Purchase Intention Towards Online Grocery Shopping After Covid-19 Pandemic: A Conceptual Framework

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Abstract. With the emergence of the Covid-19 pandemic, people have been forced to adapt to a "new normal" lifestyle. Working from home, virtual learning, lockdowns, quarantines, and required face mask wearing in public are all part of the new normal. In March 2020, many countries in the world went into lockdown to prevent the spread of the virus, which led to the temporary closure of many businesses. On the contrary, online shopping is growing rapidly as most people choose to reduce shopping in brick-and-mortar stores due to movement restrictions and safety concerns. Therefore, this study aims to propose a conceptual framework to examine the purchase intention towards online grocery shopping after Covid-19 pandemic. Based on the Theory of Reasoned Action (TRA) and Technology Acceptance Model (TAM), six hypotheses are formed.

Keywords: Covid-19 · Purchase Intention · Online Grocery Shopping

1 Introduction

The Internet enables feasible and direct business over the Internet, or communication with individuals around the world without geographic restrictions [1]. Consumers can easily order goods and services online at anytime, anywhere without any hassle. Besides, the Internet has also opened up new opportunities for advertisers to provide creative marketing methods to communicate and disseminate products and information to targeted consumers [2].

Hypermarkets are one example of being twisted and entering the market with the help of rapid technological advancement [3]. Due to the changes in retail store models, more and more retailers are starting to consider economic development. For instance, Lotus's Malaysia (formally known as Tesco Malaysia) is one of the well-known global online retailers among consumers. Additionally, the transformation to online retailing is one of the fastest growing types of trade in developed countries today. The Internet has established a strong relationship between retailers and consumers all around the world, and vice versa [4]. Furthermore, due to rapid technology advancements, online shopping has always been a source of both enthusiasm and anxiety for consumers [5].

Covid-19 has wreaked havoc across the globe. The pandemic is harming not only human health but also the global economy [6]. It disrupts individuals, families, small and

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medium businesses, and even a country's economy. In December 2019, the Covid-19 spread to nearly every country, then prompting the World Health Organization (WHO) to declare it a global health emergency. The virus infection in the supply chain of the global economy has given rise to the presence of businesses and the confidence of consumers [7].

Consumers are increasingly purchasing groceries online during the Covid-19 pandemic, as this is a basic human necessity [8]. Given the circumstances, this is reasonable to reflect that it is fairly unsafe to leave the house and visit the brick-and-mortar stores [9]. Covid-19 is having an impact on the way people shop for groceries to meet their daily necessities. At the same time, it also has a direct impact on consumer behaviour and intention to purchase products or services online [10]. The presence of health threats to consumers has prompted them to transact online, which is one of the main factors driving consumers to shop online during the pandemic [11].

This study examines how pandemic affect consumers' online purchase intentions, as well as how these behaviours influence consumers' acceptance of online grocery shopping. In this regard, the study uses the Theory of Reasoned Action (TRA) and Technology Acceptance Model (TAM) to look into consumers' online purchase intentions and acceptability of online grocery shopping after the Covid-19 pandemic.

In further detail, this study aims to achieve the following research objectives (RO):

RO1: To identify the relationship between attitude and online purchase intention.

RO2: To identify the relationship between subjective norm and online purchase intention.

RO3: To examine the relationship between perceived usefulness and online purchase intention.

RO4: To examine the relationship between perceived ease of use and online purchase intention.

RO5: To study the impact on online grocery shopping after the Covid-19 pandemic.

1.1 Research Background

Over the years, the rise of the online shopping has attracted the attention of researchers and practitioners across the globe to better understand its application in online purchasing by region [12]. The growing online shopping industry allows consumers to use information technology (IT) for their shopping activities, which helps to makes the entire process become easier [13]. Besides, online shopping also offers a wide range of benefits such as time saving, promotions, wide product range, and competitive prices, which greatly stimulates online purchase intentions [14].

Previous scholars have pointed out that part of the millennials and Gen Z are now categorized as an important shopping group, because most of them are proficient in the Internet and have high computer literacy [15]. Additionally, the consumption behaviour of Gen Z is also likely to be influenced by their parents, because both children (Gen Z) and parents (millennials) belong to the Internet Age. In this case, they may create their own unique set of consumption behaviour in the future [16]. Therefore, it is critical for online retailers to comprehend the behaviour of this segment in order to tailor their marketing strategies accordingly.

Covid-19 has already wreaked havoc on the world economy, with numerous countries suspending all economic activity, shutting down corporate offices and small businesses, and preventing large-scale social gatherings [17]. Then, the reduced consumption and investment have had an impact on many other industries that rely on a healthy economy. For instance, with the most direct impact in China, the pandemic has had an undesirable impact on consumption across multiple market categories, such as transportation, catering, and tourism [18].

In the United Kingdom, people are spending more on necessities like groceries while in quarantine [19]. This indicated that online shopping has grown continually as consumers remain cautious (or forced) while they are quarantining at home. These unforeseen consequences have even led to changes in attitudes and adaptations among less enthusiastic online shoppers. On the other hand, it is worth noting that restaurants and retail stores have suffered huge losses [20]. It also includes high-end and luxury merchants, resulting in a smaller variety of value-oriented products and offers [21]. Subsequently, rapid conversion to online business operations and rapid adaptability to the current circumstances can result in new signs of growth.

1.1.1 Online Shopping Trend in Malaysia

Malaysia has the largest number of online shoppers, accounting for 88% of the population, higher than the regional average of 78%. Furthermore, Malaysia also has the highest internet penetration and smartphone penetration among the population in Southeast Asia, with 80% of Malaysians shopping online at least twice a week [22].

Generally, the trend of online shopping is the move towards convenience [23]. Today Malaysian shoppers expect online shopping to be simple, from browsing to purchasing, payment to delivery. Adding to this convenience aspect, major online shopping platforms in Malaysia have reduced delivery times to within a week everywhere in the country. This also applies to shoppers from other countries who shop on the Malaysian online platform, in fact, they also do not wish to wait too long for their purchases to arrive.

Consumer behaviour has changed dramatically due to the Covid-19 pandemic, however these present new opportunities for Malaysian small and medium-sized businesses to compete on a global basis [24]. Retailers are taking advantage of these trends to connect with consumers through business-to-business (B2B) online shopping platforms and sell products online both domestically and internationally [25]. During the pandemic, Malaysian small and medium-sized enterprises (SMEs) are working hard to convert their businesses online [26]. Moreover, providers of logistics services are also working to improve cross-border logistics, network coverage and connectivity, all of which help support the growing penetration of e-commerce businesses in Malaysia's online shopping trend.

The acceleration of online shopping in Malaysia is undoubtedly a watershed moment in this century [27]. Businesses must quickly adapt to consumer demands and the new online shopping driven ecosystem. In fact, logistics is the backbone of this new ecosystem, as online shopping is inherently distance selling, and has taken on an ever-bigger role as online shopping has grown [28].

1.2 Problem Statement

The Internet and technology have revolutionised the method of obtaining products and services, which has aided in the growth of online shopping. This evolution of online shopping shows that consumers have quickly taken advantage of this unconventional but convenient way to shop globally [29]. Grocery purchases have risen in tandem with the rise of personal internet shopping, with online grocery shopping being the most rapidly developing online shopping sector [30].

Prior study has looked at the cognitive and behavioural aspects of consumers' online purchase intention [31]. After then, many scholars adapted the Theory of Reasoned Action (TRA) to better understand which elements take an important influence on consumers' online purchasing decisions [32]. However, majority of the existing Covid-19 study on online shopping has only concentrated on specific product categories. Only a few studies have addressed epidemiological issues as a prerequisite for attitudes and subjective norms based on the TRA concept [33].

It is critical in today's technological environment to successfully integrate technology that facilitates online shopping [34]. From the retailer point of view, online grocery shopping needs further improvement in the market due to operational inefficiencies and poor logistics caused by improper control of physical and information flow [35]. Besides, from the consumer point of view, it is critical to set up technology and website design to meet their needs, particularly in terms of website design quality, such as ease of navigation, access, load time, content usefulness, and attractiveness, all of which can have a significant impact on their behaviour [36].

1.3 Significance of Study

Consumers' attitude and subjective norm regarding online shopping have influenced their intentions to purchase products or services throughout the pandemic [33]. Moreover, because family and friends share similar health concerns and anxiety, individuals' online purchase intentions may be influenced by using Covid-19 preventive tactics when purchasing [37]. As a result, during or after the Covid-19 outbreak, the researcher shall redefine the terms attitude and subjective norms toward the intention to purchase products or services online. This study helps retailers and marketers better understand the importance of their perceptions of online shopping on their intention to purchase grocery online.

Perceived usefulness refers to how consumers' overall perception of the ability of online grocery platforms to facilitate and improve the shopping experience [38]. Meanwhile, perceived ease of use refers to how convenient, time-saving, error-free, easy-to-learn, and versatile an online grocery platform is for consumers [39]. According to prior study, the easier a technology is to adopt, the more valuable it is, demonstrating that perceived utility and simplicity of use are essential variables in completing the online grocery shopping process [5]. In addition, in order to simplify the purchase process, especially for perishable groceries, consumers will choose platforms with good reviews that provide enough product descriptions and purchase instructions to facilitate browsing and purchasing [40].

2 Literature Review

2.1 Pandemic Concern

Covid-19 has changed everything around the world. People use their emotions to evaluate any crisis or change in their lives, and the quality of emotions directly affects people's judgments [41]. In addition, people's emotions are the driving force behind their behaviours, such as social distancing, hand sanitizing, wearing masks, and shopping online to avoid pandemic risks. Therefore, some scholars define the consumer's pandemic concern as the degree to which the consumer perceives the life changes related to the pandemic, and then these changes determine their judgment [33]. Customers with pandemic concerns will usually prevent or respond to these changes.

2.1.1 Covid-19 Pandemic

According to the WHO, Covid-19 is an infectious virus that evolved from the SARS-CoV-2 virus [42]. Most confirmed positive patients may develop minor to moderate breathing sickness, but they will get well without special treatment [43]. Even so, some people will still become seriously ill and require medical assistance. High-risk categories include the aged and those with the need of medical disorders such as cardiovascular disease, diabetes, chronic respiratory disease, or cancer [44].

People share constantly adapt to new circumstances in the entire of live. With the emergence of the Covid-19 pandemic, people have been compelled to adjust to the "new normal" lifestyle. Work from home, parents home-schooling their children in new online learning environments, lockdowns and quarantines, and mandatory face mask wearing in public spaces are all part of the new normal [45]. In fact, during the 2008 financial crisis, the term "new normal" was created to describe substantial economic, cultural, and social shifts that result in uncertainty and social unrest, changing collective perceptions and individual lifestyles [46]. Sadly, the term has been used during the Covid-19 pandemic to emphasise that the pandemic has altered numerous fundamental facets of human life once again.

The new normal has also created new shopping patterns [47]. Due to country lockdowns and quarantines, the way people shopping has changed, and most of them have chosen to go online. This has been going on for at least two years now, so the new shopping patterns are ingrained. However, when the brick-and-mortar store is open for business, there will still be many people willing to take risks and shop as previous. Yet, this does not mean that people will suddenly abandon the fairly addictive, and pleasant experience of purchasing online [48]. The fear of Covid-19 will not disappear overnight. People will remain cautious even after the lockdown ends, with many opting to shop online for safety reasons [49].

Consumers will increasingly value the ease that online purchasing provides in the future. While the movement restrictions imposed because of Covid-19 may make online shopping more attractive, it is believed that this is essentially a long-term trend [50]. This is also the main focus of the study, as online shopping practises are expected to persist in the post-pandemic era.

2.1.2 Movement Control Order

Protecting everyone from infection by remaining as a minimum 1 m away from others, wearing a proper face mask, and washing or sanitising hands often are the best measures to avoid and reduce the spread of the Covid-19 [51]. If someone is feeling unwell or showing symptoms of Covid-19, that person is strongly advised to stay home and self-isolate until recovery [52].

On March 18, 2020, the government of Malaysia took the significant step of instituting its first national lockdown - the Movement Control Order (MCO), in response to the exponential surge of confirmed Covid-19 cases. The order is obligatory under the Prevention and Control of Infectious Diseases Act 1988 (Act 342) and the Police Act 1967. In addition, the government has imposed a travel restriction that does not allow Malaysians to travel abroad, nor tourists and foreigners into the country [53]. Malaysians returning from abroad must undergo health assessment and must be in quarantine for a period of 14 days.

People are encouraged to remain at home during the MCO time, and mass movements and diverse gatherings are absolutely prohibited across the country. Apart from for those dealing in essential services such as utilities, healthcare, emergency services, food and groceries, transportation and logistics, and banking and finance, all government and private educational institutions and establishments have been instructed to close [54].

Much of the world went into lockdown in March 2020, and forcing many businesses to close temporarily. Countries are lifting limitations one by one, but the future remains uncertain. Even reopened establishments have implemented social distancing, masking, and a limit on the number of consumers who can enter at one time [55]. People are increasingly turning to online purchasing when traditional shopping becomes difficult and perhaps frightening due to safety concerns. The successful transformation of offline to online is made easier by the fact that consumers have welcomed online businesses with open arms [56].

3 Theoretical Foundation and Hypotheses Development

3.1 Theoretical Foundation

3.1.1 Theory of Reasoned Action

Fishbein and Ajzen created the Theory of Reasoned Action (TRA) to investigate the relationship between attitudes and behaviour [57]. TRA considers behavioural intent rather than attitude as the main predictor of behaviour [58]. According to this theory, attitudes toward behaviour (or attitudes toward expected outcomes or outcomes of behaviour) and subjective norms (or, influence on individual's attitudes and behaviours) are the main predictors of behavioural intentions [59].

TRA was originally developed as an improvement on the theory of information integration [57]. The researchers developed it after trying to identify the difference between attitude and behaviour. The first change in integration theory is behavioural intention [60]. Furthermore, TRA also acknowledges that there are factors that limit the impact of attitudes on behaviour [61]. For instance, if individual attitudes lead them to want to shop online, but face bank accounts compromised, a lack of money can change that

attitude and keep them at home overnight. Therefore, TRA predicts behavioural intentions, which is somewhere between stopping attitude predictions and actually predicting behaviours, because it separates behavioural intentions from behaviour [62].

Another improvement of TRA that past researchers did was applied the two new elements, attitudes and other's expectations (norms), to predict behavioural intentions [63]. So, when person attitude led them to shop online, the expectations of others might influence them to think traditional shopping is better. In the end, subjective norms have two elements: normative beliefs (what individuals think others expect me to do) and willingness or motivation to follow the norm (how much individuals care about what others think of them) [64].

3.1.2 Technology Acceptance Model

The main objective of the Technology Acceptance Model (TAM) is to elucidate the processes that support technology acceptance, to predict the behaviour of the technology and to provide theoretical explanations for the successful implementation of the technology [65]. Besides, the practical objective of TAM is to inform practitioners of the actions they may take before implementing the system [66]. Davis developed TAM by constructing a process that mediates the relationship between information systems characteristics (external factors) and actual system usage. Additionally, the model was based on TRA, which provided a psychological perspective on human behaviour that was missing from the information systems literature at that time [67].

Previous study has shown that an individual's choice to take a behaviour is the result of analysing the benefits they expect to gain from the behaviour compared to the effort or cost they expend to perform the behaviour [68]. This indicates that the decision to use an information system is based on a trade-off between the system's perceived usefulness and its perceived complexity of use. In TAM, perceived usefulness is described as an individual's impression of how well a given technology increases performance, whereas perceived ease of use is defined as the degree to which people believe a system to be simple [69].

According to TAM, external factors (system design characteristics) trigger cognitive responses, which in turn form effective responses (attitude/intent to use technology), and finally determine user behaviour [65]. In short, TAM stands for behaviour, which is predicted by perceived ease of use, perceived usefulness, and behavioural purpose. The higher the emotional response, the higher the likelihood that the behaviour will occur [70]. The impact of perceived usefulness on actual use may be direct, underscoring the importance of variables in predicting behaviour. Although perceived ease of use does not directly affect usage behaviour, it supports the impact of perceived usefulness. According to the model, if an application is perceived to be simple to use, it is more likely to be considered beneficial by users and to promote technology acceptance [71].

3.2 Hypotheses Development

Consumers' behaviour can be influenced by the level of perceived impairment and the level of perceived profit or obtained benefit after the transaction when they have the purpose to purchase a product or service online [68]. Moreover, consumers shall be

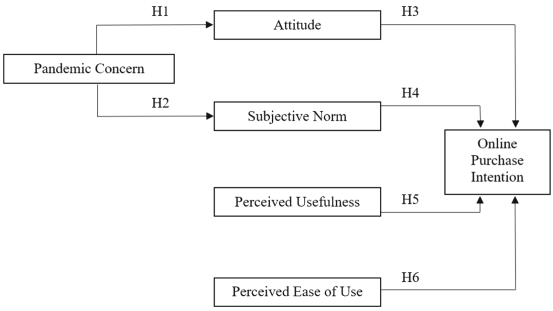

Fig. 1. Proposed framework

understood in terms of their emotions, as they play a significant part in risk assessment and judgement [72]. With the onset and spread of the Covid-19 pandemic, lockdowns and fears of infection have affected their online purchase attitudes and intentions [73]. Therefore, the researchers propose the following hypothesis (Fig. 1):

H1: Pandemic concern has a significant positive influence on attitude.

Subjective norms explain how friends and families or even influencers display social pressure to perform or not to perform an individual behaviour [74]. While consumer concerns about the pandemic, such as stress, product shortages, price increases, possible quota purchase impositions, or nervousness about their currency restrictions may affect their perceived behavioural control and the impact of others on them [33]. Therefore, the researchers propose the following hypothesis:

H2: Pandemic concern has a significant positive influence on subjective norm.

Consumer attitude is considered to be the key to perusing online purchase intention [75]. Also, attitude is the expressions of feelings about whether an object is liked or not, and attitudes also describe consumers' trust in various attributes and benefits of an object [76]. It can be concluded from several viewpoints about attitude that an attitude is a fixed state of a consumer in the way of expressing his pleasure or displeasure with an object when dealing with an object. Moreover, previous scholars stated that attitudes influence purchase intentions in three dimensions: cognition, emotion and idea [77]. Therefore, the researchers propose the following hypothesis:

H3: Attitude has a significant positive influence on online purchase intention.

Subjective norm is considered to be a person's feelings or assumptions about the expectations of people in his life about whether or not some of his actions are performed [78]. Besides, subjective norms also can be described as personal beliefs about the expectations of influential people around him, either individually or collectively, to exhibit or not to exhibit certain behaviours [79]. Subjective norms also identify numerous people who can be impacted, such as family support, support from significant others, and support from friends in two dimensions: normative belief and compliance motivation [57]. Therefore, the researchers propose the following hypothesis:

H4: Subjective norm has a significant positive influence on online purchase intention.

Perceived usefulness becomes a determinant of system, adoption, and user behaviour. A technology can be said to be successful if it has useful value that customers demand [80]. Previous studies have shown that perceived usefulness has significant effects on

online purchase intention [81]. In addition, there were scholars confirmed that perceived usefulness was shown to have a significant and positive impact on online purchase intentions with the indicators of work performance, increase productivity, efficiency, make work easier, useful [82]. Therefore, the researchers propose the following hypothesis:

H5: Perceived usefulness has a significant positive influence on online purchase intention.

Perceived ease of use is the belief in ease of use, the degree to which users perceive a technology or system to be easy to use without problems [83]. Previous studies have shown that perceived ease of use has been proven to have a positive and significant impact on online purchase intention [84]. In addition, the indicators of perceived ease of use affecting online shopping decisions are easy to learn, controllable, clear and understandable, flexible, easy to master, and easy to use [85]. Therefore, the researchers propose the following hypothesis:

H6: Perceived ease of use has a significant positive influence on online purchase intention.

4 Research Methodology

The researchers will proceed the next stage by conducting a questionnaire survey with approximately 300 respondents. Subsequently, the target population in this study will be the online shoppers born in millennials and Gen Z, who are also internet savvy and considered to be an important target group for online shoppers in Malaysia [86]. The target population considers the value of Generational Cohort Theory and then catch on the online shopping characteristics of Millennials and Gen Z [87].

On the other hand, this study will use a quantitative cross-sectional design with convenience sampling. The researchers chose to use convenience sampling because they could post a questionnaire on a website and invite all visitors to respond, or send invitations to participate directly via social media, such as Facebook [88].

5 Conclusion

This study primarily examines online purchase intention affected by the Covid-19 pandemic. Whether consumer purchase intention has altered to accommodate to a new normal lifestyle after the pandemic, or whether consumer behaviour has remained the same as it was before the pandemic.

The researchers used a combination of the TRA and TAM with the influence of pandemic concern to explore the mentioned topic. In the future, a survey questionnaire shall be sent out to millennials and Gen Z, who have been identified as major online shoppers by both retailers and marketers.

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