

# A Proposed Model for Understanding the Influencing Factors of Consumer's Purchase Intention towards Online Grocery Shopping

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#### **Abstract**

The purpose of this study is to review consumers' purchase intention towards online grocery shopping and to propose a model to identify the influencing factors on this behaviour. The model is based on a review of past studies on online purchase intention, perceived benefit, perceived risk, attitude towards online grocery, subjective norms, perceived behaviour control and Theory of Planned Behaviour. The model can be used to understand consumers' behaviour on their purchase intention toward online grocery. This research stream can provide valuable insights for retailers and e-retailers and factors that motivate consumers to make online purchases from them. The significance of this study lies in the fact that it will provide vital insights on how perceived benefit, perceived risk, attitude towards online grocery shopping, subjective norms, perceived behaviour control affect the purchasing intentions of online customers towards online grocery in Malaysia.

**Keywords:** Online grocery shopping, perceived benefit, perceived risk, attitude towards online grocery, subjective norms, perceived behaviour control

#### 1. Introduction

In this digital era, internet has become essential tools for communication and business wise. According to Clement (2019), there were 3.9 billion internet users in the world in 2017 as reported by Statistics and Fact-Internet usage worldwide, with overall sales reaching \$2.1 trillion. The internet had revolutionized the business to online shopping (Bourlakis, 2008). In Malaysia online shopping has become a norm with the range from purchase flight tickets, booking hotel room, movie ticket, fashionable apparel as well as beauty product and is now also extended to online grocery. RedTick.com, You Beli, Grocer Express, Zero Online Grocer and Presto Grocer had started online grocery shopping service in Malaysia since 2009 in order to cater a niche in the digital groceries shopping. However, these companies are serving in small boutique business (Lim, 2016). Meanwhile, in 2014, Tesco has launched its first online Grocery Home Shopping services by Tesco Extra Mutiara Damansara, Malaysia. Tesco had made the changes in the grocery industry when they introduce online groceries purchase that will be delivered to consumers' doorstep (Nair, 2014). With Tesco's online grocery services, it had influenced other small players to venture into online grocery industry. For instance, the Kiara Supermarket also had launched its online platform, Bigbazaar.my to cater the needs of residents in Kuala Lumpur (Nair, 2014), followed by Lazada, 11 street and MilkADeal that which also offering non-perishable food products.

Despite the events, Malaysia's online grocery shopping is still at the initial phase (Mortimer et al., 2016) compared to those in most of the developed countries especially in America, Europe and the Asian countries such as China and India. According to Toh (2017), the online grocery sale in Malaysia is growing slowly and the low sales contributed only 2% of total grocery sales in e-commerce. Malik Murad, the director of Mydin Mohamed Holdings also said that online grocery only occupied 1% of total sales for SAM's Groceries. Furthermore, Tesco online sales only



generated 2% of the company total turnover. The product's perish ability and variability may differentiate the experience of online shopping for food and groceries compared to other product categories (Mortimer et al., 2016). Malaysians seems prefer to physical aspects namely, touch, see, smell and 'pick by hand' aspects when choosing their groceries (Toh, 2017). Studies found that consumers concern on the risk of online grocery shopping involves product quality and service (Oppewa & Huang, 2006; Joarder et al. 2015). These lead to the challenges for online shopping environment (Citrin et al., 2003; Hussain et al. 2017). For example, most challenging is on how to change consumer perception towards buying groceries online (Singh, 2011). Few studies that focusing on the acceptance and adoption of online grocery shopping in the past had examined various factors like system quality, behaviour and characteristics (Yunus et al., 2016; Hansen et al., 2004; Chien et al., 2003, Pauzi, 2013). However, studies found inconclusive evidence on factors that influence consumers' purchase intention towards online grocery shopping. Although the online groceries are in the nascent stage, this category cannot be denied as the online groceries shopping is dramatically increasing in other Asian (Muhammad et al., 2015).

In line with these information, the purpose of this study is to propose a theoretical framework that could effectively predict consumers' purchase intention towards online grocery shopping. In this study, Theory of Planned Behaviour (TPB) will be used and its variables such as subjective norms, attitudes and perceived control behaviour will be investigated further to understand consumers' purchase intention toward online grocery shopping. In the proposed model, perceived benefit and perceived risk will be added as the influencing factors toward consumer's attitudes.

### 2. Literature Review

### 2.1 Theory of Planned Behaviour (TPB)

Theory of planned behaviour (TPB) is used to develop the study's conceptual framework. TPB is an important theory which was extended from the Theory of Reasoned Action (TRA). TRA has limitation in dealing with consumers' actual behaviour. Thus, the addition of perceived behavioural control (PBC) in TPB can predict individual's intention to perform the behaviour in order to enhance the behaviour which individuals have incomplete volitional control (Ajzen, 1991) (Figure 1). TPB today is one of the most influential theories to help explain and predict consumers' behaviour. The theory consists attitude towards behaviour, subjective norms and perceived behaviour control to influence an individual intention. The stronger an individual intention engages in behaviour, the stronger for individual intention to perform (Ajzen, 1991). Many past studies had used TPB to predict consumer's online purchase intention (George, 2004; Ranadive, 2015, Ramus & Nielsen, 2005) in many different research settings.

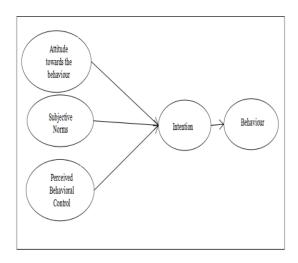


Figure 1: Theory of Planned Behavior

## 2.2 Perceived Benefit and Attitude towards Online Grocery Shopping

Perceived benefit is one of the key factors in consumer's decision making process for adoption of an innovation. Past studies on internet shopping reported that it was motivated by benefits such as time saving, convenience, lower price, wider product selection, entertaining aspect and the ability to do comparison of the product via online (Kim & Kim, 2004; Khatibi et al., 2006, Mckinney, 2004, Harn et al., 2006; Parasuraman et al., 2005; Forsythe et al., 2006, Khalifa & Limayen, 2003; Ahmed et al., 2016). In the case of Malaysia, previous studies have found that some key factors influencing consumer's behaviour towards online purchase are convenience, wider product selection and customer service (Delafrooz, 2010). In addition, Forsythe el at.'s, (2006) study found that perceived benefit, namely, convenience, selection, ease of comfort and hedonic or enjoyment to be positively related to consumer's online purchase intention. These studies indicated the importance of perceived benefits variable on behavioral intention. This leads to the 1<sup>st</sup> proposition:

P1: There is a positive and significant relationship between Consumers' Perceived Benefits and Attitude towards online grocery shopping.

# 2.3 Perceived Risk and Attitude towards Online Grocery Shopping

Risk refers to consumer's perception of insecurity when they are involve in certain activities (Dowling & Staelin, 1994). According to Cunningham (1967), there are six elements of perceived risk, namely, functional risk, social risk, financial risk, physical risk, time risk and psychological risk. In online context, Featherman and Pavlou (2003) identified performance risk -time risk, privacy risk and financial risk as consumers' most concerned factors. In other past studies, financial risk, product risk, convenience and non-delivery risk are the most critical factors that consumers perceived (Ariffin et al., 2018; Bhatnagar & Ghose, 2004).



Forsythe et al. (2006) stated that consumer perceived negative risk affected their online purchase intention especially consumer who is seldom purchase through online. In online context, consumers are said to conscious and automatically perceived some risks when judging the products and services (Choi & Lee, 2003). Proposition 2 is thus suggested:

P2: There is a negative and significant relationship between Consumers' Perceived Risk and Attitude towards online grocery.

### 2.4 Attitude towards Online Grocery Shopping and Online Purchase Intention

Consumer's attitude towards performing behaviour has been acknowledged as a strong predictor of one's behaviour (Fishbein & Ajzen, 1975). For instance, individual's attitude is always suggested to affect consumer's purchase intention (Fishbein & Ajzen, 1975). According to Al-Rafee and Cronan (2006), attitude towards online shopping is a significant predictor on making online purchases and had been found as the most important factor that influencing behavioural objectives (Yang et al., 2007). Consumers with positive attitude towards online shopping will have higher level of intention on online purchase. (Delafrooz et al., 2010). A study on online travel purchase intention also found that attitude as the most significant determinant of consumer's purchase intention (Wen, 2009). In addition, several studies have found positive significant impact between attitudes towards online shopping and online purchase intention (Kitchen et al., 2014; Yang et al., 2007; Ranadive, 2015). Hence, below is the suggestion for proposition 3:

P3: There is a positive and significant relationship between Consumers' Attitude towards online grocery Shopping and Online Purchase Intention.

### 2.5 Subjective Norms and Online Purchase Intention

Subjective norms is defined as individual perception's which is influenced by significant groups such as family, friends and peers (Ajzen, 1991). Influence by the family, media and friends were acknowledged as important factors in encouraging individual's intention towards online shopping (Khalifa & Limayen, 2003). Venkatesh (2003) stated that consumer's purchase decision can be impacted by social influence. Taylor and Todd (1995) also found that subjective norms tend to be the most influential factor on individual's intention especially in the early stages of innovation, in which they only have limited experience. Meanwhile, an empirical study on online grocery shopping in Sweden and Denmark showed subjective norms to have a positive significant impact on consumers' online grocery purchase intention (Hansen et al., 2004). Hence, it is proposed that:

P4: There is a positive and significant relationship between Consumers' Subjective Norms and Online Purchase Intention.

### 2.6 Perceived Behavioural Control and Online Purchase Intention

Perceived behavioural control refers to individual perception on certain situation in order to decide whether to perform or to not perform. According to Azjen (1991), Perceived behavioural control showed impact on intention and actions, thus it plays an important role for predicting consumer's purchase intention. Bandura (1982) stated that perceived behavioural control depends on individual's confident level about their own ability to perform certain behaviour.

In Kalifa and Limayen's (2003) study, perceived behavioural control was found to show a strong relationship with consumer's online purchase intention and actual behaviour. Few studies also found perceived behavioural control to be one of the factors that will influence consumer online purchase intention (Taylor & Todd, 1995; Shim et al., 2001). Therefore, it is proposed that:

P5: There is a positive and significant relationship between Consumers' Perceived Behavioural Control and Online Purchase Intention.

### 3. Proposed Theoretical Framework

The proposed theoretical framework for this study is illustrated in Figure 2. In this model, the dependent variable is consumers' purchase intention toward online grocery shopping. The independent variables are located at the left-hand side of the theoretical framework, namely Attitudes, Subjective Norms and Perceived Behavioural Control. Perceived Benefits and Perceived Risk play as antecedents for Attitudes.

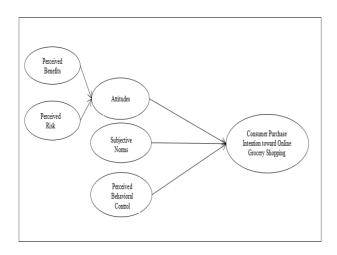


Figure 2: Proposed Theoretical Framework

### 4. Conclusion

The purpose of this study is to propose a model that can provide stakeholder with a better understanding on reason for consumer's online purchase intention towards online grocery. Perceived benefits, perceived risk, attitude, subjective norms and perceived behavioural control have been reviewed and have been identified as important



variables that will influence consumers' online intention behaviour. From TPB, the model identified Perceived Benefits and Perceived Risk as antecedents for Attitude. It is suggested that empirical research be conducted to apply the theoretical model proposed in this study and tested its usefulness. The results should be able to provide empirical insights on online shopping or e-commerce in Malaysia as the literature is observed to be very less focused on the grocery industry. The rapid changes on technologies and increased of consumers' online shopping interest have been observed to be expanding on online grocery in recent years. However, online grocery contribution to e-commerce industry is still relatively low compared to other sectors in Malaysia. Consumers in Malaysia are still not that familiar with online grocery shopping.

The empirical results from the proposed model should prove to be beneficial to several parties such as retailers, e-retailers, scholars and policy makers. For retailers, the outcome of this study could provide a guide line for managers to redefine their marketing strategies in order to meet the demands of online consumers. Moreover, it could provide them with better understanding of Malaysian consumers' perception toward online grocery shopping. The right strategies and effective business model implemented by online grocery retailers could contribute to the nation's economy's growth.

A suggestion for future research is to explore the influence of other possible factors, such as, perceived ease of use, perceived usefulness price and e-WOM (electronic word of mouth) on consumer's purchase intention towards online grocery shopping. These would benefit the industry as online grocery shopping is becoming one of the main features of e-commerce industry in Malaysia.

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### References

- [1] Ajzen, I. (1991). The theory of planned behaviour. Organisational Behavior and Human Decision Processes, 50, 179-211.
- [2] Ahmed, H., Hussain, A., Baharom, F. (2016). Current Challenges Of Requirement Change Management. Journal of Telecommunication, Electronic and Computer Engineering, 8 (10), pp. 173-176.
- [3] Al-Rafee, S., & Cronan, T. P. (2006). Digital. piracy: Factors that influence attitude toward behaviour. *Journal of Business Ethics*, 63(3), 237-259.
- [4] Ariffin, S. K., Mohan, T., & Yen-Nee, G. (2018). Influence of consumers' perceived risk on consumers' online purchase intention. *Journal of Research in Interactive Marketing*, 12(3), 309-327.

- [5] Bandura, A. (1982). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.
- [6] Bhatnagar, A. & Ghose, S. (2004). Segmenting consumers based on the benefits and risks of Internet shopping. *Journal of Business Research*, 57(12), 1352-1360.
- [7] Bourlakis, M., Papagiannidis, S., & Fox, H. (2008). E-consumer behaviour: Past, present and future trajectories of an evolving retail revolution. *International Journal of E-Business Research*, 4(3), 64-76.
- [8] Choi, J., & Lee, K. H. (2003). Risk perception and e-shopping: A cross-cultural study. *Journal of Fashion Marketing and Management: An International Journal*, 7(1), 49–64.
- [9] Chien, A. W., Kurnia, S., & Westrap, F.V. (2003). The Acceptance of Online Grocery Shopping. BLED 2003 Proceedings. 52
- [10] Clement, J. (2019). Internet Statistics & Facts-Internet Usage Worldwide for 2019. Retrieved 15 November 2019 from https://hostingfacts.com/internet-facts-stats-2016
- [11] Citrin, A. V., Stem, D. E., Spangenberg, E. R., & Clark, M. J. (2003). Consumer need for tactile input: an internet retailing challenge. *Journal of Business Research*, 56(11), 915-922.
- [12] Cunningham, S. M. (1967) The major dimensions of perceived risk. *Risk Taking and Information Handling in Consumer Behavior*, 82-108.
- [13] Delafrooz, N., Laily, H. P., & Khatibi, A. (2010). Understanding consumer's internet purchase intention in Malaysia. *African Journal of Business Management*, 5(3), 2837-2846.
- [14] Dowling, G. R., & Staelin, R. (1994). A model of perceived risk and intended risk-handling activity. *Journal of Consumer Research*, 21(1), 119–134.
- [15] Featherman, M. S., & Pavlou, P. A. (2003). Predicting e-Services Adoption: A Perceived Risk Facets Perspective. *International Human Computer Studies*, 59, 451-474.
- [16] Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behaviour: *An introduction to theory and research*. Reading: Addison-Wesley.
- [17] Forsythe, S., Liu, C. L., Shannon, D., & Gardner, L. C. (2006). Development of a scale to measure the perceived benefits and risks of online shopping. *Journal of Interactive Marketing*, 20(2), 55-75.
- [18] George, J. F. (2004). The theory of planned behavior and Internet purchasing. *Journal of Internet Research*, 14(3),198-212.
- [19] Hansen, T., Jensenb, J. M, Solgaard, H. S. (2004). Predicting online grocery buying intention: a comparison of the theory of reasoned action and the theory of planned behaviour. *International Journal of Information Management*, 24, 539–550.



- [20] Hussain, A., Mkpojiogu, E.O.C., Abubakar, H., Hassan, H.M. (2017). The Usability Evaluation Of Mudah.My On Mobile Device. AIP Conference Proceedings, 1891, art. no. 020058.
- [21] Joarder, M.H.R., Subhan, M., Ghani, A.B.A., Islam, R. (2015). Pay, security, support and intention to quit relationship among academics in developing economy. Investment Management and Financial Innovations, 12 (3), pp. 190-199.
- [22] Khalifa, M. & Limayem, M. (2003). Drivers of Internet Shopping. *Communication of the ACM*, 46(12) 233-239.
- [23] Khatibi, A., Haque A., & Karim K. (2006). E-commerce: A study on internet shopping in Malaysia. *Journal of Applied Sciences*, 6(3), 696-705.
- [24] Kim, E.Y., & Kim, Y.K. (2004). Predicting online purchase intentions for clothing products. *European Journal of Marketing*, *38*(7), 883-97
- [25] Kitchen, P. J., Alwi, S. F. S., Che-ha, H., & Lim, P.Y. (2014). Coupon redemption behaviour: a Malaysian cross-segment investigation. Marketing Intelligence & Planning, 32(1), 66-88.
- [26] Lim, S. L. (2016). Capturing the online grocery market. Retrieved from www.focusmalaysia.my/Issues/capturing-the-online-grocery-market
- [27] McKinney, L. N. (2004). Creating a satisfying internet shopping experience via atmospheric variables. *International Journal of Consumer Studies*, 28(3), 268-83.
- [28] Mortimer, G., Hasan, S. F., Andrews, L., & Martin, J. (2016). Online grocery shopping: the impact of shopping frequency on perceived risk. *The International Review of Retail, Distribution and Consumer Research*, 26(2), 202-223.
- [29] Muhammad, N. S., Sujak, H., & Rahman, S. A (2015). Buying groceries online: the influences of electronic service quality (eServQual) and situational factors. *Procedia Economics and Finance*, *37*,379 385.
- [30] Nair (2014). Clicking for consumables. Retrieved 3 Novermber 2017 from https://www.thestar.com.my/news/community/2 014/11/05/clicking-for-consumables-online-grocery-shopping-starts-to-make-waves-in-malaysia/
- [31] Parasuraman, A., Zeithaml, V.A, & Malhotra A. (2005). ES-QUAL: A multiple item scale for assessing electronic service quality. *Journal Service Research*, 7(3), 213-33.
- [32] Pauzi, S., Thoo, A. C., Tan, L. C., Muharam, F., & Talib, N. (2013). Factors Influencing Consumers Intention for Online Grocery Shopping A Proposed Framework. *Materials Science and Engineering*, 215.
- [33] Ranadive, A. (2015). An Empirical Study on the Online Grocery Shopping Intentions of Consumers in Vadodara City. *International*

- Journal of Management and Social Sciences Research (IJMSSR), 4(3)23, 19-4421.
- [34] Ramus, K., & Nielsen, N. A. (2005). Online grocery retailing: what do consumers think? *Internet Research*, 15(3), 335-352.
- [35] Shim, S., Eastlick, M. A., Lotz, S. L., & Warrington, P. (2001). An online prepurchase intention model: the role of intention to search. *Journal of Retailing*, 77(3), 397–416.
- [36] Singh, K. (2011). Investing BIG in online groceries. *The Edge Malaysia*
- [37] Taylor, S., & Todd, P. A. (1995). Assessing IT Usage: The Role of Prior Experiences. *MIS Quarterly*, 19(3), 561-570.
- [38] The International Trade Administration. (2017). Malaysia-eCommerce. Retrieved from https://www.export.gov/article?id=Malaysia-E-COmmerce.
- [39] Toh, K. I. (2017). Online grocery sales in Malaysia seen growing slowly. Retrieved 10 November 201 from http://www.thestar.com.my/business/business-news/2017/06/24/online-grocery-sales-in-malaysia-seen-growing-slowly/
- [40] Venkatesh, V., Morris, M.G., Davis, G. B., & Davis, F.D. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, 27(3), 425-78.
- [41] Yang, B., Lester, D., & James, S. (2007). Attitudes toward buying online as predictors of shopping online for British and American respondents. *Cyber Psychology and Behavior*, 10(2), 198-203.
- [42] Yunus, N. S. N. M., Ghani, N. M. A., & Rashid, W. E. (2016). The Acceptance and the Intention of Online Groceries Shopping in Malaysia. *Journal of Applied Environment and Biological Sciences*, 6(6S), 29-34.