target audience classified based on market segmentation and individual demands (Anckar, et al., 2002).

Perceived order accessibility involves consumer's perception on the easiness to order the products via online grocer's sites (Raijas, A., 2002). In this case, online grocers have to find ways to solve the navigation problem. As mentioned by Ring, L. J. and Tigert, D. J. (2001) the reducing number of online shoppers to purchase via online is due to the layout, design and navigation of the online grocers' websites. Online groceries have to equip with fast, flexible, convenience and easy-to-use-item search system where customers can easily search what they want to buy (Ogawara. S. et al., 2003).

According to Duffy, G. and Dale, B. G. (2002), order fulfillment is one of the important key success factors when running online business to end users. Based on the study of understanding shopper's expectation on internet retailing, the most important and significant factor of shopper's expectation on online groceries is "time to place an order" (Wilson-Jeanselme, M. and Reynolds, J., 2006). In other words, online grocers have to ensure that the speed of the webpage when placing an order via online (Wilson-Jeanselme, M. and Reynolds, J., 2006).

Besides that, "delivery time" also another important attribute because the increase and decrease of the sales depends on the duration of delivery (Wilson-Jeanselme, M. and Reynolds, J., 2006). The unique selling point of online business is superior delivery system (Ogawara. S. et al., 2003). So, the delivery should be flexible and fast to fulfill different kind of customers and increase the operational efficiency (Ogawara. S. et al., 2003).

2.1.3.1 The relationship between perceived order accessibility and attitude towards online grocery shopping

According to Hansen, T. (2005), low perceived order accessibility is negatively influence attitude towards online grocery shopping especially for low income and older consumers. Based on his study, older and low income groups prefer access to webpage with simple and effective ordering and fulfillment procedures. Consumers normally will cancel the purchase they are unable to find the products and complete the transaction process. Therefore, we expect perceived order accessibility might be one of the factors influence the attitude towards online grocery and the hypotheses are as followed:

H5: Perceived order accessibility will positively influence attitude towards online grocery shopping.

2.1.3.2 The relationship between perceived order accessibility and future online grocery buying intention

Raijas, A. (2002) also found that “the easiness to order groceries” might positively affect customer’s intention to purchase via online grocery stores. Customers felt annoying and most likely cancel the purchase if they realise that the process or procedures to purchase via online grocers is complicated (Odekerken-Schroder, G. and Wetzels, M. 2003). In the study of Elliot, S. and Fowell , S. (2000), one of the reasons online shopper are not satisfied with the

online shopping experience is the complicated of website navigation and complex procedures.

Based on Keh, H.T. and Shieh, E. (2001), a large percentage of people intend to purchase via online, but they are always facing the problem of can't receive the order immediately and daily schedule of delivery is unpredictable. In this case, perceived order accessibility significant influenced future online grocery buying intention (Hansen, T., 2005). Thus, perceived order accessibility might be one of the factors influence future online grocery buying intention and the hypotheses are as followed:

H6: Perceived order accessibility will positively influence future online grocery buying intention.

2.1.4 Perceived risk

The definition of perceived risk is based on consumer's perception on the uncertainty and adverse consequences when purchasing products and services (Dowling, G. R. and Staelin, R. 1994). Perceived risk can be divided to different categories, as shown in Table 2.1. However, for perceived risk via online shopping, it can be only divided to four categories which are privacy risk (Hoffman, D.L., Novak, T.P. and Perita, M., 1999), security risk (Gefen, D. 2000), product performance risk (Geuens, M., Brengman, M. and S'Jegers, R., 2003;

Lim, N., 2003) and vendor risk (Cheung, C. and Lee, M. K. O., 2000; Lim, N., 2003).

Table 2.1 Categories of perceived risk

Categories of Perceived Risk	Definition	Authors
Privacy risk	The degree of the online shoppers' feeling on whether they are secure and protected when they provide their personal information to the website	Hoffman et al., 1999
Security risk	The potential losses caused by the internet and related technologies.	Lim, N., 2003
Product performance risk	The possibility that the consumers received a particular product and service which does not meet the consumer's expectation	Horton, R. L., 1976
Perceived vendor risk	It involves the issue of consumers facing losses caused by virtual grocery store	Hansen, T., 2005
Financial risk	Consumer facing monetary losses when the products are not functioning normally	Mitra, K., Reiss, M. C. and Capella, L. M. (1999)
Psychological risk	Consumer perception that problematic products could possibly hurt them.	Mitra et al. (1999)
Physical risk	The possibility that low quality products or service could cause physical injury to consumers	Mitra et al., 1999
Social risk	The possibility that consumers will receive negative comments and pressure from their family, friends, colleagues due to purchase of products	Mitra et al., 1999
Performance risk	The possibility that the performance of purchased products cannot meet the consumer's expectation	Mitra et al., 1999
Time risk	The time spend while buying the products	Mitra et al., 1999

Consumer privacy is no longer a new issue in electronic commerce. Privacy risk can be defined as the degree of the online shoppers' feeling on whether they are secure and protected when they provide their personal information to the website (Hoffman et al., 1999). When Internet users provide their personal information to a particular website, they are always worried and concerned if the information will be exploited by the unethical companies. If the consumers have a bad experience with online purchase, the consumers will indirectly feel anxious and

reluctant to purchase via online. As Internet users, they normally expect their personal information and privacy are being protected by the companies.

In recent years, the development of the technology increased the number of people who have accessed to the Internet and this indirectly increased the consumer privacy issues in electronic commerce (Reda, S. 1996; Rubin, M. R., 1995). The activities normally conducted in cyberspace include online shopping, leaving messages in forums, blogs and bulletin boards, chat room discussions, usage of emails and engaging in network community sites. Through these activities, there is a possibility that a malicious person is able to collect information directly or indirectly from the cyberspace without the owner's knowledge (Godwin, J. U., 2001).

Consumers have to also face the risks of vendors selling their personal information to third parties without their permission. This kind of scenario will inflict the lack of trust in online shopping and the unwillingness to purchase online (Hoffman et al., 1999). According to Collier, J. E. and Bienstock, C. C. (2006), consumers will also avoid online shopping altogether if their personal information, especially credit card data, is not protected from potential hackers. In order to encourage online grocery shopping, online vendors must stress on consumer privacy and advocates government intervention to ensure online shoppers feel secure and protected when purchasing online (Godwin, J. U., 2001). At the same time, online vendors shall provide sufficient information and clear policy

regarding the use of the consumers' personal data. On the other hand, consumers have to take note on the privacy statement offered by the online vendors, and decide whether to use their personal information (Godwin, J. U., 2001). So, prior research on online shopping context indicates that consumers' perceptions of privacy have significant and positive effects on their trust in the online vendor (Bart, Y., Shankar, V., Sultan, F. and Urban, G.L. 2005; Liu, C., Marchewka, J.T., Lu, J. and Yu, C.S., 2005; Roma'n, S., 2007).

The rapid changes on the technology create the resolution for the consumers to become Internet users and adapt to the environment of electronic commerce. However, technology risk such as security is still the main concern for most of the consumers when they are involved in online shopping activities. Security is one of the technology risks that affects consumer to purchase groceries via virtual stores. Security always become one of the major issues among the Internet consumers whether to purchase or otherwise. According to Gefen, D. (2000), most of the consumers are troubled about online payment security, personal privacy and credibility of the websites before purchasing products and services through the Internet. In the consumers' minds, the security concerns consist of personal authentication and the exchange of the consumer's data and information between the consumers and web owners (Rowley, J., 1996; Ratnasingham, P., 1998).

Most of the security issues occur in the Internet is payment fraud, in which consumers have to take potential risks when they shop online and make payments using credit cards (Murphy, P., 1998). Therefore, online shoppers indirectly face security threats, such as break-ins and technology disturbance, and have to also be concerned about serious issues of stalking, impersonation and identity theft in electronic commerce (Janal, D. S., 1998). Based on Godwin, J. U. (2001), Internet users may lose confidence on e-commerce and the way the government handles the Internet security issues. In order to encourage online shopping, companies have to establish trust towards the security of their company's website. Security risk still remains the hottest issues had the greatest influence on consumer's online purchase intention (Ranganathan, C. and Ganapathy, S., 2002).

On the other hand, product performance risk is one of the most frequently cited reason consumers do not intend to purchase products and services via internet (Forsythe, S. M. and Shi, B. 2003). Product performance risk can be defined as the possibility that the consumers received a particular product and service which does not meet the consumer's expectation (Horton, R. L., 1976). If consumers received the product or service where quality is low and not up to their expectation, it may negatively influence consumer's buying intention through virtual store. Product performance risk is playing an important role in online grocery store compared to other virtual store. Grocery items such as vegetables, fruits and meats can be categorised as perishable products where consumer's

buying behaviour on the grocery products is used to physically evaluate the quality of the product before purchasing it (Baker, M., 2000; Ernst & Young, 1999; Citrin, A.V., Stem, D., Spangenberg, E.R. and Clark, M.J., 2003). According to Geuens et al. (2003), most of the online shoppers are worried about the quality of the fresh food products delivered from virtual grocery store.

Perceived vendor risk, it involves the issue of consumers facing losses caused by virtual grocery store (Hansen, T., 2005). He also argued that the potential losses include unreliable vendors and issues on returning the incorrect items. Although some of the online grocery stores can guarantee to provide superior, fresh and high quality products, but online grocery have to know that different customers have different preferences and judgment on the quality of products and they might not meet the customer's expectation (Anckar et al., 2002).

2.1.4.1 The relationship between perceived risk and attitudes towards online grocery shopping

Based on the previous studies conducted by Miyazaki, A. D. and Fernandez, A. (2001); Van den Poel, D. and Leunis, J. (1999), consumer's perceived risk is higher if they purchase via virtual store instead of traditional retailing store. High perceived risk from online shopping may cause consumers to be reluctant to purchase via online due to untrustworthy websites (Cho, J. 2004; Forsythe, S. M. and Shi, B., 2003). Therefore, we can conclude that perceived risk is important

where privacy risk, security risk, product performance risk and vendor risk (McKnight, D. H., Choudhury, V. and Kacmar, C., 2002) might become an issue that affect consumer's behaviour toward online grocery shopping. We hypothesize:

H7: Perceived risk will negatively influence attitude towards online grocery shopping.

2.1.4.2 The relationship between perceived risk and future online grocery buying intention

According to Aqueveque, C. (2006), perceived risks had the greatest effect on buying process and negatively influence future behavioural buying intention. Consumers normally will search for more information especially on sophisticated products with high value and perceived risk in order to reduce their perceived risks (Goyal, A., 2008). Consumers do not intend to make decision and purchase particular products when consumers perceived high risks (Dowling, G. R. and Staelin, R., 1994). Perceived risk is significant influence future online grocery buying intention based on the study conducted by Hansen, T. (2005). This leads to develop the following hypothesis:

H8: Perceived risk will negatively influence future online grocery buying intention.

2.1.5 Perceived enjoyment

Perceived enjoyment is defined as the degree of consumer's perceived to be enjoyable when using internet to purchase products or services (Davis, F. D., R. P. Bagozzi, and P. R. Warshaw, 1992). Enjoyment is defined as the degree of personal pleasure, enjoyable and fun when involved in online shopping process (Beatty, S. E. and Ferrell, M. E., 1998; Chiu C. M. and Chang C. C., Cheng H. L., Fang Y. H., 2009). Based on Deci, E. L. (1975), enjoyment is an affective response and an intrinsic motivation that refers to the performance of an activity for invisible reinforcement other than the process of performing it.

Most consumers perceived grocery shopping as a burden or a chore (Geuens et al., 2003; Aylott, R. and Mitchell, V-W., 1998). Online grocery shopping brings time savings and convenience to consumers. Research shows that many shoppers like to shop in the supermarkets (Prus, R., 1991; Smith, M. F. and Dickinson, R. A., 1994) because they can physically touch, see and identify the quality of the products. Both shopping in virtual store or traditional store basically seems to be able to deliver fun and excitement. It fully depends on the individual consumers shopping habits and the attributes of the grocery stores (Ramus, K. and Nielsen, N. A., 2005).

Eventually, consumers always expect virtual store provide advanced technology to allow virtual interaction that can enhance the consumer shopping experience

between vendors and consumers (Freeman, S., Walker, I. and Gabbott, M., 1999). Furthermore, the importance of visibility between the vendor and potential customers, which refers to the extent of which an innovation is apparent to the potential adopters, indirectly influence the consumer attitude towards online shopping (Rogers, E. M., 1983).

According to Ramus, K. and Nielsen, N. A. (2005), the sales of conventional grocery store are higher than online grocery store due to impulse buying. Impulse buying can be considered as an important attribute for a lot of consumers and they used to purchase the grocery products simultaneously when they shop in conventional store (Ramus, K. and Nielsen, N. A., 2005). Conversely, consumers realise that they have to plan and organise the needed grocery products before they purchase it via online grocery. Impulse buying becomes an important attribute for some consumers where they can complete their grocery shopping simultaneously and immediately.

Early adopters of online shopping enjoy shopping via the web and realise the benefits of using online shopping. Consumers generally can browse the information about the product or service they intend to purchase and make buying decision in private and avoid unnecessary stressful shopping trip (Ramus, K. and Nielsen, N. A., 2005). Based on the studies by Ramus, K. and Nielsen, N. A. (2005), consumers enjoy shopping via internet because they can avoid those pushy salesperson. But it seems like pushy salesperson is not so applicable in

the grocery store except for the product demonstrations, where it is possible to meet them.

2.1.5.1 The relationship between perceived enjoyment and attitude towards online grocery shopping

Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A. and Wood, S. (1997) believed that the enjoyment experience of shopping will affect most of the consumers to purchase the product or service. Different consumers have different shopping behaviours where the level of shopping enjoyment is strongly influence by shopper's behaviour. According to Babin, B.J., Darden, W.R. and Griffin, M. (1994), shoppers can be divided into utilitarian shoppers, who treat shopping as work and hedonic shoppers, who believed shopping are fun and excited. There are a few types of hedonic shopping motivation which are adventure shopping, gratification shopping, idea shopping, role shopping, social shopping and value shopping (Arnold , M. J. and Reynolds, K. E., 2003; Tauber, E. M., 1972).

According to Jarvenpaa, S. L. and Todd, P. A. (1997); Vijayasathy, L. R. and Jones, J. M., (2000), online shopping experience was strongly related with the attitudes to online shopping and intentions to shop online. Both studies also believed that perceived enjoyment of online shopping are related to consumer

lifestyles as well. Thus, perceived enjoyment generally influences the consumer's attitude towards online grocery store. We hypothesize as:

H9: Perceived enjoyment will positively influence attitude towards online grocery shopping.

2.1.5.2 The relationship between perceived enjoyment and future online grocery buying intention

Based on Davis et al. (1992), an individual is most likely to intend to purchase products or services by using internet or technologies if they can experience pleasure or enjoyment on it. Positive shopping experience is basically related to emotions in a hedonic context where it will lead consumers to have a high level of commitment and purchase intention (Hirschman, E. C. and Holbrook, M. B., 1982). Since the relationship between perceived enjoyment and future online grocery buying intention has received theoretical and empirical support, we hypothesize as:

H10: Perceived enjoyment will positively influence future online grocery buying intention.

2.1.6 Social factors

According to the Theory of Reasoned Action (Ajzen and Fishbein, 1975), a person's behavioural intention is also affected by subjective norm concerning the

behaviour. Subjective norm can be defined as social pressure exerted on the person to perform the behaviour, is then affected by normative beliefs and motivations to comply (Ajzen, I. and Fishbein, M., 1975). The impact of the subjective norm was therefore in a construct named 'Social factors'. Social factors are the changes of consumer attitude intentionally and unintentionally when they are influenced by others. Social groups generally can be divided to superiors, co-workers, relatives or friends.

Based on Ramus, K. and Nielsen, N. A. (2005), the ways consumers switch their buying behavior from conventional store to virtual store is influenced by colleagues, family and friends; exposure of advertisement and accidental browsing across interesting commercial websites. The opinions, recommendations and shopping experiences which suggested by reference groups such as family, friends or colleagues are providing a strong impression for consumers to try for new shopping channel (Ramus, K. and Nielsen, N. A., 2005). Reference groups not only communicate and recommend to their colleagues, family or friends, they tend to persuade them to use virtual store for online shopping (Ramus, K. and Nielsen, N. A., 2005).

Using the theory of adoption of innovation (Rogers, E. M., 1983), innovations can be observed, spread and communicated to other people. Online purchase can be considered as a new trend and noticed by many consumers who are alert on the development on technology and media (Hansen, T., 2005). Online retailers used

to communicate and encourage their targeted customers to use different types of grocery shopping channel to purchase the grocery products. They communicate and promote their online grocery stores by using chat room, forum, social network site and newsgroup so that consumers can obtain the latest information (Hansen, T., 2005).

In this case, online vendor have to use a proper communication tools to create the awareness, persuasion, repurchase and loyalty on specific virtual store or products and services. Proper communication tools are important and create communicability between online vendors and targeted customers. Weich, C. W. and Walchli, S. B. (2002) defined communicability is the ability of a product can be noticed and promoted to consumers via formal and informal networks. Conversely, communicability can be defined as the extent of “social acceptance”, which the information can be spread from one consumer to another (Blackwell, R. D., Miniard, P. W. and Engel, J. F., 2001).

2.1.6.1 The relationship between social factors and attitudes towards online grocery shopping

The attitudes of online shoppers and non-online shoppers towards online grocery shopping are different. Online shoppers will accept and trust of online grocery shopping, but non-online shoppers prefer to shop in conventional store and used to provide negative feedback on online grocery stores (Ramus, K. and Nielsen, N.

A., 2005). We find out there is important to investigate how social factors or consumer's opinion influence consumer's behaviour towards online grocery shopping. The following hypothesis is performed:

H11: Social factors will positively influence attitude towards online grocery shopping

2.1.6.2 The relationship between social factors and future online grocery buying intention

The basic concept of social influence is when one of the social group members identified the advantages and benefits of the online grocery shopping and every social group members are agreed with it, then they will intend to purchase via online grocery (Kurnia, S. and Chien, A. J., 2003). In this situation, we can examine the relationship between social factors and future online grocery buying intention by develop the hypothesis as followed:

H12: Social factors will positively influence future online grocery buying intention.

2.1.7 Attitude towards online grocery shopping

In this study, we examine the relationship between attitude towards online grocery shopping and future online grocery buying intention. Buying intention measures have been used widely to examine buying preference for particular

products within defined time periods (Juster, T. F., 1966; Morrison, D. G., 1979; Whitlark, D. B., Geurts, M. D. and Swenson, M. J., 1993). According to Berkman and Gilson (1978), the level of buying rates is generally affected by consumers who report that they have intention or no intention to purchase certain products.

The theory of reasoned action (Ajzen, I. and Fishbein, M., 1975) is relevant to consumer behaviour where the behavioural intention will be significantly affected by the attitude towards that behaviour (i.e., the general feeling of favourableness or unfavourableness for that behaviour) and “subjective norm” (i.e. the perceived opinion of other people in relation to the behaviour in question). The theory of reasoned action is people perform attitudes based on the basis of their beliefs (perceptions and knowledge) about certain objects. That means a person’s overall attitudes towards some object could be derived from his/her beliefs and feeling.

Hansen, T., Jensen, J. M., Solgaard, H. S. (2004, pg.540) believe that the theory predicts intention to perform a behaviour by consumer’s attitude toward that behaviour rather than by consumer’s attitude toward a product or service. The theory of planned behaviour (Ajzen, 1985, 1991), which is the extension of the theory of reasoned action, is relevant to “perceived behavioural control (PBC)”, as a determinant of behavioural intention. The studies which conducted by Goldsmith, R. E. and Goldsmith, E. B. (2002); Jarvenpaa, S. L. and Tractinsky, J. (1999); Kim, Y., Kim, E. Y. and Kumar, S. (2003); Shim et al. (2001) and Watchravesringkan, K. and Shim, S. (2003) have same results which consumers’

attitude towards online shopping are positively influenced the buying intention through internet.

According to Armstrong, G. and Kotler, P. (2000), consumer buying behaviour is strongly related to cultural, social, personal and psychological characteristics. Consumer buying behaviour is influenced by an individual lifestyle which combination of external factors and internal factors. The external factors include demographic, economic, social, situational and technology factors. The internal factors include beliefs and attitudes, learning, motives and needs, personality, perception and values. Consumer buying preferences are categorised as internal factors where it involve consumer's purchase motivation and preference (Wu, S., 2003). The researcher also believe that consumer have positive perception towards online shopping if consumers perceived advantages and meet their needs and wants.

Therefore, attitude towards online grocery shopping might be influence consumers' future online grocery buying intention and we hypothesize as:

H13: Attitude towards online grocery shopping will positively influence future online grocery buying intention.