

FACTORS INFLUENCING CONSUMERS'
PURCHASE INTENTION TOWARDS ONLINE
GROUP BUYING IN MALAYSIA

LIEW YEAN SIEN

MASTER OF BUSINESS ADMINISTRATION

UNIVERSITY TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND
MANAGEMENT

DECEMBER 2015

Factors Influencing Consumers' Purchase Intention
towards Online Group Buying in Malaysia

Liew Yean Sien

A research project submitted in partial fulfillment of the
requirement for the degree of

Master of Business Administration

Universiti Tunku Abdul Rahman

Faculty of Accountancy and Management

December 2015

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By

Liew Yean Sien

This research project is supervised by:

Dr. Mohammad Falahat
Assistant Professor
Department of International Business
Faculty of Accountancy and Management

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Name of Student : LIEW YEAN SIEN

Student ID : 12 UKM 01791

Signature : _____

Date : 10th December, 2015

ACKNOWLEDGMENTS

I would like to express my sincere gratitude to my supervisor, Assistant Professor Dr. Falahat Nejadmahani Mohammad for guiding me through my Master study and completion of this dissertation. To all the faculty Professors, Lecturers and staffs of the Faculty of Accountancy and Management, University of Tunku Abdul Rahman (UTAR), I extend my sincere thanks for the knowledge and skills that I have acquired over the past several years, not forgetting the friendships gained among the faculty and fellow MBA candidates. I owe a debt of gratitude to several faculty members and fellow MBA candidates for their invaluable advice and guidance in the course of my study. I dedicate this dissertation to my wife for her unwavering support, understanding and love.

DEDICATION

I would like to express my heartfelt gratitude to my beloved wife, Teh Ter Rui, for being there with me on every step of this journey. Her patience, dedication and encouragement brought this dissertation to fruition. Without her unwavering support, I could not have finished this dissertation.

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ABSTRACT

Group-buying is a business model based on the power of collective buying. Consumers with similar product interest come together and obtain a significant volume discount from retailers. Online group buying (OGB) is growing rapidly and it has become popular and successful in many countries. However, this area still lacks of research and it is still in the early stages of development especially in developing and emerging market.

This study aims to examine the factors influencing consumers' purchase intention towards online group buying in the context of Malaysia. Six dimensions were employed in measuring consumers' purchase intention in online group buying, such as perceived usefulness (PU), perceived ease of use (PEOU), price, electronic word of mouth (e-WOM), trust and perceived risk (PR). A total of 300 valid sample was drawn from consumers who reside in Malaysia. This study reveals that PU, price and e-WOM have strong correlation with consumers' purchase intention towards online group buying in Malaysia. Whilst, trust and PR have a moderate impact on consumers' purchase intention. Conversely, PEOU has no significance on consumers' purchase intention towards online group buying.

Keywords: electronic word of mouth, online group buying, perceived usefulness, perceived ease of use, trust, perceived risk.

CHAPTER 1

RESEARCH OVERVIEW

1.0 Introduction

Online group buying websites are growing rapidly around the globe. Consumers unite and combine their buying power in order to bargain for a significant volume discount from a seller. On the other hand, it also helps new seller to enter the competitive markets easily.

This chapter provides an overview study to examine factors influencing consumers' buying intention towards online group buying websites in Malaysia. Further, research background of the study and problem statements will be discussed. In addition, the research questions and objectives will be proposed. Moreover, the hypothesis of the study will be constructed corresponding to the research question. After that, the significance of the study will be presented. The chapter outline with a brief overview of respectively chapter in this study will be presented and a conclusion of this chapter.

1.1 Research Background

Group buying (or collective buying) is a situation where consumers combine their purchasing power in order to obtain significant volume discounts from retailers (Cheng & Huang, 2013). The group buying pricing mechanisms encourages consumers to combine their acquiring power in order to gain volume discounts from seller (Kauffman & Wang, 2002). Group-buying works the same either online or offline (Yang & Mao, 2014).

Online group-buying (OGB) has emerged with the advent of e-commerce and social networking. Groupon, established in the year 2008, is the world's fastest growing group-buying website. Other similar websites have followed suit. There are numerous similar type websites mushrooming in China and other countries. In Malaysia, OGB websites such as Groupon Malaysia, MilkADeal.com, MyDeal.com.my, Dealmates.com.my, EverydayCouponMalaysia.com, Yaloo.com, and GroupTime.my give tremendous attractive discounts to consumers.

OGB is a new form of e-commerce, which benefits all parties in the transaction, for instance suppliers, intermediaries, merchants and consumers. Consumers can purchase their preferred products and services at a relatively lower price. Meanwhile, merchants can sell greater volumes and reach more consumers (Lau, 2011). Merchants can also adopt promotional methods that provide quantity based price reduction or no free delivery to attract consumers to buy the goods and services (Chen, Chen, & Song, 2002). Besides, new start-ups can make use of OGB websites to promote their products and their brand at low cost. In all these, OGB certainly changes the way how consumers purchase goods and services online. Firms are able to leverage their business to wider reach to potential customers globally through the Internet (Rakshita & Alok, 2014).

Past studies show there are several challenges in online group buying businesses, such as retaining existing consumers and attracting new customers (Chen, Wang, Zheng, & Luo, 2013; Cheng & Huang, 2013). Other studies show that the price factor mostly affects the purchase intention (Chen, Chen, Kauffman, & Song, 2009) whilst the consumer decision making is affected by personal attitudes and social standards (Pi, Liao, Liu, & Lee, 2011). It is because consumers often utilize the Internet as an instrument for product comparison as well as price searching in order to obtain their desired product at the lowest available price (Haubl & Trifts, 2000).

1.2 Problem Statement

The objective of this study is to examine the relationships among the factors and to assess how it influences consumers' participation and buying intention on

group buying websites in Malaysia context. According to antecedent studies, although price is the key factor that consumers concerned the most, however, there are other factors that sway consumers' buying intention, such as attitudes, reference group and others (Chang, Lai, & Wu, 2010). Further, there are limited studies being done on consumers' buying intention on group buying websites, especially in Malaysia context. Due to the OGB concept still in the initial stage of development. Therefore, it is necessary to investigate factors affecting consumers' purchase intention in this area.

1.3 Research Objectives

This section will initiate with a general objective of this study. Consequently, the breakdown of the specific areas to examine in this study will be demonstrated.

1.3.1 The General Objective

The purpose of this study is to examine and assess whether perceived usefulness, perceived ease of use, price, electronic word of mouth, trust and perceived risk will affect the buying intention of consumers towards group buying websites.

1.3.2 The Specific Objectives

The following research objectives are proposed to generate better understanding on the issues.

- a) To examine the **perceived usefulness** in relation with consumers' purchase intention towards OGB.
- b) To examine the **perceived ease of use** in relation with consumers' purchase intention towards OGB.
- c) To examine the **price** affects consumers' purchase intention towards OGB.
- d) To examine the **word of mouth** affects consumers' purchase intention towards OGB.
- e) To examine the **trust** in relation with consumers' purchase intention towards OGB.
- f) To examine the **perceived risk** affects consumers' purchase intention towards OGB.

1.4 Research Questions

The proposed research questions as below:

- a) Does **perceived usefulness** positively affects consumers' purchase intention towards OGB?
- b) Does **perceived ease of use** positively affects consumers' purchase intention towards OGB?
- c) Does **price** positively affects consumers' purchase intention towards OGB?
- d) Does **electronic word of mouth** positively affects consumers' purchase intention towards OGB?
- e) Does **trust** positively associate with consumers' purchase intention towards OGB?
- f) Does **perceived risk** positively affects consumers' purchase intention towards OGB?

1.5 Hypotheses of the Study

Six hypotheses are proposed to conform to the research inquiries.

- H₁ : There is a positive relationship between **perceived usefulness** and consumers' purchase intention towards OGB.
- H₂ : There is a positive relationship between **perceived ease of use** and consumers' purchase intention towards OGB.
- H₃ : There is a positive relationship between **price** and consumers' purchase intention towards OGB.
- H₄ : There is a positive relationship between **electronic word of mouth** and consumers' purchase intention towards OGB.
- H₅ : There is a positive relationship between **trust** and consumers' purchase intention towards OGB.
- H₆ : There is a positive relationship between **perceived risk** and consumers' purchase intention towards OGB.

1.6 Significance of the Study

There are six factors proposed to assess issues which might influence consumers' buying intention on group buying websites in Malaysia context. There are perceived usefulness, perceived ease of use, electronic word of mouth, trust and perceived risk. Moreover, this study also provides the valuable information and insights to companies and researchers to have a better understanding of the OGB business model. Firms which are aiming to venture into online group buying may use this paper as a guide for improvement. They can focus on the possible areas which they could have missed. Whilst, they can also use the findings as a benchmark to improve their business processes.

1.7 Chapter Layout

Chapter 1: Introduction

It provides an overview with regards to the issues which influence consumers' buying intention towards online group buying website in Malaysia context. The research background of the study will be discussed and problem statement will be identified. Further, this chapter will state the proposed research objectives to be analyzed, it follows by the proposed questions and hypotheses to be examined. Last but not least, the chapter ended with the significance of the study follows by a brief overview of each chapter found in this research project.

Chapter 2: Literature Review

The literature of this study will be reviewed. Further, all the relevant theoretical models will be discussed. In addition, the proposed conceptual framework to identify the network of relationship and hypotheses development will be identified. Further, it will discuss the correlation of both independent variables and a dependent variable of the research project. Besides, it will include the in-depth explanation about each variable together with the supported studies of other researchers as well.

Chapter 3: Methodology

This chapter illustrates the research methodology adopted in the present research study. It begins with the explanation research design and the data gathering methods used. Further, sampling design will be reviewed. Moreover, the research instrument and construct measurement for the questionnaire will be discussed. After that, this chapter will discuss the data processing methods used to improve and reducing error on the survey instruments. On data analysis, it explains the validating and reliability on measurement model and assessment on structural model.

Chapter 4: Data Analysis

This chapter starts with analyzing and discussing of the results. Further, the procedures continue with assessing the measurement model and it follows by validating the structural model for hypothesis testing. For measurement model includes data reliability, internal consistency reliability, convergent validity, discriminant validity. For structural model, testing of hypotheses will be examined.

Chapter 5: Discussion, Conclusion and Implication

This chapter explains the overall statistical analysis, key findings and the results of hypothesis testing found in previous chapters. It follows with reviewing the implication and addressing the constraint of the study. Further, some suggestions for upcoming research will be discussed. Finally, the conclusion of this study.

1.8 Conclusion

This chapter gives a brief introduction and background with regards to online group buying. Moreover, this chapter proposed several research objectives and questions to examine factors influence consumers' buying intention on group buying websites. Consequently, the proposed hypotheses compiled to conforming to the research questions. After that, the significance of the chapter discussed on the significance of the study and it ended with a presenting the chapter layout.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter reviews the literature of the study as well as relevant theoretical models. Consequently, a proposed theoretical framework will be established conforming to research objectives and questions which proposed in the previous chapter. The last section, hypotheses on each of the components will be developed and be tested to review the correlation towards online group buying.

2.1 Review of Literature

2.1.1 Technology Acceptance Model (TAM)

TAM is a theoretical model which commonly adopted by researchers to explain technology acceptance behavior (Davis, 1989) and describe user acceptance level on technology (Bahmanziari, Pearson, & Crosby, 2003). Antecedent studies (Tong, 2010; Rahman, Khan, & Islam, 2013) employed the TAM model to examine user acceptance on e-commerce context. Further, other used it to predict consumers' purchase intention through technology (Tsai, Cheng, & Chen, 2011). According to Davis (1989), the TAM consists of five main variables, such as Perceived Ease of Use (PEOU), Perceived Usefulness (PU), Attitude Towards Using (ATU), Behavioral Intention to Use (BI), and Actual Usage (AU). The TAM model has proved that PU and PEOU have an optimistic association on behavioral intentions in OGB activity (David, 1989; Tsai et al., 2011).

2.1.2 Online Group Buying

OGB is also named “team purchase” or “online collaborate buying”. It has been emerged and developed for more than ten years (Anand & Aron, 2003).

It is a business model whereby consumers unite, by inviting or recruiting people, to join the group in order to achieve sufficient volume of order to generate extremely low transaction price (Cheng & Huang, 2013). According to Anand and Aron (2003), the online group buying adopted the innovation of online market mechanisms that works according the traditional group buying auction concept.

The advent of the rapid development of the e-Commerce and online group buying activities, it is mainly due to three criteria, it's fast, convenient and without geographical restriction. The group-buying business model gathers individuals, with the same product interest, to participate in a purchase activity to gain remarkable discounts from seller (Cheng & Huang, 2013). With the help of the Internet, the online platform unites consumers from various places, improve the volume demand, to bargain with vendors to achieve a deal at a lower price (Kauffman & Wang, 2002). OGB activity consists of five stages: negotiation, consolidation formation, initiator voting, payment collection and distribution (Tsvetovat, Sycara, Chen, & Ying, 2000). The initiator and other participants play a vital role in OGB activity. Prior study (Chen & Wu, 2010) indicated that electronic word of mouth, website quality, trust plus reputation have positive influences on consumers' purchase intention on OGB websites.

2.1.3 Perceived Usefulness (PU)

Davis (1989) defined PU as “the degree to which an individual believes in using a particular system would enhance his or her performance”. Henderson and Divett (2003) indicate that consumers recognize the application as useful if the application able to perform tasks in an effective way. According to Gefen, Karahanna and Straub (2003), PU was used to measure shopper's subjective valuation of the utility which is recommended by the current updated information technology in an explicit task-related context. According to the study by Pikkarainen, Pikkarainen, Karjaluoto, and Phanila (2004) in the study of TAM acceptance online banking, they found that PU positively affects the actual behavior of Internet banking adoption. Sanchez-Franco and Roldan (2005)

indicated in their study that PU and behavioral intention were correlated and it was strong among goal-directed users. Chau (1996) demonstrated two types of PU, near-term and long-term, in a study to review TAM.

2.1.4 Perceived Ease of Use (PEOU)

Davis (1989) defined PEOU as “the degree to which an individual believes in using a particular system would be free of effort”. It has an influence on the individual’s behavioral intention to conduct financial transaction on a website (Yang & Mao, 2014). Contrarily, Koufaris and Hampton-Sosa (2004) explained PEOU as consumers’ subjective perception, which is regards to the extent of effort required to learn and use the particular website. The work of Selamat, Jaaf and Ong (2009) explained that consumers prefer a more user-friendly and simple system for online shopping. This is supported by Teo (2001) in the study that consumers are likely to use the particular technology if the system appeared as easy to use and require less effort to learn.

Previous studies indicated that website characteristics play an important role to determine PEOU in online purchase activities (Zeithaml, Parasuraman, & Malhotra, 2002; Beldona, Morrison, & O’Leary, 2005). Further, the study of Lim and Ting (2014) demonstrated that PU and PEOU form a basic measurement towards consumers’ acceptance of a particular new website (Lim & Ting, 2014). Several components need to be taken into consideration, such as simple process flow, flexible and easy to learn (Rahman et al., 2013). Nevertheless, effective product searching and easy checkout process are two important features that will help to improve PEOU and achieve higher consumer’s purchase intention (Yang & Mao, 2014).

2.1.5 Price

Price is the main reason in motivating consumers to purchase (Kotler & Keller, 2006). Price consciousness refers to consumers who pay attention only to products or services at lower prices, because they want to avoid paying higher price for the same products or services (Sinha & Batra, 1999). Price sensitivity refers to consumers who are sensitive to price and respond to the changing of the prices for particular products and services (Wakefield & Inman, 2003; Pi et al., 2011).

Pricing is the most effective method to stimulate price sensitive consumers to obtain the greatest value for their money or to purchase a particular product at the cheapest price possible (Brassington & Pettitt, 2006). Price sensitive consumers will notice and respond based on the changes on the prices published in group buying websites (Pi et al., 2011).

Previous study indicated that there are two major types of price system commonly used in online group buying website (Erdogmus & Cicek, 2011). The first type is recognized based on dynamic pricing mechanisms. It implies that a huge group of buyers unite to perform collective buying, with significant discounts in price, through the group buying website. The discount prices and number of buyers were predefined by the sellers. Each buyer in a group will enjoy the similar discount if they able to form a group within a given period of time. The second type refers to the group-buying vendors offer certain products at bigger discounts, usually more than 50%, but the price do not reduce any further even if the number of buyers increases.

2.1.6 Electronic Word of Mouth (e-WOM)

Westbrook (1987) defines word of mouth (WOM) as any form of informal communication deliver to or exchange with other consumers, such as proprietorship, usage, or characteristics of specific product and services. Whilst, Park and Kim (2008) define WOM as “an effective routine to share product information to potential consumers as of a user standpoint”. In the old-fashioned WOM, consumers share their comments on products or service-related as well as their experiences with their closest friends and family members. Kotler and Keller (2006) states in their study that family members (including siblings and parents) are the most persuasive reference groups in traditional ways of WOM communication, even though they may not stay together with their family.

With the advancement of the Internet and communication capability, it has radically improved the measure and scope of WOM communication. The online reviews or e-WOM has become a relatively important source of information for consumers to post their feedback and gain other comments on particular products or services (Lin et al., 2013). Riegner (2007) found that consumers' purchase behavior changed due to the increasing accessibility of the Internet. Some studies

(Cheng & Huang, 2013; Lin et al., 2014) found that consumers tend to get more information about the product from virtual communities, for instance Internet forum and blogs, before they make a decision. Henceforth, it indicates that consumers are accepting online reviews as an additional source of reference (Riegner, 2007). Moreover, it also demonstrates that comments or reviews published on the Internet create robust persuasive influence on consumers (Smith, 1993).

Furthermore, consumers' comments published on online platform were found create significant towards the company's brand or product, either positively or negatively (Henning-Thurau, Gwinner, Walsh, & Gremler, 2004). Product reviews from professional and experienced users, which are posted on group buying websites, can sway consumers' perceptions of the product characteristics (Cheng & Huang, 2013). Ye, Law and Gu (2009) indicated that positive reviews lead to sales increases. Whilst, the study of Duan, Gu and Whinston (2008) also indicated parallel with the study that the online WOM stimulates product sales.

2.1.7 Trust

Definition by Mayer, Davis and Schoorman (1995), "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party". Shiau and Chau (2013) mentioned that trust is an effective factor to reduce the insecurity and improve the simplicity of online transaction whilst creating a positive intention towards transaction behavior. Jarvenpaa, Tractinsky and Vitale (2000) proved that trust might be a predecessor element for transaction intention which is correlated to behavior and attitudes. The study indicated five ascendants of perceived risk (such as subjective norm, uncertainty avoidance, disposition to trust, interaction and reputation) whereby trust on the initiator (Sun, Luo, & Liu, 2010). Additionally, the study concluded that trust on initiator affects the purpose of participating OGB (Sun et al, 2010). Chiu, Huang and Yen (2010) proved in their study that trust is a positive predictor of consumer intention to repeat purchases.

2.1.8 Perceived Risk (PR)

It is defined as “consumers’ subjective expectation of suffering a loss in pursuing a desired outcome” (Zhou, Dai & Zhang, 2007; Van Noort, Kerkhof & Fennis, 2007). Several past studies also found that PR has a robust influences on consumers’ buying intention over the Internet (Barnes, Bauer, Neumann, & Huber, 2007; Zhang, Tan, Xu, & Tan, 2012; Tong, 2010). In the work of Tong (2010) indicates that a higher perception of risk leads to a fewer willingness to buy. In addition, the PR in consumer behavior is defined as “consumers’ experience of pre-purchase uncertainty as the degree of expected loss resulting from the purchase and use of a particular subject” (Ye, 2004). Wang, J. Ashleigh and Meyer (2006) stated in their study that products or service quality, personal privacy and safety are the essential concerns of consumers who often perform the online financial transaction.

Security risk is the main issues that consumers worried most when they engaging in online purchase transactions, merely due to the security provided by the websites, applications or merchants (Bart, Shankar, Sultan, & Urban, 2005). On the other hand, Goodwin (1991) defined privacy risk as consumers’ perceived their privacy information being hijacked, unintentionally, by others during online transaction. This is supported by the literature of Liebermann and Stashevsky (2002) which concluded that consumers’ personal information and Internet credit card information stealing connected to the perceived risk on online shopping process. Hence, security risk and privacy risk are said to be predominant in an online shopping environment (Chen & Barnes, 2007; Mukherjee & Nath, 2007).

Several antecedent literatures proved that PR can be minimized by enhancing the trust of the website (Gefen & Pavlou, 2006; Mukherjee & Nath, 2007) and improve the safety of the online transaction process (Pavlou, 2003; Koufaris & Hampton-Sosa, 2004). In the study of Chen and Barnes (2007), it is demonstrated that PR significantly correlated to initial trust in e-commerce. This was supported by Mukherjee & Nath (2007) in their findings, which concluded that trust has a positive association with perceived privacy and perceive security in e-commerce.

2.1.9 Purchase Intention

Purchase intention is defined as “consumers’ willingness to purchase certain products or services from the online group buying website” (Ailawadi, Neslin, & Gedenk, 2001). Online purchase intention refers to the consumers’ willingness to be involved in an online transaction (Pavlou, 2003). Purchase intention has been broadly used as a focal construct to indicate consumers’ buying behavior in market research (Yang & Mao, 2014).

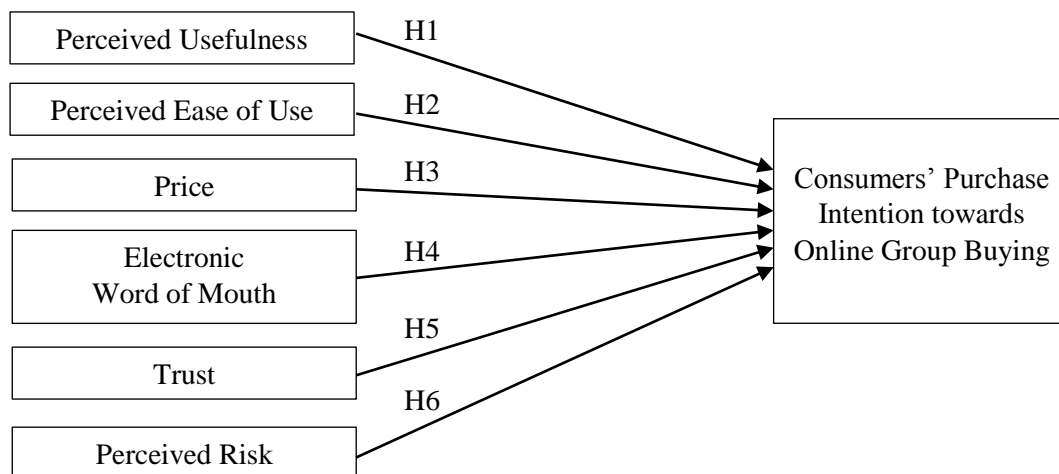
Past studies indicated that PEOU and PU influence consumers’ buying intention on e-commerce websites (Gefen et al., 2003; Ha & Stoel, 2008). However, Shergill and Chen (2005) argued in their findings that information privacy is consumers’ primary concern online shopping.

According to Chang and Wildt (1994), the authors identified two attributes used to estimate the consumers’ buying intention. They are buyers’ willingness to purchase and buyers’ willingness to repurchase from an e-commerce website in near future. This is in line with previous finding (Pavlou & Gefen, 2004) in which they indicated that buying intention positively sways consumers’ actual purchase behavior. Moreover, it may affect buyers’ to repurchase intention from the websites.

2.2 Theoretical Framework

Figure 1 demonstrates the proposed theoretical framework conform to the research questions and research objectives. It serves as a foundation to develop this theoretical framework. The endogenous variable, consumers’ purchase intention towards OGB, is located at the right hand side of the framework. Whilst, the PU, PEOU, price, e-WOM, trust and PR represented the exogenous variables located at the left hand site of the model. The conceptual framework is constructed to identify the independent and dependent variables and shows each variable’s expected relationship. The hypotheses development of this study will be discussed in the subsequent section.

Figure 1: Theoretical Framework



2.3 Hypotheses Development

2.3.1 Perceived Usefulness (PU)

PU was identified as one of the key factors that generally influence consumers' buying intention, either through online shopping or online group buying activities. Consumers are getting more comfortable to participate in online shopping other than do shopping at brick and mortar stores. It is mainly due to the reason that Internet shopping is convenient, no time constraints and no geographical restrictions.

With the advent of the Internet, e-Commerce website, and smart phones, consumers can connect to the Internet more often and perform shopping at their fingertips. Moreover, with the convenience of online payment or mobile wallet, for instance PayPal or Google Wallet, the payment made online is faster and traceable compare with the traditional one. Consumers able to track their spending, receive confirmation emails, and invoices from vendor with just one click. The payment processes become so simple appear nowadays. On the other hand, it also helps vendors to gain more sales and orders even during the off hours. This was supported by Pikkarainen et al. (2004) in the study of TAM acceptance online banking whereby consumers' purchase intention using online banking was proved positive.

It is possible for consumers to order almost any products or services through the Internet, either at home or stuck in the traffic jam, as long as they have access to the Internet. Thus, it will definitely save a lot of their time. Besides that, consumers can also hopping various online stores at the same time, to get the cheapest price of the product or services, before they place an order. The traditional shopping stores will hardly compete with the online store in this area. As for vendors, they can publish as many products as they want on their e-Commerce websites and it will not add extra cost in their balance sheet. Furthermore, consumers will get sufficient time to think and to research on the products or services before they place an order (Morganosky & Cube, 2000; Kim & Kim, 2004).

In order to further analyze the association between perceived usefulness and consumers' buying intention towards OGB in Malaysia, this study proposed that:

H₁ : There is a positive relationship between perceived usefulness and consumers' purchase intention towards online group buying.

2.3.2 Perceived Ease of Use (PEOU)

A group buying website with higher PEOU encourages consumers' readiness to accept current website (Davis, 1989) and will possibly motivate them to invite their friends or family members to purchase from the website as well. Previous studies found that PEOU affects significantly on shoppers' behavior towards online purchase activities (Davis, 1989; Yulihhasri, Islam, & Daud, 2011; Rahman et al., 2013). This is in line with Yuslihasri et al. (2011) research which indicates that PEOU has proved positive and significant influence towards consumers' attitude on online purchasing. Additionally, e-commerce websites which are built with ease to navigate user interface and user friendly layout may improve consumers' trust towards the company (Koufaris & Hampton-Sosa, 2004).

To further analyze the connection between PEOU and consumers' purchase intention towards OGB in Malaysia, this study proposed that:

H₂ : There is a positive relationship between perceived ease of use and consumers' purchase intention towards online group buying.

2.3.3 Price

OGB is a new business model which offers significant discounts for various products and services online. Consumers focus exclusively on products offered at low price and vendors use the price discount rate as a promotion tool or a marketing tool to attract consumers (Alford & Biswas, 2002). Thus, OGB is a new way connecting promotion and price (Erdogmus & Cicek, 2011).

Price discount is a consumers' perception of the price saving, the higher the discount rate the more they could save from buying the particular product (Yang & Mao, 2014). Yang and Mao (2014) explained that discount rate could also be viewed as the factor that influences consumers' to purchase.

Discount rate is a vital factor influencing customers' searching intention (Grewal, Monroe, & Krishnan, 1998) and price sensitive consumers are those who try their best to search for a lower price (Wakefield & Inman, 2003). Price sensitive consumers search multiple online stores or online group buying websites, compare prices with several vendors, before they place their order.

In order to further analyze the association between price and consumers' purchase intention towards OGB in Malaysia, this study proposed that:

H₃ : There is a positive relationship between price and consumers' purchase intention towards online group buying.

2.3.4 Electronic Word of Mouth (e-WOM)

WOM is commonly known as the driver to promote new products for new adopters (Bass, 1969) and affects consumers' choices of products (Henricks, 1998). Moreover, with rapid development of communication capability as well as the mushrooming of smartphone users, sharing opinions and posting comments are getting more easily and quickly. Some related study (Park & Kim, 2008) also shows that consumers used to post their comments and write reviews about products or services in virtual communities or website discussion groups.

e-WOM has become the important source of reference for consumers before they make any buying decision (Lin et al., 2013) due to tremendous advices and product using experiences shared by the online user that influence their behavior.

Additionally, Kotler and Keller (2006) found out that consumers often influenced by their family members' suggestion. Thus, it indicates that consumers are likely to purchase products or services if their family members recommended it, merely because they trusted them (Kotler & Keller, 2006).

Quality of e-WOM refers to comments that have persuasive strength embedded in an informational message (Bhattacharjee, 2006). In the study of Lin et al. (2014), from the information characteristic standpoint, the quality of e-WOM consists of understandability, sufficiency, relevance and objectivity. Those comments and reviews posted by anonymous are considered not reliable, consumers generally will not believe this information published on the website (Ratchford, Talukdar, & Lee, 2001). Conversely, comments and reviews that contain more persuasive advice will gain more positive influences on consumers' buying intention. On the other hand, Cheung, Matthew and Rabjohn (2008) stated that the consumers' purchase intention relied on requirements that meet their prerequisites. Hence, the perceived quality of information they received will determine their willingness to purchase it (Cheung et al., 2008).

Quantity of e-WOM refers to the total number of post comments for a particular product or service (Cheung & Thadani, 2010). Some studies state that the extent of online consumer reviews represents popularity of the product, whilst some associated it to the volume trades of the particular product (Chatterjee, 2001; Chen & Xie, 2004). Therefore, it is likely to lead consumers to rationalize their buying decision. Nevertheless, comments or reviews posted by experts tend to be easily accepted by consumers because consumers believe they have more professional knowledge and more experiences in a particular product or service (Alba & Hutchinson, 1987).

In order to further analyze the association between e-WOM and consumers' buying intention towards online group buying in Malaysia, this study proposed that:

H₄ : There is a positive relationship between electronic word of mouth and consumers' purchase intention towards online group buying.

2.3.5 Trust

OGB is a type of social behavior in e-retail environment (Shiau & Chau, 2013). Trust plays a great part in interpersonal interactions within a group (Mayer et al., 1995). Pi et al. (2011) indicated that trust is the most important matter in consumers' purchasing intention. Gefen and Straub (2004) demonstrated that it can lessen social ambiguity throughout the distribution period of products and services, but it will also increase consumers' readiness to purchase from the seller. There are basically three common trust considerations (seller, the Internet, and third parties) on attitudes towards buying online (McCole, Ramsey, & Williams, 2010). In addition, the level of trust is moderated by privacy and security concerns (McCole et al., 2010).

In order to further analyze the association between trust and consumers' purchase intention towards OGB in Malaysia, this study proposed that:

H₅ : There is a positive relationship between trust and consumers' purchase intention towards online group buying.

2.3.6 Perceived Risk (PR)

PR is defined as "the uncertainty that consumers' face when they cannot predict the consequences of their purchase decision" (Schiffman & Kanuk, 2007). The concept of perceived risk to consumer behavior was first introduced by Bauer (1960) to describe the phenomena as information searching, opinion leaders, reference groups, brand loyalty and pre-purchase considerations. The concept further narrows down into two factors, uncertainty and adverse consequences, by Cox and Rich (1964). Past studies found that shoppers perceive a greater level of risk when they shop on e-commerce websites compared to brick and mortar store (Akaah & Korgaonkar, 1988; Tan, 1999).

PR is the most important element in online group buying. Consumers are afraid their personal identity or credit card information being hijacked by an anonymous party which causes consumers to purchase online frequently (Liebermann & Stashevsky, 2002). The study of Mitchell (2011) proved in the study that perceived risk is a key factor to prevent consumers to continue shopping in OGB

websites. It is due to shoppers are more encouraged to avoid wrongdoing than maximizes utility in acquiring (Mitchell, 2011).

PR and trust were proved that there is a close relationship with previous studies (Cheng, Tsai, Cheng, & Chen, 2012 and Wang, Wang, & Tang, 2003). Cheng et al. (2012) concluded in the study that the higher level of trust leads to a fall in perceived risk.

Contrarily some researchers (Molina-Castillo & Lopez-Nicolas, 2007; Novak, Hoffman & Yung, 2000; Vellido, Lisboa, & Meehan, 2000) demonstrated that PR has negative influences on consumers' online purchase intention. These researchers recommended that perceived risk in e-commerce and consumer online purchase intention can be moderate with computer knowledge. Bhatnagar, Misra, and Rao (2000) agreed with the findings and explained in their study that consumers with greater computer knowledge are found to be more favorably inclined to do online shopping in particular. Consumers who have more optimistic online shopping experience perceived lower risk in online shopping and lower perceived risk leads to less future purchase intention from the online store (Samadi & Nejadi, 2009).

In order to further analyze the association between perceived risk and consumers' purchase intention towards online group buying in Malaysia, this study suggested that:

H₆ : There is a positive relationship between perceived risk and consumers' purchase intention towards online group buying.

2.4 Conclusion

The information found in this Chapter 2 provides a concise analysis with regard to the opinion and thoughtful of this study. The relationships of the endogenous variables associate with each exogenous variable are precisely stated in the hypotheses form. In the following chapter, the whole hypotheses will be assessed based on the respondent with suitable research techniques.

CHAPTER 3

METHODOLOGY

3.0 Introduction

This chapter emphasis on the methodology used to gather required data. Also, this chapter will assess the hypotheses presented in Chapter two. This chapter will start with explaining the research design method as it is an important step in almost every research project work. After that, the data collection methods will be discussed. In addition, the sampling strategy and survey instrument as well as construct measurement will be deliberated. Next, the data processing will explain on the questionnaire examining, editing, coding, transcribing, and data cleaning process. It is merely to ensure the data are feasible prior continuing to the actual data analysis phase. On the data analysis method, the descriptive analysis and data analysis will be discussed. On data analysis, there measurement model and structural model will be addressed.

3.1 Research Design

It is the most important planning phase which consists of the overall planning of the research, such as the methods used, gathering procedures, analyzing methods and identifying the required information or the research study (Zikmund, Babin, Carr, & Griffin, 2009, p. 66). Moreover, it also consists of a research framework design and plan of action for the research. Most importantly, it is to ensure the data collected from field work are appropriate for solving the problems.

Quantitative research concludes a statistically finding about the population by examining a representative sample from the population (Creswell, 2003). Whilst,

business research examines the study objectives over the empirical valuation which consists of statistical measurement and analysis (Zikmund et al., 2009)

In order to examine the factors that would affect consumers' purchase intention in Malaysia on OGB websites, the quantitative research will be employed to measure the variables. The objective is to assess the correlation between the endogenous variables and an exogenous variable.

Descriptive research provides a precise description of observation of a phenomenon. A descriptive designed is undertaken to obtain answers to the six Ws (who, when, what, why, where and why) question of the research (Verónica Rosendo Ríos, 2013, p. 44).

3.2 Data Collection Methods

Selecting an appropriate data gathering technique is a vital step in research studies. Inaccurate data collection will lead to invalid results or, in the worst case, it will jeopardize the research study. Primary data and secondary data are two commonly used data collecting techniques. Primary data collection method is employed in this study to response the proposed research questions the as well as the testing f hypotheses.

3.2.1 Primary Data

Raw data are gathered from scratch through survey, observation or experimentation is defined as the primary data (Jan & Colin, 2009). It is mostly or specifically collected to resolve some marketing problem or opportunity facing management. In this study, the primary data are gathered through survey method, which is also the most common method used for primary data collection. All gathered statistical data will be analyzed by the statistical analysis techniques in order to produce findings in Chapter 4.

3.3 Sampling Design

3.3.1 Target Population

It refers to a collection of objects or elements related to the research study (Bajpai, 2011, p. 96). This study aims to examine and to comprehend the respondents' response on the factors influencing consumers' buying intention towards OGB website in Malaysia context. Thus, this study focuses on target population who reside in Malaysia. There are no restrictions on consumers' age, gender and ethnic.

3.3.2 Sampling Frame and Sampling Location

It refers to the population, which the sample is drawn, whilst the sampling locations is the place of where the population is located (Zikmund et al., 2009, p. 391). The survey instrument will be distributed to the respondents from various locations in Malaysia. Thus, the sampling frame is people who reside in Malaysia and the sampling location is within Malaysia.

3.3.3 Sampling Elements

This research will be conducted in Malaysia through an online survey. The target respondents are students, working adults and online shoppers. These populations are targeted because they would have some understanding or prior experiences with online shopping. Thus, they would have a better understanding on the different kinds of acquisition patterns and some basic understanding to answer the questions state in the survey instrument.

3.3.4 Sampling Technique

Probability and non-probability are two commonly used sampling techniques used by researchers in their studies (Zikmund et al., 2009). In this study, non-probability technique has been adopted as it is inexpensive, it is widely used and it doesn't require large population. Certainly, it can help to reduce the cost of sampling.

Quota sampling technique is categorized as non-probability sampling technique. It makes sure the various small groups in the population will be characterized on pertinent characteristics corresponding to the researchers' requirements (Zikmund

et al., 2009, p. 397). Hence, quota sampling technique is selected in this research because it is convenient, fast and low cost (Hair, Celsi, Money, Samouel, & Page, 2011, p. 176).

3.3.5 Sampling Size

Specifying appropriate sample extent is a tricky and sophisticate task. According to Roscoe's rules of thumb for determining samples, more than 30 and less than 500 are appropriate for most research (Roscoe, 1975). Whilst Comrey and Lee (1992) indicated the following scale of sample size: 50 (very poor), 100 (poor), 200 (fair), 300 (good), 500 (very good), and 1,000 and more is excellent. The sample size for past studies (Yang & Mao, 2014; Rahman et al., 2013; Lim & Ting, 2014; Pi et al., 2011; Chen et al., 2013), are between 200 to 400. Thus, the target sample extent of this study is aimed for 300 respondents.

3.4 Research Instrument

The questionnaire was established with the research from the literature review and the objective to examine the correlation of PU, PEOU, price, e-WOM, trust and perceived risk on factors influencing consumers' purchase intention towards OGB in Malaysia. The questionnaire was distributed through online and emails to respondent. It's primarily due to web-based survey has few benefits compared to old fashion way of paper-based mail-in-surveys (Tan & Teo, 2000). Explicitly, it is inexpensive to conduct, elicit quicker responses and without geographically constraint. Online survey is widely used to collect from respondents through the Internet and primary data and the validity of the online research is expected to accept by Internet researchers (Wright, 2005).

Self-administered survey is adopted as the survey instrument for this research. It is a questionnaire that respondents can complete it by themselves without further assistance or existence of an interview (Aaker, Kumar, Day, Lawley, & Stewart, 2007).

3.4.1 The Purpose of Using Questionnaire

Questionnaire helps to detain people's thoughts and feels about various issues (Hair et al., 2011). In addition, Zikmund et al. (2009, p. 336) indicates that

questionnaire helps researchers to address the current business problem with all information gathered addresses a research question. Moreover, the questionnaire is critically essential because the information provided is only as good as the question asked.

3.4.2 Questionnaire Design

A structured questionnaire was employed as the questionnaire in this study. The survey was prepared and published on the website. The hyperlink to the survey website was distributed to respondents through email. Respondents are requested to select from the options or choose an appropriate scale point provided in the survey instrument. In this study, the survey instrument is categorized into three main sections, see Appendix A.

In Section A, general questions related to the dependent variable which is consumers' buying intention towards OGB websites and the type of group buying websites followed by consumers purchasing experience. Respondents are required to answer the structured question such multiple-choice, scales and dichotomous in this section.

In Section B, questions were designed to gather respondent's opinion about factors influencing consumers' buying intention towards OGB websites in Malaysia. It contains questions associated with measurement of the independent variables such as PU, PEOU, price, e-WOM, trust and perceived risk.

In Section C, it is designed to capture respondent's demographic data. In this section, respondents need to fill in their personal information which consists of gender, age, race, marital status, education level, occupation, monthly income level and location.

3.4.3 Pilot Study

It is used to validate a survey instrument (Baker, 1994). It often uses as a pre-test in a preparation for a major study (Pilot, Beck, & Hungler, 2001). There are several advantages of conducting pilot study prior the main research, such as identifying errors in the survey instrument, validating research protocols, examining the survey instruments and to validate whether the proposed methods are appropriate (Baker, 1994). Pilot study usually prepares in a small scale

version (Pilot et al. 2001), 10% to 20% of the sample size of the main study's sample size is considered a reasonable number of respondents to enroll in the pilot study (Baker, 1994).

The pre-test of the study aimed to test the feasibility of the survey instrument to ensure the instructions and questions are clear to understand (Sekaran & Bougie, 2010). During the pilot study, researchers will obtain feedbacks from respondents. It is to identify and minimize error in the survey instrument as well as to enhance the present survey instrument. The questionnaire will be distributed to the target respondents if no error being identified during the pilot test stage.

3.5 Construct Measurement

3.5.1 Origin of Construct

All questions are adopted from previous research studies. Each construct and measurement items are as below.

Table 1: Perceived Usefulness Construct and Measurement Items

Construct	Sample Measurement Items	Sources
Perceived Usefulness 5 items	1. Online group buying sites provide me access to useful purchase information.	Lim and Ting (2014)
	2. Online group buying sites enhance my purchasing effectiveness.	
	3. Online group buying is a convenient way to shop.	
	4. Online group buying sites makes shopping less time consuming.	
	5. Online group buying sites features are useful (e.g. most viewed deals, booking availability, etc.) in helping make my purchase decision.	

Table 1 above indicates the items for the construct of perceived usefulness. There are five items used to measure these attitudes such as (1) Online group buying sites provide me access to useful purchase information, (2) Online group buying sites enhance my purchasing effectiveness, (3) Online group buying is a convenient way to shop, (4) Online group buying sites makes shopping less time consuming, (5) Online group buying sites features are useful (e.g. most viewed deals, booking availability, etc.) in helping make my purchase decision. The five items are adopted and modified from Lim and Ting (2014).

Table 2: Perceived Usefulness Construct and Measurement Items

Construct	Sample Measurement Items	Sources
Perceived Ease of Use 5 items	1. Online group buying sites are easy to learn.	Lim and Ting (2014)
	2. Online group buying sites are easy to use.	
	3. Online group buying sites do not require a lot of mental effort.	
	4. Online group buying sites transactions are hassle free.	
	5. Online group buying sites are easy to navigate.	

Table 2 above indicates the items for the construct of perceived ease of use. There are five items used to measure these attitudes such as (1) Online group buying sites are easy to learn, (2) Online group buying sites are easy to use, (3) Online group buying sites do not require a lot of mental effort, (4) Online group buying sites transactions are hassle free, (5) Online group buying sites are easy to navigate. Five items are adopted and modified from Lim and Ting (2014).

Table 3: Price Construct and Measurement Items

Construct	Sample Measurement Items	Sources
Price 6 items	1. I tend to buy the lowest-priced product that will fit my needs.	Pi, Liao, Liu and Lee (2011)
	2. When it comes to group-buying, I rely heavily on price.	
	3. When buying a product, I look for the more discount product available.	
	4. I am sensitive to differences in prices of group-buying.	
	5. I will change what I had planned to buy in order to take advantage of a lower price for group-buying.	
	6. I am willing to make an extra to find a low price for group-buying.	

Table 3 above indicates the items for the construct of price. There are six items used to measure these attitudes such as (1) I tend to buy the lowest-priced product that will fit my needs, (2) When it comes to group-buying, I rely heavily on price, (3) When buying a product, I look for the more discount product available, (4) I am sensitive to differences in prices of group-buying, (5) I will change what I had planned to buy in order to take advantage of a lower price for group-buying, (6) I am willing to make an extra to find a low price for group-buying. The six items are adopted and modified from Pi, et al. (2011).

Table 4: Electronic Word of Mouth Construct and Measurement Items

Construct	Sample Measurement Items	Sources
Electronic Word of Mouth 14 items	1. The online review/comment is clear.	Lin, Wu and Chen (2013)
	2. The online review/comment is understandable.	
	3. The online review/comment is helpful.	
	4. The online review/comment is credible.	
	5. The online review/comment has sufficient reasons supporting the opinions.	
	6. In general, the quality of each online review/comment is high.	
	7. The number of online review/comment is large, inferring that the product is popular.	
	8. The quantity of online review/comment information is great, inferring that the product has good sales.	
	9. Highly ranking and recommendation, inferring that the product has good reputation.	
	10. The persons who provided online reviews/comments, I think they are experienced.	
	11. The persons who provided online reviews/comments, I think they have abundant knowledge towards the product.	
	12. The persons who provided online reviews/comments, I think they have the ability on judgment.	
	13. The person provided some different ideas than other sources.	
	14. The person mentioned some things I had not considered.	

Table 4 above indicates the items for the construct of electronic word of mouth. There are seven items used to measure these attitudes such as (1) The online review/comment is clear, (2) The online review/comment is understandable, (3) The online review/comment is helpful, (4) The online review/comment is credible, (5) The online review/comment has sufficient reasons supporting the opinions, (6) In general, the quality of each online review/comment is high, (7) The number of online review/comment is large, inferring that the product is popular, (8) The quantity of online review/comment information is great, inferring that the product has good sales, (9) Highly ranking and recommendation, inferring that the product has good reputation, (10) The persons who provided online reviews/comments, I think they are experienced, (11) The persons who provided online reviews/comments, I think they have abundant knowledge towards the product, (12) The persons who provided online reviews/comments, I think they have the ability on judgment, (13) The person provided some different ideas than other sources, (14) The person mentioned some things I had not considered. The fourteen items are adopted and modified from Lin, et al. (2013).

Table 5: Trust Construct and Measurement Items

Construct	Sample Measurement Items	Sources
Trust 4 items	1. Online group buying platform is general dependable.	Pi, Liao, Liu and Lee (2011)
	2. Online group buying platform is general reliable.	
	3. Online group buying platform is general honest.	
	4. Online group buying platform is general trustworthy.	

Table 5 above indicates the items for the construct of trust. There are four items used to measure these attitudes such as (1) Online group buying platform is general dependable, (2) Online group buying platform is general reliable, (3) Online group buying platform is general honest, (4) Online group buying platform is general trustworthy. The four items are adopted and modified from Pi, et al. (2011).

Table 6: Perceived Risk Construct and Measurement Items

Construct	Sample Measurement Items	Sources
Perceived Risk 5 items	1. Online group buying sites have sufficient security measures.	Lim and Ting (2014)
	2. Online group buying sites take action to safeguard my personal information.	
	3. Online group buying sites protect my billing information.	
	4. Online group buying sites protect my privacy.	
	5. Online group buying sites operate with secure sites during purchase transaction processes.	

Table 6 above indicates the items for the construct of perceived risk. There are five items used to measure these attitudes such as (1) Online group buying sites have sufficient security measures, (2) Online group buying sites take action to safeguard my personal information, (3) Online group buying sites protect my billing information, (4) Online group buying sites protect my privacy, (5) Online group buying sites operate with secure sites during purchase transaction processes. The five items are adopted and modified from Lim and Ting (2014).

Table 7: Purchase Intention Construct and Measurement Items

Construct	Sample Measurement Items	Sources
Purchase Intention 8 items	1. I would consider browse group-buying platform in the future.	Pi, Liao, Liu and Lee (2011)
	2. I would consider buy group-buying products in the future.	
	3. I would consider put my friend up for group-buying.	
	4. After reading online review/comment, it makes me desire to buy the product.	Lin, Wu and Chen (2013)
	5. I will consider buying the product after I read online review/comment.	
	6. After reading online review/comment, it makes me desire to buy the product.	
	7. I will consider buying the product after I read online review/comment.	
	8. I intend to try the product/service discussed in the online review/comment.	
	9. In the future, I intend to seek out the product/service discussed in the online review/comment.	

Table 7 above indicates the items for the construct of purchase intention. There are five items used to measure these attitudes such as (1) I would consider browse group-buying platform in the future, (2) I would consider buy group-buying products in the future, (3) I would consider put my friend up for group-buying, (4) After reading online review/comment, it makes me desire to buy the product, (5) I will consider buying the product after I read online review/comment, (6) In the future, I intend to buy the product discussed in the online review/comment, (7) I will consider buying the product after I read online review/comment, (8) I intend to try the product/service discussed in the online review/comment, (9) In the future, I intend to seek out the product/service discussed in the online review/comment. Item one to three are adopted from Pi, et al., (2011) whilst the item four to eight are adopted and modified from Lin, et al. (2013).

3.5.2 Data Scale of Measurement

The research instrument of this research study consists of three sections. Section A, the survey was developed using the nominal scale and interval scale to gather respondent's generate information. Normal scale is used to identify the purchase pattern of respondent towards online group buying website in Section A, except question four, that used interval scale to rate respondents' likely to participate in online group buying.

Section B, the questionnaire used an interval scale to draw respondent's general opinion. Items for variables include PU, PEOU, price, e-WOM, trust and PR are measured using seven-point Likert scale ranging from 1 to 7, which 1 indicates Strongly Disagree and 7 indicates Strongly Agree. Table 8 below presents the overview of seven-point Likert Scales adopted to measure variables.

Sections C, consist of eight questions, to identify the respondents' personal information to assist in analyzing the responses. The questions are constructed using nominal scale and ratio scale for measurement. Nominal scale is used to measure the gender, ethnic group, marital status, education level, categories of occupation and location of the respondent. Contrarily, ordinal scale is adopted to measure the age range and income level of the respondents.

Table 8: Summary of Likert Scale used to Measure Variables

Variables	Likert Scale
<u>Dependent Variable:</u> Consumers' Purchase Intention Towards Online Group Buying	1 = Strongly Disagree 2 = Somewhat Disagree 3 = Disagree 4 = Neutral
<u>Independent Variable:</u> Perceived Usefulness Perceived Ease of Use Price e-Word of Mouth Trust Perceived Risk	5 = Agree 6 = Somewhat Agree 5 = Strongly Agree

3.6 Data Processing

Data processing is a stage whereby raw data collected from questionnaire convert to information content (Zikmund et al., 2009, p. 70). Data processing involves questionnaire checking, editing, coding, transcribing and data cleaning. The purpose of information processing is to improve the quality and produce results with less error.

3.6.1 Questionnaire Checking

Examining questionnaire also consider preliminary survey instrument screening is important to re-check the questionnaire to ensure it is technically complete and interview quality during the fieldwork (Bajpai, 2011, p. 193). Conversely, according to Bajpai (2011, p.194), questionnaire checking can help to identify the understanding of respondent by analyzing their answer pattern to different questions. This is the final stage of research whereby all problems need to address before the data are edited.

3.6.2 Editing and Fixing

According to Zikmund et al. (2009, p. 70), editing and fixing process merely to identify flaws in the research instrument and fix it. Further, the process also involves fixing the errors after the survey form return from respondents. The errors are mostly caused by human carelessness, such as answered filled in the wrong portion of the survey form. The purpose is to ensure the data are valid prior to transfer to computer.

3.6.3 Coding

According to Zikmund et al, (2009, p. 70), coding means assigning meaningful categories and character symbols to each question before data can be tabulated. The coding process consists of interpreting, categorizing, recording, and transferring the data to the data storage media.

3.6.4 Transcribing

Transcribing data means transmitting the coded data from questionnaire onto disks or magnetic tapes or save it into a computer by key-punching (Malhotra & Peterson, 2009). In this research project, the SPSS version 17.0 and SmartPLS version 3.2.1 will be used for transcribing data.

3.6.5 Data Cleaning

According to Bajpai (2011, p. 198) Data cleaning involves handling missing data and examining data for illogical or inconsistent entries. Missing data happen when the respondent has not provided any answer or has provided a vague answer. In addition, data can be missed when a typist fails to type it. Checking data for illogical or inconsistent entry can be detected with the help of SmartPLS software.

Data inconsistencies must be identified and a corrective action must be taken before performing data analysis.

3.7 Descriptive Analysis

Descriptive analysis was applied to demonstrate the characteristic of the sample and to reveal the general pattern of respondents. Frequency analysis and percentage counts were used in Section A and Section C to evaluate the data. Frequency was generally obtained from nominal variable such as gender and marital status. Mean test, ranking, variance analysis and standard deviation were used in Section B to measure the data.

3.8 Data Analysis

Partial Least Square (PLS) was used in this study to analysis the data and to examine the structural relationship in the proposed conceptual framework, see Figure 1. The main reason that a PLS was employed in this study because it has minimal demands of sample size and residual distribution (Barclay, Higgins, & Thompson, 1995).

This study adopted the recommended two-stage analytical procedures (Hair, Black, Babin, & Anderson, 2010; Anderson & Gerbing, 1988) to examine and interpret the collected data: measurement model and structural model. The procedure begins with assessing the measurement model and then follows by validating the structural model for hypotheses testing. The measurement model demonstrates how measured variables meet to represent constructs. Whist, structural model represents how constructs are connected with each other.

3.8.1 Measurement Model

Assessment of the measurement model consists of examining the reliability and validity of the items and constructs in the PLS model. It is to make sure the constructs' measures are valid and reliable prior to access the nature of correlation in the overall model. The assessment of the measurement model was examined by individual item reliability, internal consistency, and discriminant validity (Barclay et al., 1995).

Reliability and validity are normally used to test the goodness of measures of the instrument. Reliability is a test to examine the consistency the instrument measures its concept, whereas validity is a test to examine how well an instrument measure the particular concept (Sekaran & Bougie, 2010).

3.8.1.1 Individual Item Reliability

The assessment of the individual item reliability was examined by the loadings of their respective items on their respective latent constructs (Hullan, 1999). Loadings with greater value indicate that there is more share variance between the construct and its measures than an error variance. Conversely, low loadings contribute very little to the explanatory power of the model while decreasing the estimates of parameters associating constructs (Hullan, 1999).

3.8.1.2 Internal Consistency Reliability

The internal consistency reliability was assessed by Cronbach's alpha and composite reliability of the measurement model. Referring to Hair et al. (2010) the acceptable value for Cronbach's alpha value must exceed the minimum threshold of 0.7.

Cronbach's alpha estimates the reliability based on the inter-correlations of the observed indicator variables. The value of Cronbach's alpha reliability coefficient will increase while the inter-correlations among test items increase, it usually ranges between 0 and 1 (Bajpai, 2011). The reliability test value of 0.6 or below is considered poor. Whilst, the value ranges of 0.7 consider good acceptable reliability, those more than 0.8 to 0.9 is considered good. The closer the Cronbach's alpha value to 1 the greater the internal consistency it is. The evaluation of the Cronbach's alpha coefficient is based on the rules of thumb below, see Table 9:

Table 9: Rules of Thumb about Cronbach's Alpha Coefficient Size

Alpha Coefficient Range	Strength of Association
Less than 0.6	Poor
0.6 to < 0.7	Moderate
0.7 to < 0.8	Good
0.8 to < 0.9	Very Good
0.9 and above	Excellent

Composite reliability is favored over Cronbach's alpha due to it generate more accurate estimate of variance shared by the respected indicators (Hair et al., 2010). Further, Hair, Hult, Ringle and Sarstedt (2013) recommended employing composite reliability as alternate measure of internal consistency reliability because of the drawbacks of Cronbach's alpha in the population. The drawbacks of Cronbach alpha's such as sensitive to the number of items in the scale and generally miscalculates the internal consistency reliability (Hair et al., 2013).

The composite reliability ranges between 0 and 1. Similarly with Cronbach's alpha, higher values indicate higher levels of internal reliability (Hair et al., 2013). Fornell and Larcker (1981) indicated that composite reliability values should exceed 0.6. According to Nunally and Bernstein (1994), composite reliability values of 0.6 to 0.7 are acceptable in exploratory research, whilst values greater than 0.7 and less than 0.9 can be considered as satisfactory in advanced stage of research. Values exceed 0.9 (and definitely > 0.95) indicate that all the indicator variables are redundant and measuring the similar phenomenon (Hair et al., 2013). Contrarily, composite reliability values less than 0.6 indicate a lack of internal consistency reliability.

3.8.1.3 Convergent Validity

Convergent validity is the degree to which a measure associates positively with other measures of the same constructs (Hair et al., 2013, p. 102). The convergent validity test is to examine if the scale items converge on a single construct in the model (Garver & Mentzer, 1999).

Fornell and Larcker (1981) suggested two conditions to access the convergent validity of the scales. First, all indicator outer loadings need to exceed 0.7 and it should be significant. Second, the average variance extracted (AVE) for each construct must greater than 0.5. Hair et al. (2013) suggestion is in line with Fornell and Larcker (1981) that an indicator's outer loading must above 0.708, due to the number squared equals to 0.5. According to Hair et al. (2013), a higher outer loading of the construct indicates means the associated indicators have more in common, which is captured by the construct.

3.8.1.4 Discriminant Validity

Discriminant validity is the degree to which items distinguish between constructs by empirical standards (Hair et al., 2013). The discriminant validity indicates that a construct is unique and capture unique phenomena in the model. Hair et al. (2013) proposed two measures of discriminant validity: cross loadings and the Fornell-Lacker criterion.

For cross loadings criterion, the outer loadings of an indicator on the associated construct need to be greater than all of its loadings on other constructs (Hair et al., 2013). The Fornell-Larcker criterion compares the square root of the average variance extracted (AVE) values with the latent variable correlations (Hair et al., 2013). The square root of the AVE values for each construct should exceed the squared correlation with other constructs in the model (Hair et al., 2013).

3.8.2 Structural Model

The structural model is essential to hypothesize the relationship between the research model and the latent constructs. It also helps to determine how well the empirical data support the concept or theory. With this regard, the assessment of structural model consists of estimating the path coefficients (β) between the constructs, coefficients of determination (R^2 value), and path significant (p -value). For assessment of the path coefficients, the replacement value of 5,000 subsamples was adopted in the bootstrapping procedures to assess the statistical significance of the parameter estimates (Hair et al., 2013).

The structural model in PLS-ESM is examined after the reliability and validity of the constructs have been established. The PLS model is assumed to be identified correctly and is assessed with regards to how well it predicts the endogenous constructs (Rigdon, 2012). It is assessed on the basis of heuristic criteria that are determined by the model's predictive capabilities.

According to Hair et al. (2013), the path coefficients (β) values are ranged between -1 and +1, it indicates a strong relationship if the values close to +1 and vice versa for the negative values. Contrarily, the weaker the relationships when the estimated coefficients closer to 0, and it is usually not significant. The

empirical t value enables statistical significance is measured on each path coefficient (β).

The coefficients determination (R^2 values) is used to measure the structural model's predictive accuracy. It is calculated as the squared correlation between a particular endogenous construct's predicted value and actual value. The R^2 values indicate the variance of the endogenous construct in the structural model, whilst the path coefficient measure the strength of correlation between constructs. The R^2 value ranges from 0 to 1. The higher the value, closer to 1, indicates higher level or predictive accuracy. According to the rough rule of thumb suggested by Hair et al. (2013), the R^2 values of 0.75 is substantial, 0.5 is moderate and 0.25 is weak.

The two-tailed test was employed to assess the significance and the effect sizes of the path coefficients of the model. The commonly used critical t -value for two-tailed test are as such, 1.65 (significance level = 0.10), 1.96 (significance level = 0.05) and 2.57 (significance level = 0.01). According to Hair et al. (2013), the significance level depends on study's objective and the field of study. The OGB business model is still in development stage, in Malaysia context, compare to the e-commerce business model. Moreover, the significance level of 10 percent was commonly adopted by researchers for study that is exploratory in nature, according to Hair et al. (2013). Hence, this study adopted the significant level of 10 percent (t -value = 1.65) as a statistical decision criterion.

3.9 Conclusion

This chapter begins with the research design method which emphasizes on the methodology and procedures used for data gathering and data analysis. Further, the data collection methods and research instrument used in this study were explained. Next, on data processing section, it described the methods used to improve the quality of the results with less error. In addition, the descriptive analysis section helped to demonstrate the characteristics of the respondents' profile. This study adopted partial least square (PLS) to analysis the data and examine the structural relationship in the proposed framework. Thus,

measurement model was tested by assessing reliability and validity of the items and constructs in the model. Whilst, the structural model adopted to assess the relationship between the research model and the latent construct.

CHAPTER 4

DATA ANALYSIS

4.0 Introduction

This chapter presents the results based on data collected from the fieldwork. This chapter begins with the pre-test survey to ensure the feasibility of the research instrument and it follows by data collection for the main study. The SPSS version 17.0 was adopted to examine the descriptive statistics and to access the research model, this study employed the Structural Equation Modeling (SEM) statistical technique. SmartPLS version 3.2.1 was used to validate and access the PLS (Partial Least Squares) model. The assessment started with assessing the data reliability and data validity on measurement model. The data reliability assessment consisted of data reliability and internal consistency reliability whilst the data validity assessment consisted of convergent validity and discriminant validity. With the acceptable level of reliability and validity, the structural equation model was validated and accessed. Lastly, the results and testing of hypotheses were discussed.

4.1 Pilot Study

Pilot study consists of testing on the feasibility of the questionnaire. Prior to gathering a complete scale of data, a pilot study for this study was shepherded during the month of August 2015. According to Baker (1994), the reasonable sample size of the pre-test is between 10 percent to 20 percent of the actual research study. Thus, 40 sets of questionnaires were distributed via email to randomly selected friends, colleagues and family members. By the cutoff date, 30 sets of questionnaires were collected, which it was translated to the response rate

of 75%. The pre-test results (see Appendix C) shows that all factor loadings exceeded 0.50 cutoff values. The factor loadings more than 0.50 are considered practically significant, as per Hair et al. (2010) recommended. Hence, no item needs to remove from the questionnaire.

4.2 Data Collection

Data was gathered through online survey. Respondents were cordially invited to participate in this survey. The hyperlink to the web-based survey site was embedded in an email, with the statement of the research purpose, and sent to 1,250 participants who reside in Malaysia. The survey took place in the period of September 2015 to October 2015. By the time this survey was concluded, 310 responses were obtained which it translated to the response rate of 0.25%. After screening the collected questionnaires for reliability and usability, only 300 sets of questionnaires were used for data analysis.

4.3 Descriptive Analysis

4.3.1 Demographic Profile of Respondents

Appendix B presented the details of the respondents' demographic profile. On gender, the number of male respondents is slightly higher, that is 166 (55.4%), than female respondents with a number of 134 (44.7%). On marital status, the majority of the respondents are single that is 194 out of total 300 (64.7%) and married is 104 (34.7%). Only two respondents are divorced or widow (0.7%). With regards to the age of the respondents, 105 aged between 25 and 29 years old, 79 aged between 30 to 34 years old, 51 aged between 18 to 24 years old, 36 aged between 35 to 39 years old, 21 aged 40 and above follow by 8 respondents aged 17 and below.

In respect to ethnicity, the majority of the respondents are Chinese that is 216 (72%), 54 (18%) Malay, 22 (7.3%) Indian followed by 8 (2.7%) others. The respondents with others ethnicity are expatriates. In terms of education level, the majority derived from the postgraduate 126 (42%) and undergraduate degree 118

(39.3%) respectively. The rest of the respondents, 41 (13.7%) hold college diploma and 15 (5%) had an education level of secondary school.

With regards to the occupation, the majority is derived from the private sector that is 208 (69.3%). There are 49 (16.3%) are students and 27 (9%) are self-employed. Next, there are 16 (5%) respondents from other occupational group whom are government servants and teachers. Looking at the personal monthly income, the majority of the respondents' earned more than RM2,501 a month (75.3%). There are 24 respondents earning slightly lower than RM2,500 a month (8%). There are 3.3% of the respondents earned monthly income between RM1,500 to RM2,000. Last but not least, 40 respondents are from the monthly income group of less than RM1,500 a month (13.3%).

On location, the majority of the respondents came from Kuala Lumpur that is 226 (75.3%) with the corresponding number of 56 (18.7%) came from other states such as Selangor, Kedah, Perak, Ipoh, Sabah and Sarawak. There are 12 (4%) respondents from Pulau Pinang and 6 (2%) respondents from Johor.

4.4 Measurement Model

4.4.1 Data Reliability

Appendix D reported the factor loading from the final PLS measurement models. The factor loadings more than 0.50 are considered practically significant, as per Hair et al. (2010) recommended. All items shown in Appendix D are more than 0.50 and exceed the 0.50 cutoff values.

4.4.2 Internal Consistency Reliability

Table 10 presented the results of Cronbach's alpha and composite reliability test of the measurement model. The alpha coefficients of electronic word of mouth e-WOM, PEOU, PU, PR, price, purchase intention and trust are higher than 0.70. All values are range from 0.850 to 0.937, which exceed the acceptable value of 0.70. Thus, the results imply that the items have comparatively high internal consistency. Further, Cronbach's alpha coefficients values below 0.95, showing items are not redundant.

Composite reliability is recommended by Hair et al. (2013) as an alternate measure of internal consistency reliability, due to it provides more accurate estimation of variance shared by respected indicators as well as the limitation of Cronbach's alpha in the population. In Table 10, the results show that the composite reliability values are above 0.60, which meet the acceptable level for explanatory research (Nunally & Bernstein, 1994). The composite reliability values of 0.845 (e-WOM) and 0.892 (PU) demonstrate that both reflective constructs achieve high levels of internal consistency reliability. Whilst, the composite reliability values of 0.900 (PEOU), 0.946 (PR), 0.910 (Price), 0.932 (Purchase Intention) and 0.954 (Trust) demonstrated that the indicator variables are evaluating the similar phenomenon (Hair et al., 2013).

All Cronbach's alpha and composite reliability values are greater than 0.70, thus it shows all scales used in this study are reliable.

Table 10: Result of AVE, Cronbach's Alpha and Composite Reliability Test

Construct	AVE	Cronbach's Alpha	Composite Reliability
Electronic Word of Mouth (e-WOM)	0.552	0.937	0.845
Perceived Ease of Use (PEOU)	0.645	0.861	0.900
Perceived Usefulness (PU)	0.624	0.850	0.892
Perceived Risk (PR)	0.778	0.928	0.946
Price	0.627	0.881	0.910
Purchase Intention	0.630	0.916	0.932
Trust	0.837	0.935	0.954

4.4.3 Convergent Validity

Table 10 presented the results of the average variance extracted (AVE) for each construct. All items are above 0.50. According to Hair et al. (2013), the AVE value of 0.50 or greater indicates that the latent variables explain more than the variance of its indicators' variance. Contrarily, the AVE value of lesser than 0.50 indicates more error remains in the items than the variance described by the construct.

4.4.4 Discriminant Validity

Discriminant validity distinguishes the degree between each construct and implies that the construct is unique by empirical standards (Hair et al., 2013). This study

follows the two methods, Fornell-Lacker criterion and cross loadings, proposed by Hair et al. (2013).

Table 11 shows the Fornell-Lacker criterion validity of this study. The AVE value of each latent variable is larger than the squared associations between the latent variables and other variables. It indicates that it has adequate discriminant validity.

Table 11: Discriminant Validity of Constructs

	1.	2.	3.	4.	5.	6.	7.
1. e-WOM	0.743						
2. PEOU	0.461	0.803					
3. PU	0.487	0.673	0.790				
4. Perceived Risk	0.504	0.589	0.479	0.882			
5. Price	0.366	0.435	0.456	0.319	0.792		
6. Purchase Intention	0.717	0.556	0.616	0.559	0.539	0.794	
7. Trust	0.618	0.502	0.518	0.674	0.339	0.622	0.915

Note: The diagonals (in bold) represent the average variance extracted (AVE) while the other entries represent the squared correlation.

The cross loading is the second method proposed by Hair et al. (2013) for accessing discriminant validity. According to Hair et al. (2013), an indicator's outer loading on the associated construct should be higher than the rest of its loading on other latent variables.

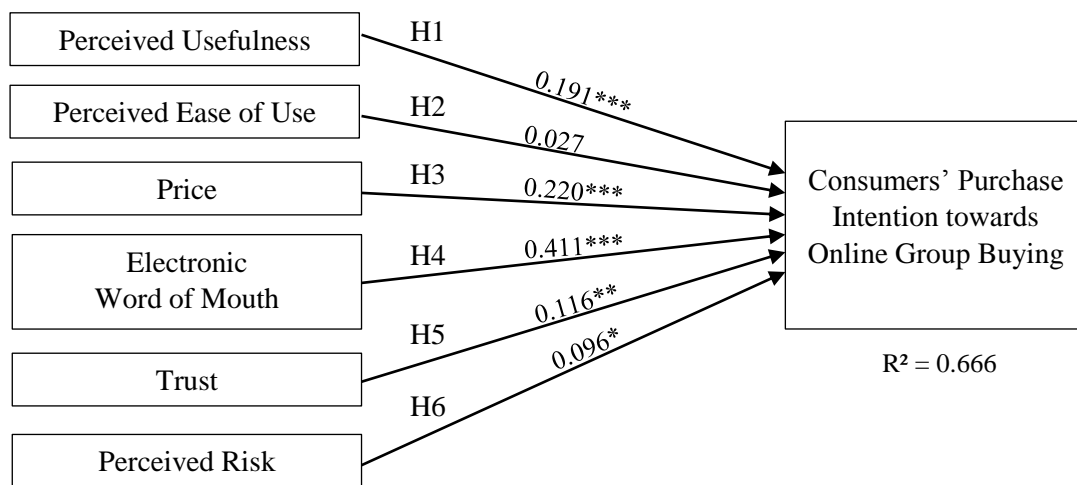
Appendix E presents the cross loading results of this study. It indicates each indicator's outer loading value is relatively greater than all of its loadings on other constructs. Thus, the results demonstrated that the presented PLS model has sufficient level of reliability and validity.

4.5 Structural Model

With the acceptable level of reliability and validity, the structural equation model of this study was examined by testing on the hypothesized relationship among the various constructs, shown in Figure 2. For assessment of the path coefficients, the replacement value of 5,000 subsamples was adopted in the bootstrapping procedures to assess the statistical significance of the parameter estimates (Hair et

al., 2013). The critical values for two-tailed test is 1.65 (significance level = 0.10), 1.96 (significance level = 0.05) and 2.57 (significance level = 0.01). According to Hair et al. (2013), the significance level depends on the particular study's objective and the field of study. Researchers often use a significance level of 10 percent for exploratory study (Hair et al., 2013). Hence, this study adopted the 10 percent significance level (t -value = 1.65) as a statistical decision criterion due to the OGB business model still in the development stage in consumers' in Malaysia context.

Figure 2: Result of Structural Model



Note. Path significance: * Sig at 0.10, ** Sig at 0.05, *** Sig at 0.01

Figure 2 illustrates the result of the structural model. All hypotheses were supported except H₂. The R² value is 0.666. It explains 66.6% variance in consumers' purchase intention towards OGB.

4.5.1 Testing of Hypotheses

Table 12 presented the results for the path coefficients and hypothesis study in the structural model. The path coefficient value for H₁ has a value of 0.191 and standard error of 0.59. The empirical t -value is 3.230 and it is greater than the theoretical t -value of 2.57 for a probability error of 1%. It shows that PU has a strong positive influence on consumers' purchase intention. Likewise, H₃ predicts that price ($\beta = 0.220$) has a great influence and optimistic relationship with consumers' purchase intention. The empirical t -value is 4.819 and the path is significant at $p < 0.01$. Further, H₄ predicts that electronic word of mouth ($\beta =$

0.411) has a strong optimistic relationship with consumers' buying intention. The path coefficient value shows 0.411 and the empirical t -value is 7.831 at significant at $P < 0.01$. Hence, it can conclude that H_1 , H_3 and H_4 have strong influence on consumers' purchase intention at significant at a level of 1%. Thus, the hypotheses are supported.

Table 12: Result of Path Coefficients and Hypotheses Testing

Hypothesis	Relationship	Beta	Std Error	t -value	Decision
H_1	Relationship between perceived usefulness and consumers' purchase intention	0.191	0.059	3.230***	Supported
H_2	Relationship between perceived ease of use and consumers' purchase intention	0.027	0.050	0.550	Not Supported
H_3	Relationship between price and consumers' purchase intention	0.220	0.046	4.819***	Supported
H_4	Relationship between electronic word of mouth and consumers' purchase intention	0.411	0.053	7.831***	Supported
H_5	Relationship between trust and consumers' purchase intention	0.116	0.052	2.209**	Supported
H_6	Relationship between perceived risk and consumers' purchase intention	0.096	0.051	1.876*	Supported

Note. Path significance: * Sig at 0.10, ** Sig at 0.05, *** Sig at 0.01

On H_5 , the path coefficient for trust shows 0.116. The empirical t -value is 2.209, which is more than the theoretical t -value of 1.96 for probability error of 5%. Thus, it shows that trust has a significant stimulus on consumers' purchase intention at significant level of 5%. Thus, the H_5 is supported.

With regards to perceive risk, the path coefficient value shows 0.096. The empirical t -value is 1.876, which is more than the theoretical t -value of 1.65 for probability error of 10%. It indicates that H_6 has a weak influence on consumers' purchase intention at significance level of 10%. This study adopted the 10% significance level as statistical decision criteria. Hence, the H_6 is supported as well.

Contrarily, the PEOU has a positive path coefficient value of 0.196. The t -value is 0.557 and it is lower than the theoretical t -value of 1.65 for probability error of

10%. Although H₂ has a positive relationship with consumers' purchase intention but it was not significant. Thus, H₂ is not supported.

Last but not least, the hypothesis testing results show that all hypotheses were supported except H₂.

4.6 Conclusion

This chapter presented a detailed analysis and interpretation of the quantitative analysis of the proposed model. The pilot test resulted was accessed to answer the questionnaire was feasible and appropriate for the actual fieldwork. The descriptive analysis was analyzed. For the assessment of the measurement model for the PLS model, all factor loadings were exceeding 0.50 acceptable level suggested by Hair et al. (2010). Further, the internal consistency reliability was conducted and the results show that all Cronbach's alpha and composite reliability values are above 0.70 which indicates all scales are reliable. Next, the convergent validity results demonstrated that AVE for each construct exceeded the acceptable level of 0.50. It explained the latent variables explain more than the variance of its indicator variance. The validity assessment followed by the Fornell-Lacker criterion validity. The results indicated the model has adequate discriminant validity. After reliability and validity are accepted, the structural equation model was assessed and validated. The results of hypothesis testing concluded that H₂ is not supported whilst H₁, H₃, H₄, H₅ and H₆ are supported. Next chapter will discuss the major findings based on this chapter's hypothesis testing result.

CHAPTER 5

DISCUSSION, CONCLUSION AND IMPLICATION

5.0 Introduction

This chapter aims to discuss on the analysis results obtain from the earlier chapter. This chapter starts with the discussion of the major findings in this study. All research questions will be answered and the achievement of each research objective will be determined. After that the implication of this study will be discussed. Researchers or firms can make use of all the possible aspects of their future research works. The constraint of this research will be discussed and it follows by the recommendation for upcoming research. Lastly, this chapter will end with the collusion.

5.1 Discussion of Major Findings

This research aims to assess factors that influence consumers' buying intention towards group buying websites in Malaysia. There are 6 hypotheses proposed in this study. All hypotheses were found to be supported except H₂. The results of hypothesis testing are summarized in Table 13.

Table 13: Summary of the result of hypothesis testing

Hypothesis	Values Scored	Determination
H ₁ : There is a positive relationship between perceived usefulness and consumers' purchase intention towards online group buying.	$\beta = 0.191,$ $p < 0.01$	Supported
H ₂ : There is a positive relationship between perceived ease of use and consumers' purchase intention towards online group buying.	$\beta = 0.196,$ $p = 0.583$	Not Supported

H ₃ :	There is a positive relationship between price and consumers' purchase intention towards online group buying.	$\beta = 0.220,$ $p < 0.01$	Supported
H ₄ :	There is a positive relationship between electronic word of mouth and consumers' purchase intention towards online group buying.	$\beta = 0.411,$ $p < 0.01$	Supported
H ₅ :	There is a positive relationship between trust and consumers' purchase intention towards online group buying.	$\beta = 0.116,$ $p < 0.05$	Supported
H ₆ :	There is a positive relationship between perceived risk and consumers' purchase intention towards online group buying.	$\beta = 0.196,$ $p < 0.10$	Supported

5.1.1 Findings on the Hypotheses

5.1.1.1 Perceived Usefulness and Consumers' Purchase Intention

The findings for the first hypothesis show that PU has a great significant influence on consumers' purchase intention towards OGB with β of 0.191 and $p < 0.01$. This is consistent with the findings of Lim and Ting (2014) and Tsai et al. (2011). According to the authors, PU has significantly affected consumers' purchase intention when they found that OGB enhancing their purchase effectiveness. In addition, according to study by Yoon (2015), PU had statistically affected consumers' behavioral intention to purchase online. This implies that consumers are more likely to participate in group buying activities when they perceived the website is beneficial and useful. Other similar studies conducted by Rahman et al. (2013) concluded in their study that the effectiveness of online shopping can be sustained by improving the customers' PU in Malaysia. Whilst some previous studies (Lu, Hsu, & Hsu, 2005; Hassanein & Head, 2004) supported the finding and indicates that PU has a positive impact on attitude towards online shopping. Hence, the first research objective is achieved and the H₁ is supported.

5.1.1.2 Perceived Ease of Use and Consumers' Purchase Intention

This hypothesis posited that PEOU and consumers' purchase intention show a negative relation. The results reveal the regression coefficient beta is 0.196 and significance of p value is 0.583, $p > 0.05$. Therefore, the H₂ is not supported.

The result implies that consumers in Malaysia are able to adapt to the OGB business model easily as well as the rapidly changing online shopping platform. It

also indicates that consumers in Malaysia are more technologically savvy and they are experienced in OGB and online shopping. Moreover, it could be due to the majority of the respondents are cultivated and they are capable to navigate through the OGB website without further guidance from others. Referring to the descriptive results presented in Appendix B, the majority of them hold at least a college diploma for their education level. Moreover the age group of the respondents may sway the results as well. The majority of the respondents are aged from 17 to 34 years old, which translates that 81% of the overall population of the respondents. These respondents are able to adapt to new technology easier than other respondents and online shopping is not something new to them.

Contrarily, the present findings may indicate that OGB site is simple and easy to use compared to the e-commerce website. Thus, consumers who have experienced in online shopping may able to navigate through the OGB site easily.

5.1.1.3 Price and Consumers' Purchase Intention

The findings indicate that price has a significant influence on consumers' purchase intention towards OGB with β of 0.220 and $p < 0.01$. This is consistent with the findings from Yang and Mao (2014) and Kauffman and Wang (2001), both indicated that price has a significant control on consumers' buying intention on OGB. Yang and Mao (2014) found out that consumers had an impression of OGB as a channel of getting a great discount and promotion. Further, the finding also indicates that consumers tend to compare group volumes among various OGB vendors before they decide to place their order. Whilst, Kauffman and Wang (2001) found that consumers tend to order when they perceived the price will drop in the near future. Similarly, the study of Fan, Chiang, Wang and Eric Wang (2010), on consumers' continuing to use OGB platform, explain that expensive products or luxury goods are not suitable to put on sale on the OGB website because OGB consumers are very price-sensitive consumers. This implies price has strong influences on consumers' purchase intention and consumers see the OGB as a channel to obtain products and services at relatively discount price. In addition, consumers are sensitive to the prices and they would compare the prices with other OGB vendors, in order to obtain even lower prices,

before they make a purchase. Hence, the third research objective is achieved and the H₃ is supported.

5.1.1.4 Electronic Word of Mouth and Consumers' Purchase Intention

e-WOM was found positively influenced to consumers' purchase intention towards OGB with β of 0.411 and $p < 0.01$ in this research. The result is consistent with the study from Lin et al. (2013), Hsu, Yen, Chiu and Chang (2006), and Almana and Mirza (2013). The studies indicate that online reviews and comments help consumers make purchasing decision. In additions, the findings also found that consumers tend to read online reviews before they purchase any products or services online (Almana & Mirza, 2013). Consumers tend to gain other opinion, with search for related information about the particular product, from other websites when they feel uncertainty with the product (Lin et al., 2013). The reviews and comments published on blogs, websites and OGB site have significant influences towards consumers' participation in OGB activity (Hsu et al., 2006). Further, in the study of Lin et al. (2013) found that consumers would tend to search for the online comments when they feel uncertainty towards the product. The study also found consumers have more confidence in a purchase decision after they view online comments. This implies that e-WOM has relatively strong influences on consumers' buying intention on OGB activities. Consumers tend to read others reviews and comments to understand the product, or even the services provided by the vendor, before they make a purchase online. For consumers who have little knowledge about the product that put on sale on OGB site, the e-WOM will help them to feel more confident on purchase intention. Additionally, according to the study by Mudambi and Schuff (2010) added that experiential e-WOM will gain potential consumers to take part in OGB activity. Hence, the fourth research objective is achieved and H₄ is supported.

5.1.1.5 Trust and Consumers' Purchase Intention

The findings show that trust and consumers' purchase intention have significant correlation with β of 0.116 and $p < 0.05$. This is consistent with the prior literatures (Pi et al., 2011; Hsu & Hsu, 2012; Yoon, 2015) that trust was found to directly affect consumers purchase intention towards OGB. Whilst, according the study of Gefen D. (2000) on consumers' repurchase behaviour, it concluded with

the same result as well. Further, this was supported by McCole et al. (2010) findings and the results proved that the three common trust considerations (third parties, vendor and Internet) had positive effects on consumers' attitude towards online purchasing. Consumers would purchase more from the OGB website if they trust the website (Gefen D. , 2000). Thus, it implies that trust is one of the key aspects that sway consumers' buying intention. OGB websites need to ensure their websites are secure and not vulnerable to attack by hackers. Further, OGB websites need to work closely with merchants to ensure the payment gateways are safe. Consumers are concerned about their personal information accidentally leak to public or credit card information being hijacked. A secure and reliable OGB websites will definitely help to create more sales and attract recurring consumers to participate in the OGB activities. In this study, trust was identified as a significant predictor of consumers' purchase intention towards OGB with significant level at 0.05%. Therefore, the fifth research objective is met and H₅ is supported.

5.1.1.6 Perceived Risk and Consumers' Purchase Intention

PR and consumers' purchase intention were found with a moderate impact with β of 0.196 and $p < 0.10$. Therefore, H₆ is supported. This is in line with the studies by Lim and Ting (2014), Mitchell (2011) and Zhang et al. (2012). Those studies indicated consumers' perceived risk can be reduced if OGB websites able to help consumers to develop favorable attitudes towards OGB. The study of Lim and Ting found that the uncertainty faced by consumers in purchasing process caused by wrong decisions resulted from their subjective assessment to use OGB sites. Further, this was supported by the studies by Mitchell (2011) and Zhang et al. (2012) which concluded that PR is a key determinant of consumers' attitude towards the behavior. Moreover, Lim and Ting (2014) suggested that OGB sites need to make sure the security and privacy measures are constantly taken into account. This will help to reduce consumers' uncertainty to trade on OGB site as well as to protect the confidential information. This implies that consumers are concerned about their personal information and credit card information being stolen by hackers.

5.2 Implications of the Study

The results of this study indicate that the three major factors, PU, price and e-WOM, demonstrated a relatively strong impact on consumers' purchase intention towards OGB. Whilst, trust and perceived risk shown significant impact and moderate impact respectively on consumers' participation in OGB. Contrarily, PEOU was found no influence in consumers' in Malaysia context.

On PU, it implies that consumers are preferable to buy products or services from the OGB website if they perceived the OGB website is useful and they can obtain a great deal from the OGB website. In addition, OGB websites can boost the sales, encourage more consumers to participate, by simply improve the perceived usefulness of the website. This study of Rahman et al. (2013), on Malaysian consumers' participation in online shopping, indicated the same result as well.

With regards to price, it is the key factor that influences consumers to participate in OGB websites. Consumers participate in an OGB activity with the purpose to obtain remarkable deals, with significant discount rate and vendor used price to attract consumers to buy their products or services. Further, consumers have an impression of OGB as a channel to obtain great discount and promotion (Yang & Mao, 2014). Consumers would compare prices among various OGB vendors before they place their order.

Henceforth, the e-WOM was founded as a tool for the OGB website to build trust with consumers and a tool to attract potential consumers. This finding found out that consumers are more willing to participate in OGB website when they perceived the comments published on the OGB website are useful. In addition, experiential e-WOM will gain potential consumers to participate in OGB activities.

Trust is another important factor that sways consumers' purchase intention. OGB websites need to keep their software always up-to-date and patches periodically. It is to ensure the website is not vulnerable to hackers. This research also found that consumers are concerned about the reliability of the website. Consumers are worried about their personal information and credit card information being

hijacked or stolen by hackers. Besides, OGB websites need to work closely with merchants to ensure the payment gateways are safe for consumers to trade.

Perceived risk shows less influence, compared with other variables, in this study. It implies that consumers' perceived risk can be reduced if OGB websites able to help consumers to develop favorable attitudes towards OGB. The OGB website needs to strengthen the security and privacy of the websites. It will reduce consumers' uncertainty and encourage consumers to trade while they perceived their confidential information is protected.

Last by not least, the PEOU in this study indicates that consumers pay less attention on the website characteristics, design of the website and the system flow. Consumers willing to learn how to use the OGB website while they perceived the website can help them to achieve what they want.

5.3 Limitations of the Study

OGB is a new business model which bonds the traditional group-buying activities with the e-commerce store. It is still at the initial stage of development. Therefore, it has limited studies on consumers' purchase intention on OGB websites in Malaysia context. Further, many people are confused the traditional e-commerce website with the online group buying.

The sample size employed in this research is relatively small. A greater sample size will help to generate more appropriate output and more precise findings. Further, the sampling location should reduce it to a state or city instead of whole Malaysia. Respondents from various states may have various points of view or perspective towards OGB.

Consumers' satisfaction was not included in this research study. It is an important area to examine the consumers' willingness to purchase products or services from OGB. With regards to that it may help investigate consumers' repurchase intention as well.

Trust proved it has a positive correlation with consumers' purchase intention in OGB of this study. Trust is an important factor in any online transaction because

consumers going to disclose their privacy and credit card data to the OGB merchant. OGB websites and merchants need to ensure the collected information is secure and do not leak to public.

In addition, this research only emphasizes on the OGB website. With the advent of mobile technology nowadays, many e-commerce website or OGB website allow consumers to their mobile application. It is important to examine whether consumers prefer to visit the OGB website through their mobile phone or their personal computer.

5.4 Recommendations for Future Research

With the advent of technology and the growth in e-WOM, consumers are able to provide reviews or comments from various devices which they own on almost every e-commerce websites, blogs and group-buying sites. Further with the growth of social networking and smart phone users, consumers are now easier to express their comments on the Internet. Thus, there is a need for marketers to understand how the e-WOM might influence consumers' purchase intention.

Further, the e-WOM needs to be managed properly as it consists of the comments from informants and recommenders (Lin et al., 2013). The information could be strategically as a communication channel and firms can make use of this useful information for their corporate strategy. Additionally, corporate website and blog will help to build relationships with their customers by providing factual information and encourage consumers to contribute their knowledge and comments (Selnes & Sallis, 2003). Providing real time feedback or promptly response to consumers' problems can help to build customer loyalty, thus generating sales (Senecal & Nantel, 2004).

Therefore, this study aims to provide valuable information and insights to companies and researchers in this area. Firms which are aiming to venture into online group buying may use this paper as a guide for improvement whilst companies that are already running OGB businesses may find this paper useful as a benchmark to improve the grey areas.

5.5 Conclusion

This study focuses on the determinants of buyers' purchase intention towards OGB in Malaysia. The discussion of the major findings concluded that all hypotheses were supported except H₂. The PEOU on consumers' purchase intention was found no significant impact in this study. Whilst, this study implies that it might due to consumers in Malaysia are technologically savvy and experienced in online shopping platform. Thus, they do not require further guidance from others. It also implies that Malaysian consumers are adapted to a new technological platform such as OGB, which is still at the initial stage of development.

This research highlighted that PU, price and e-WOM have a strong influence on customers' purchase intention. Trust and consumers' perceived risk were shown significant and moderate impact respectively on consumer participation in OGB. This implies that OGB website needs to focus on the top three key areas if they would like to enhance and boost their OGB sales in Malaysia context.

There are several limitations found in this study. First, the OGB business model is still at the initial stage of development in Malaysia context. Thus, there are limited studies and findings to references. Second, consumer satisfaction was not included in this study. It is an interesting area to study.

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APPENDICIES

1. Research Questionnaire	A
2. Demographic Profiles	B
3. Pilot Test Result	C
4. Internal Reliability and Convergent Validity Test Result	D
5. Loadings and Cross Loadings	E
6. Conferences and Publication	F

APPENDIX A



Questionnaire Survey

UNIVERSITY TUNKU ABDUL RAHMAN
FACULTY OF ACCOUNTANCY AND MANAGEMENT (FAM)
MASTER OF BUSINESS ADMINISTRATION

Dear respondent,

Survey on the factors influencing consumers' purchase intention towards online group buying in Malaysia

I am a MBA student from University of Tunku Abdul Rahman (UTAR). I am conducting a research project on the topic of "Factor influencing consumers' purchase intention towards online group buying in Malaysia".

The respondent identity will keep anonymous and confidential. This survey contains only three sections, which should take not more than 20 minutes to complete. Your answer is very important for us to conduct this research successfully.

Thank you for your precious time and participation in this survey.

Yours Faithfully,

LIEW, YEAN SIEN

SECTION A:

INSTRUCTIONS: Please read each question carefully. Answer the question by filling the appropriate box that represents your response.

1. Do you purchase any product/service from online group buying sites?
₁ Yes ₂ No

2. If you do purchase product/service from online group buying sites, what kind of product/service that you usually purchase? (You may select more than one)
₁ Food and Beverage
₂ Gadgets
₃ Fashion Products
₄ Services
₅ Others: _____ (please specify)

3. Where will you purchase product /service? (You may select more than one)
₁ Groupon Malaysia
₂ MilkADeal
₃ Dealmates
₄ MyDeal
₅ Others: _____ (please specify)

4. How often do you purchase product/service from online group buying sites?
₁ Very Often
₂ Quite Often
₃ Often
₄ Rarely
₅ Never

5. Please indicates the factors that influence you the **most** in purchasing product/service from online group buying site? (Select only **one** answer)
₁ Lower Price
₂ Promotions
₃ Influence (peer, family, colleagues, friends, etc)
₄ Popularity
₅ Others: _____ (please specify)

SECTION B:

INSTRUCTION: Listed below are the measurement items about.

Perceived Usefulness	Strongly Disagree			Neutral		Strongly Agree	
	1	2	3	4	5	6	7
6. Online group buying sites provide me access to useful purchase information.	1	2	3	4	5	6	7
7. Online group buying sites enhance my purchasing effectiveness.	1	2	3	4	5	6	7
8. Online group buying is a convenient way to shop.	1	2	3	4	5	6	7
9. Online group buying sites makes shopping less time consuming.	1	2	3	4	5	6	7
10. Online group buying sites features are useful (e.g. most viewed deals, booking availability, etc.) in helping make my purchase decision.	1	2	3	4	5	6	7

Perceived Ease of Use	Strongly Disagree			Neutral		Strongly Agree	
	1	2	3	4	5	6	7
11. Online group buying sites are easy to learn.	1	2	3	4	5	6	7
12. Online group buying sites are easy to use.	1	2	3	4	5	6	7
13. Online group buying sites do not require a lot of mental effort.	1	2	3	4	5	6	7
14. Online group buying sites transactions are hassle free.	1	2	3	4	5	6	7
15. Online group buying sites are easy to navigate.	1	2	3	4	5	6	7

Price	Strongly Disagree			Neutral		Strongly Agree	
	1	2	3	4	5	6	7
16. I tend to buy the lowest-priced product that will fit my needs.	1	2	3	4	5	6	7
17. When it comes to group-buying, I rely heavily on price.	1	2	3	4	5	6	7
18. When buying a product, I look for the more discount product available.	1	2	3	4	5	6	7
19. I am sensitive to differences in prices of group-buying.	1	2	3	4	5	6	7

20. I will change what I had planned to buy in order to take advantage of a lower price for group-buying.	1	2	3	4	5	6	7
21. I am willing to make an extra effort to find a low price for group-buying.	1	2	3	4	5	6	7

Electronic Word of Mouth	Strongly Disagree		Neutral			Strongly Agree	
22. The online review/comment is clear.	1	2	3	4	5	6	7
23. The online review/comment is understandable.	1	2	3	4	5	6	7
24. The online review/comment is helpful.	1	2	3	4	5	6	7
25. The online review/comment is credible.	1	2	3	4	5	6	7
26. The online review/comment has sufficient reasons supporting the opinions.	1	2	3	4	5	6	7
27. In general, the quality of each online review/comment is high.	1	2	3	4	5	6	7
28. The number of online review/comment is large, inferring that the product is popular.	1	2	3	4	5	6	7
29. The quantity of online review/comment information is great, inferring that the product has good sales.	1	2	3	4	5	6	7
30. Highly ranking and recommendation, inferring that the product has good reputation.	1	2	3	4	5	6	7
31. The persons who provided online reviews/comments, I think they are experienced.	1	2	3	4	5	6	7
32. The persons who provided online reviews/comments, I think they have abundant knowledge towards the product.	1	2	3	4	5	6	7
33. The persons who provided online reviews/comments, I think they have the ability on judgment.	1	2	3	4	5	6	7
34. The person provided some different ideas than other sources.	1	2	3	4	5	6	7
35. The person mentioned some things I had not considered.	1	2	3	4	5	6	7

Trust	Strongly Disagree		Neutral			Strongly Agree	
	1	2	3	4	5	6	7
36. Online group buying platform is general dependable.	1	2	3	4	5	6	7
37. Online group buying platform is general reliable.	1	2	3	4	5	6	7
38. Online group buying platform is general honest.	1	2	3	4	5	6	7
39. Online group buying platform is general trustworthy.	1	2	3	4	5	6	7

Perceived Risk	Strongly Disagree		Neutral			Strongly Agree	
	1	2	3	4	5	6	7
40. Online group buying sites have sufficient security measures.	1	2	3	4	5	6	7
41. Online group buying sites take action to safeguard my personal information.	1	2	3	4	5	6	7
42. Online group buying sites protect my billing information.	1	2	3	4	5	6	7
43. Online group buying sites protect my privacy.	1	2	3	4	5	6	7
44. Online group buying sites operate with secure sites during purchase transaction processes.	1	2	3	4	5	6	7

Purchase Intention	Strongly Disagree		Neutral			Strongly Agree	
	1	2	3	4	5	6	7
45. I would consider browse group-buying platform in the future.	1	2	3	4	5	6	7
46. I would consider buy group-buying products in the future.	1	2	3	4	5	6	7
47. I would consider put my friend up for group-buying.	1	2	3	4	5	6	7
48. After reading online review/comment, it makes me desire to buy the product.	1	2	3	4	5	6	7
49. I will consider buying the product after I read online review/comment.	1	2	3	4	5	6	7
50. I intend to try the product/service discussed in the online review/comment.	1	2	3	4	5	6	7

51. In the future, I intend to seek out the product/service discussed in the online review/comment.	1	2	3	4	5	6	7
52. In the future, I intend to buy the product discussed in the online review/comment.	1	2	3	4	5	6	7

SECTION C:

INSTRUCTION: Please provide the following information about yourself by placing a (✓) on one of the blank space to assist us in analyzing the responses.

53. Gender

- ₁ Male ₂ Female

54. Age

- ₁ 17 years old and below ₄ 30-34 years old
₂ 18-24 years old ₅ 35-39 years old
₃ 25-29 years old ₆ 40 years old and above

55. Race

- ₁ Malay ₂ Chinese ₃ Indian ₄ Others _____

56. Marital status

- ₁ Single ₂ Married ₃ Divorce/ widow

57. Education level

- ₁ Primary school ₄ Undergraduate degree
₂ Secondary school ₅ Postgraduate degree
₃ College diploma

58. Occupation

- ₁ Student ₃ Self-employed
₂ Private Sector ₄ Others _____ (Please specify)

59. Personal Monthly Income/ Allowance

- ₁ Less than RM 1,500 ₃ RM 2,001 to RM 2,500
₂ RM 1,500 to RM 2,000 ₄ RM 2,501 and above

60. Location

- ₁ Kuala Lumpur ₃ Johor
₂ Pulau Pinang ₄ Others _____ (Please specify)

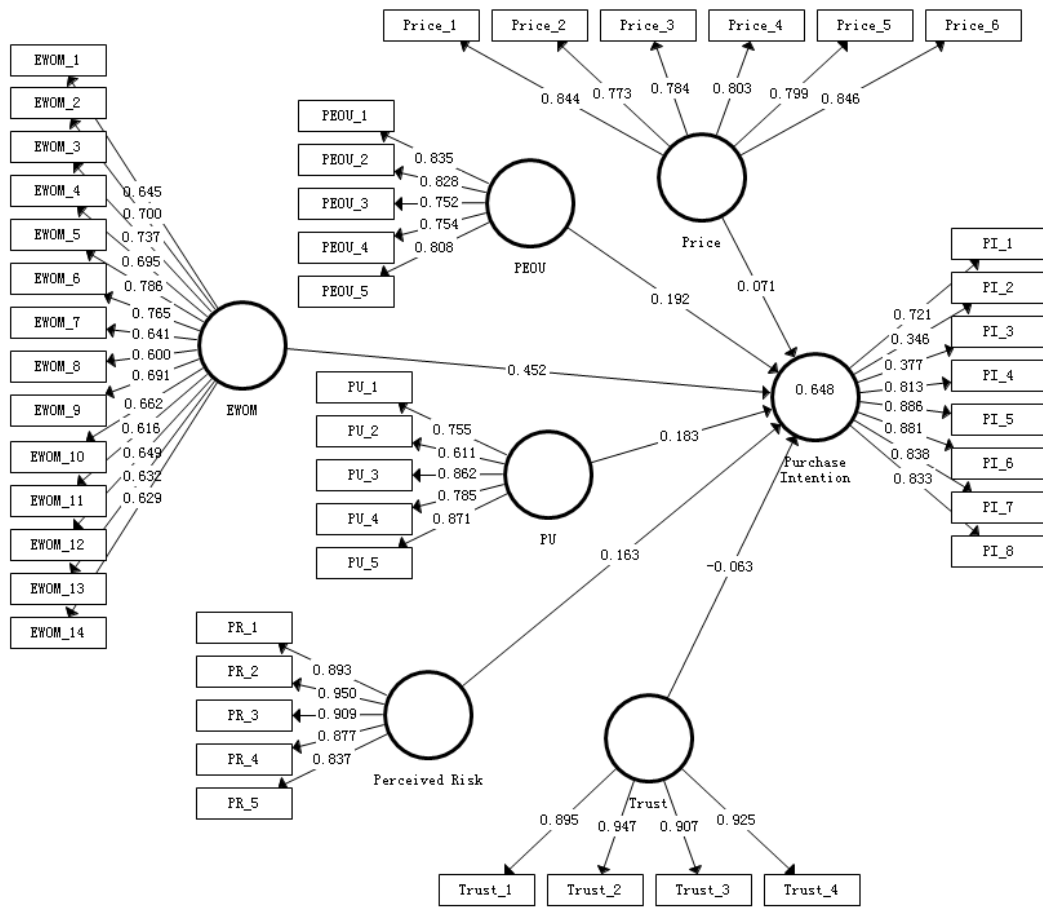
APPENDIX B

DEMOGRAPHIC PROFILES

Characteristics	Frequency	Percentage (%)	Cumulative Percent (%)
Gender			
Male	166	55.4	55.4
Female	134	44.7	100.0
Marital			
Single	194	64.7	64.6
Married	104	34.7	99.3
Divorce / Widow	2	0.7	100.0
Age			
17 years old and below	8	2.7	2.7
18 – 24 years old	51	17.0	19.7
25 – 29 years old	105	35.0	54.7
30 – 34 years old	79	26.3	81.0
35 – 39 years old	36	12.0	93.0
40 years old and above	21	7.0	100.0
Race			
Malay	54	18.0	18.0
Chinese	216	72.0	90.0
Indian	22	7.3	97.3
Others	8	2.7	100.0
Education Level			
Secondary School	15	5.0	5.0
College Diploma	41	13.7	18.7
Undergraduate Degree	118	39.3	58.0
Postgraduate Degree	126	42.0	100.0
Occupation			
Student	49	16.3	16.3
Private Sector	208	69.3	85.7
Self-employed	27	9.0	94.7
Others	16	5.0	100.0
Personal Monthly Income/ Allowance			
Less than RM1,500	40	13.3	13.3
RM1,500 to RM2,000	10	3.3	16.7
RM2,001 to RM2,500	24	8.0	24.7
RM2,501 and above	226	75.3	100.0
Location			
Kuala Lumpur	226	75.3	75.3
Pulau Pinang	12	4.0	79.3
Johor	6	2.0	81.3
Others	56	18.7	100.0

APPENDIX C

PILOT TEST RESULT



APPENDIX D

LOADING FOR EACH VARIABLE

Constructs	Items	Description	Loadings
Electronic	EWOM_1	The online review/comment is clear.	0.759
Word of	EWOM_2	The online review/comment is understandable.	0.781
Mouth	EWOM_3	The online review/comment is helpful.	0.774
	EWOM_4	The online review/comment is credible.	0.790
	EWOM_5	The online review/comment has sufficient reasons supporting the opinions.	0.804
	EWOM_6	In general, the quality of each online review/comment is high.	0.721
	EWOM_7	The number of online review/comment is large, inferring that the product is popular.	0.709
	EWOM_8	The quantity of online review/comment information is great, inferring that the product has good sales.	0.705
	EWOM_9	Highly ranking and recommendation, inferring that the product has good reputation.	0.787
	EWOM_10	The persons who provided online reviews/comments, I think they are experienced.	0.724
	EWOM_11	The persons who provided online reviews/comments, I think they have abundant knowledge towards the product.	0.669
	EWOM_12	The persons who provided online reviews/comments, I think they have the ability on judgment.	0.728
	EWOM_13	The person provided some different ideas than other sources.	0.727
	EWOM_14	The person mentioned some things I had not considered.	0.706
Perceived	PEOU_1	Online group buying sites are easy to learn.	0.848
Ease of Use	PEOU_2	Online group buying sites are easy to use.	0.873
	PEOU_3	Online group buying sites do not require a lot of mental effort.	0.747
	PEOU_4	Online group buying sites transactions are hassle free.	0.759
	PEOU_5	Online group buying sites are easy to navigate.	0.780
Perceived	PU_1	Online group buying sites provide me access to useful purchase information.	0.748
Usefulness	PU_2	Online group buying sites enhance my purchasing effectiveness.	0.822
	PU_3	Online group buying is a convenient way to shop.	0.807
	PU_4	Online group buying sites makes shopping less time consuming.	0.768
	PU_5	Online group buying sites features are useful (e.g. most viewed deals, booking availability, etc.) in helping make my purchase decision.	0.804
Perceived	PR_1	Online group buying sites have sufficient security measures.	0.845
Risk	PR_2	Online group buying sites take action to safeguard	0.916

		my personal information.	
	PR_3	Online group buying sites protect my billing information.	0.918
	PR_4	Online group buying sites protect my privacy.	0.862
	PR_5	Online group buying sites operate with secure sites during purchase transaction processes.	0.866
Price	Price_1	I tend to buy the lowest-priced product that will fit my needs.	0.715
	Price_2	When it comes to group-buying, I rely heavily on price.	0.819
	Price_3	When buying a product, I look for the more discount product available.	0.809
	Price_4	I am sensitive to differences in prices of group-buying.	0.786
	Price_5	I will change what I had planned to buy in order to take advantage of a lower price for group-buying.	0.778
	Price_6	I am willing to make an extra effort to find a low price for group-buying.	0.839
Purchase Intention	PI_1	I would consider browse group-buying platform in the future.	0.779
	PI_2	I would consider buy group-buying products in the future.	0.811
	PI_3	I would consider put my friend up for group-buying.	0.817
	PI_4	After reading online review/comment, it makes me desire to buy the product.	0.806
	PI_5	I will consider buying the product after I read online review/comment.	0.824
	PI_6	I intend to try the product/service discussed in the online review/comment.	0.771
	PI_7	In the future, I intend to seek out the product/service discussed in the online review/comment.	0.778
	PI_8	In the future, I intend to buy the product discussed in the online review/comment.	0.764
Trust	Trust_1	Online group buying platform is general dependable.	0.900
	Trust_2	Online group buying platform is general reliable.	0.939
	Trust_3	Online group buying platform is general honest.	0.898
	Trust_4	Online group buying platform is general trustworthy.	0.922

APPENDIX E

FACTOR LOADINGS AND CROSS LOADINGS

	EWOM	PEOU	PU	PR	Price	PI	Trust
EWOM_1	0.759	0.370	0.335	0.356	0.327	0.575	0.473
EWOM_2	0.781	0.440	0.455	0.449	0.301	0.544	0.514
EWOM_3	0.774	0.346	0.370	0.359	0.254	0.539	0.459
EWOM_4	0.790	0.304	0.327	0.324	0.202	0.494	0.494
EWOM_5	0.804	0.355	0.338	0.325	0.264	0.534	0.469
EWOM_6	0.721	0.301	0.324	0.296	0.247	0.477	0.427
EWOM_7	0.709	0.314	0.333	0.345	0.306	0.547	0.358
EWOM_8	0.705	0.321	0.323	0.428	0.255	0.540	0.410
EWOM_9	0.787	0.384	0.428	0.426	0.336	0.634	0.529
EWOM_10	0.724	0.332	0.340	0.390	0.245	0.485	0.464
EWOM_11	0.669	0.289	0.304	0.370	0.284	0.426	0.381
EWOM_12	0.728	0.292	0.367	0.387	0.244	0.495	0.509
EWOM_13	0.727	0.351	0.433	0.412	0.279	0.555	0.451
EWOM_14	0.706	0.362	0.363	0.355	0.239	0.560	0.471
PEOU_1	0.383	0.848	0.586	0.467	0.337	0.453	0.375
PEOU_2	0.413	0.873	0.599	0.473	0.368	0.487	0.431
PEOU_3	0.276	0.747	0.403	0.434	0.355	0.373	0.336
PEOU_4	0.339	0.759	0.537	0.451	0.385	0.471	0.387
PEOU_5	0.426	0.780	0.554	0.541	0.302	0.436	0.480
PU_1	0.379	0.486	0.748	0.410	0.283	0.456	0.466
PU_2	0.398	0.516	0.822	0.391	0.313	0.451	0.445
PU_3	0.366	0.589	0.807	0.375	0.442	0.500	0.368
PU_4	0.269	0.555	0.768	0.341	0.361	0.446	0.341
PU_5	0.489	0.513	0.804	0.376	0.387	0.562	0.428
PR_1	0.479	0.518	0.438	0.845	0.248	0.465	0.610
PR_2	0.453	0.494	0.399	0.916	0.236	0.494	0.603
PR_3	0.401	0.552	0.426	0.918	0.299	0.487	0.611
PR_4	0.413	0.482	0.366	0.862	0.244	0.463	0.572
PR_5	0.470	0.547	0.474	0.866	0.365	0.546	0.577
Price_1	0.229	0.366	0.378	0.244	0.715	0.328	0.266
Price_2	0.274	0.355	0.377	0.272	0.819	0.422	0.269
Price_3	0.258	0.325	0.359	0.228	0.809	0.400	0.253
Price_4	0.306	0.327	0.337	0.256	0.786	0.403	0.241
Price_5	0.274	0.329	0.329	0.232	0.778	0.448	0.242
Price_6	0.372	0.372	0.391	0.281	0.839	0.524	0.331
PI_1	0.617	0.422	0.459	0.422	0.380	0.779	0.441
PI_2	0.604	0.416	0.380	0.413	0.422	0.811	0.462
PI_3	0.577	0.406	0.398	0.418	0.383	0.817	0.464
PI_4	0.643	0.422	0.467	0.404	0.362	0.806	0.494
PI_5	0.638	0.433	0.431	0.403	0.392	0.824	0.460
PI_6	0.519	0.535	0.607	0.535	0.473	0.771	0.518

PI_7	0.500	0.499	0.621	0.502	0.512	0.778	0.548
PI_8	0.470	0.372	0.503	0.425	0.478	0.764	0.546
Trust_1	0.566	0.504	0.506	0.623	0.369	0.585	0.900
Trust_2	0.590	0.467	0.527	0.616	0.326	0.595	0.939
Trust_3	0.549	0.403	0.402	0.603	0.267	0.539	0.898
Trust_4	0.557	0.459	0.455	0.625	0.274	0.555	0.922

APPENDIX F

CONFERENCES AND PUBLICATION

This research project was presented in 2nd Global Conference on Business Social Science (Scopus A)

and

Published in Global Journal of Business and Social Science Review (ISSN 2289-8506)

2nd Global Conference on Business & Social Sciences

Dates: 17-18 September, 2015

Venue: ASTON Denpasar Hotel & Convention Centre, Bali, Indonesia

Dated: 18th August, 2015

Liew Yean Sien , Mohammad Falahat,
University Tunku Abdul Rahman- Malaysia.

Re: *Letter of Acceptance and Invitation*

Dear Liew Yean Sien,

Congratulations! We are pleased to inform you that your paper titled "Conceptualising Consumers' Purchase Intention towards Online Group Buying." has been accepted for oral presentation at the above global conference. Please note the following:

1. Your paper number is **MPMS-002015** and please quote this number for all future correspondence. Please check the accuracy of the paper title, address and spelling of the author name and the name of the university and send us corrected full paper or abstract with correct information by 30 August 2015. We do not allow any change anywhere after this deadline and nothing can be changed in the draft of conference program except presentation time.
2. Abstract of your paper will be published in the Refereed Conference Proceedings which will be published online and in a CD form with ISBN. Your paper is also accepted for **Global Journal of Business and Social Science Review** with minor revisions.
3. You are required to send us attached completed registration form along with payment on or **before 26 August 2015 in order to avail normal fee**. Please find attached Registration Form and Fee Schedule.
4. Conference program will be sent to you after 10 September 2015. Two types of parallel presentations: Abstract based presentation duration is 10-12 Minutes including Discussions. Full paper based presentation duration is 15-20 Minutes including Discussions. Please bring your flash-drive, pen-drive or USB containing power point slides. We will provide LCD projector and computer at the venue.
5. Please visit www.gcbss.org and read all information relating to hotel and all other issues. We look forward to seeing you at the conference.

With best regards.



Dr. Kashan Pirzada,
Conference Chair.



Collaborators:

Plos One, USA (Multidisciplinary) (ISI And 3.534 Impact Factor) | Global Business and Economics Review (Scopus)

Pertanika Journal of Social Sciences & Humanities (Scopus) | International Journal of Business Governance and Ethics (Scopus)

Elsevier Procedia of Social and Behavioural Science, UK (Scopus/A-Category) | Journal of Management Research, USA (A-Category)

Global Journal of Business & Social Science Review, Malaysia (A-Category)



Conference

Conceptualising Consumers' Purchase Intention towards Online Group Buying

Liew Yean Sien^{1*}, Mohammad Falahat²

^{1,2} University Tunku Abdul Rahman (UTAR), Jalan Sungai Long, 43000, Kajang, Malaysia

ABSTRACT

Group-buying is a business model based on the power of collective buying. Consumers with similar product interest come together and obtain a significant volume discount from retailers. Online Group Buying (OGB) is growing rapidly and it has become popular and successful in many countries. However this area still lacks of research and it is in the early stages of development especially in developing and emerging market. With that in mind, we have reviewed the literature on consumers' purchase intention towards online group buying, focusing on a set of factors identified as leading influencers. This paper presents a conceptual framework and proposes propositions that explain factors influencing consumers' purchase intention towards online group buying.

Type of Paper: Conceptual

Keywords: electronic word of mouth; online group-buying; perceived usefulness; perceived ease-of-use; price; trust; perceived risk.

1. Introduction

Group buying (or collective buying) is a situation where consumers combine their purchasing power in order to obtain significant volume discounts from retailers (Cheng & Huang, 2013). Group-buying pricing mechanisms allow buyers to combine their purchasing power and gain lower prices than they otherwise would be able to get individually (Kauffman & Wang, 2002). Group-buying works the same either online or offline (Yang & Mao, 2014).

Online group-buying (OGB) has emerged with the advent of e-commerce and social networking. Groupon, established in year 2008, is the world's fastest growing group-buying website. Other similar websites have followed suit. There are numerous similar type websites mushrooming in China and other countries. In Malaysia, group buying websites such as

* Paper Info: Revised: August, 2015
Accepted: August, 2015

* Corresponding author:

E-mail: jimmy.liewys@gmail.com

Affiliation: Faculty of Accountancy and Management, University Tunku Abdul Rahman (UTAR)

Groupon Malaysia, MilkADeal, MyDeal.com.my, Dealmates.com.my and Everyday Coupons are websites that give attractive discounts via online shopping.

OGB is a new form of e-commerce which benefits all parties in the transaction, for instance suppliers, intermediaries, merchants and consumers. Consumers can purchase their preferred products and services at a relatively lower price. Meanwhile, merchants can sell greater volumes and reach more consumers (Lau, 2011). Merchants can also use promotional methods that offer quantity based price discounts or free delivery to attract consumers to buy the goods and services (Chen, Chen, & Song, 2002). Besides, new start-ups can make use of OGB websites to promote their products and their brand at low cost. For all these, OGB certainly changes the way how consumers purchase goods and services online. Firms are able to leverage their business to wider reach to potential customers globally through the Internet (Rakshita & Alok, 2014).

Past studies show that there are several challenges for online group buying, which include retaining existing buyers and attracting customers (Cheng & Haung, 2013; Cheng, Wang, Zheng, & Luo, 2013). Other studies show that the price factor mostly affects the purchase intention (Chen J. , Chen, Kauffman, & Song, 2009) whilst the consumer decision making is affected by personal attitudes and social standards (Pi, Liao, Liu, & Lee, 2011). It is because consumers often make use of the Internet as a tool for product comparison and price searching in order to obtain their desired product at the lowest available price (Haubl & Trifts, 2000).

Thus, this study is aimed at identifying factors that affect consumers' purchase intention towards online group buying websites. There are six factors that will be examined in this study which are perceived usefulness, perceived ease of use, price, electronic word of mouth, trust and perceived risk.

2. Literature Review

2.1 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is considered the most influential theory used to explain technology acceptance behavior (Davis, 1989) and it is widely adopted by researchers to explain user acceptance of technology (Bahmanziari, Pearson, & Crosby, 2003). Antecedent studies (Tong, 2010; Rahman, Khan, & Islam, 2013) applied the TAM model in the context of online shopping. Some studies used it to predict consumers' purchase intention through technology (Tsai, Cheng, & Chen, 2011). According to Davis (1989), the TAM consists of five main variables, such as Perceived Ease of Use (PEOU), Perceived Usefulness (PU), Attitude Towards Using (ATU), Behavioral Intention to Use (BI), and Actual Usage (AU). The TAM has proved that both Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) have significant relationship on behavioral intentions in online group buying (David, 1989; Tsai et al., 2011).

2.2 Perceived Usefulness (PU)

Perceived usefulness is defined as the degree to which an individual believes using a particular system would enhance his or her performance (Davis, 1989). Henderson and Divett (2003) indicate that consumer perceives the system to be useful if the system present itself as an effective way of performing tasks. According to Gefen, Karahanna and Straub (2003), PU is a measure of the consumer's subjective valuation of the utility offered by the new information technology in an explicit task-related context. According to the study by Pikkarainen, Pikkarainen, Karjaluoto, and Phanila (2004) in the study of TAM acceptance online banking, they found that PU positively affects the actual behavior of Internet banking adoption. Sanchez-Franco and Roldan (2005) indicated in their study that PU and behavioral intention were correlated and it was strong among goal-directed users. Chau (1996) demonstrated two types of PU, near-term and long-term, in a study to review TAM.

2.3 Perceived Ease of Use (PEOU)

Perceived ease of use is defined as the degree to which an individual believes using a particular system would be free of effort (Davis, 1989). TAM theorizes that PEOU has an influence on the individual's behavioral intention to conduct financial transaction on a website (Yang & Mao, 2014). Koufaris and Hampton-Sosa (2004) define PEOU as the subjective perception by the consumers regarding the amount of effort required to learn and use the particular website. The work of Selamat, Jaaf and Ong (2009) explained that consumers prefer more a user-friendly and simple system for online shopping. This is supported by Teo (2001) in the study that users are likely to use the particular technology if the system is easy to use and require less effort to learn.

Previous studies indicated that website characteristics play an important role to determine PEOU in online purchase activities (Zeithaml, Parasuraman, & Malhotra, 2002; Beldona, Morrison, & O'Leary, 2005). Further, the study of Lim & Ting (2014) demonstrated that PU and PEOU form the basic measurement towards consumers' acceptance of a particular new website (Lim & Ting, 2014). Several components need to be taken into consideration, such as simple process flow, elastic and easy to become skillful (Rahman et al., 2013). Nevertheless, effective product searching and easy checkout process are two important features that will help to improve PEOU and achieve higher consumer's purchase intention (Yang & Mao, 2014).

A group buying website with higher PEOU encourages consumers' readiness to accept the current website (Davis, 1989) and will possibly motivate them to invite their friends or family members to purchase from the website as well. Previous studies found that PEOU had a positive influence on consumers' behavior towards online purchase activities (Davis, 1989; Yuslihasri, Islam, & Daud, 2011; Rahman et al., 2013). This is consistent with Yuslihasri et al. (2011) research which indicates that PEOU has proved to be a positive and significant influence towards consumers' attitude on online purchasing. Additionally, online shopping websites that are easy-to-use and user friendly may lead to increased trust from new consumers toward the company (Koufaris & Hampton-Sosa, 2004).

2.4 Price

Price is the main factor in stimulating consumers to purchase (Kotler & Keller, 2006). Price consciousness is defined as consumers who are reluctant to pay a higher price for products and mostly pay attention to lower prices (Sinha and Batra, 1999; Pi et al., 2011). Price sensitivity is the extent to which persons perceive and respond to fluctuations in prices for products or services (Wakefield & Inman, 2003; Pi et al. 2011).

Pricing is an effective way for price sensitive consumers to be motivated to purchase a particular product at the lowest prices possible or to get the greatest value for their money (Brassington & Pettitt, 2006). When the prices for products and services show a decrease in the group-buying websites, price sensitive consumers will notice and respond, based on prices (Pi et al., 2011).

According to the study by Erdogmus and Cicek (2011), there are two types of price systems occurring in online group buying. The first type is established based on dynamic pricing mechanisms. It implies that a large group of buyers come together as a group to perform collective buying and enjoy price discounts through the group buying website. The discount prices rely on the number of buyers predefined by the sellers. If consumers succeed in forming a group within a given period of time, then everyone in the group will enjoy at the same discounted price. The second type refers to group-buying vendors who offer certain products at big discounts, usually more than 50%, but the price does not reduce any further even if the number of buyers increases.

2.5 Electronic Word of Mouth (e-WOM)

Westbrook (1987) defined word of mouth (WOM) as any informal communication directed at other customers about the proprietorship, usage, or characteristics of specific goods and services or their sellers. Park & Kim's study defined WOM as an effective routine

to deliver product information to potential consumers as of a user perspective (Park & Kim, 2008). In traditional WOM communication, consumers share their products or service-related experiences with their family members. Kotler and Keller (2006) states in their study that family members (including siblings and parents) are the most influential reference groups in traditional WOM communication although people may not staying together with their family.

The advent of the Internet and communication capability has dramatically improved the scale and scope of WOM communication. The online reviews or electronic word of mouth have become a major informational source for consumers to post their feedbacks and gain other comments on particular products or services (Lin, Wu, & Chen, 2013). Riegner (2007) found that consumers' purchase behavior changed due to the increasing accessibility of the Internet. Some studies (Cheng & Huang, 2013; Lin et al., 2014) showed that consumers prefer to get information from virtual communities or website discussion groups such as blogs and Internet forums. These online messages have robust persuasive influence on other people (Smith, 1993).

Consumers are increasingly getting accustomed to accepting digital information and comments regarding products and brands online (Riegner, 2007). Henning-Thurau, Gwinner, Walsh and Gremler (2004) pointed out that e-WOM happens when potential, current or future consumers comment positively or negatively through online platform regarding a company or product. Product reviews from professional and experienced users which are posted in group buying websites can influence consumer perceptions of the product characteristics for example quality and function (Cheng & Huang, 2013). Ye, Law and Gu (2009) indicated that sales increase with the number of positive reviews and Duan, Gu and Whinston (2008) also confirmed the importance of e-WOM as an influence on product sales.

2.6 Trust

Trust is defined as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (Mayer, Davis, & Schoorman, 1995). Pi et al. (2011) indicated that trust is the most important issue in purchasing intention. Gefen and Straub (2004) demonstrated that trust can lessen social uncertainty throughout the delivery period of product and services and increase consumers readiness to purchase from the seller. Shiau and Chau (2013) mentioned that trust is an effective factor to reduce the insecurity and improve the simplicity of online transaction whilst creating a positive intention towards transaction behavior. Jarvenpaa, Tractinsky and Vitale (2000) proved that trust might be a predecessor element for transaction intention and is related to attitude and behavior. According to Sun, Luo and Liu (2010) the level of trust consumers had on initiators influences group buying. The study indicated five ascendants (such as subjective norm, uncertainty avoidance, disposition to trust, interaction and reputation) of perceived risk and trust on initiator and found that trust on initiator affects the intention of participating online group buying (Sun et al, 2010). Chiu, Huang and Yen (2010) proved in their study that trust is a positive predictor of consumer intention to repeat purchases.

2.7 Perceived Risk (PR)

Perceived risk is defined as consumers' subjective expectation of suffering a loss in pursuing a desired outcome (Wang, Wang, & Tang, 2003). Zhou, Dai and Zhang (2007) and Van Noort, Kerkhof and Fennis (2007) defined PR as the consumers' subjective belief of suffering a loss in pursuit of a desired outcome. Several past studies found that PR has a strong impact on consumers' purchase intention over the Internet (Barnes, Bauer, Neumann, & Huber, 2007; Zhang, Tan, Xu, & Tan, 2012; Tong, 2010). In the work of Tong (2010) it is explained that a greater perception of risk leads to less willingness to purchase.

PR in consumer behavior is defined as consumers' experience of pre-purchase uncertainty as the degree of expected loss resulting from the purchase and use of a particular subject (Ye N. , 2004). The theory of consumers' perceived risk explained consumers perceive risk when they encounter undesirable moments and uncertainty due to inappropriate decision (Taylor,

1974). Wang, J. Ashleigh and Meyer (2006) stated in their study that products or service(s) quality, personal privacy and safety are the essential concerns for consumers who often perform online financial transaction.

The concept of PR can be categorized into various types of risks in marketing literature (Zikmund & Scott, 1974; Peter & Ryan, 1976; Chen & Barnes, 2007; Murkherjee & Nath, 2007). Security risk and privacy risk are said to be predominant in online shopping environment (Chen & Barnes, 2007; Murkherjee & Nath, 2007). Security risk is one of the factors that affect consumer trust in online retailing. It refers to the safety of the security of the e-commerce website, electronic devices, credit card or financial information of the consumer when engaging in an online purchase transaction (Bart, Shankar, Sultan, & Urban, 2005). Privacy risk refers to the consumers' ability to control the dissemination of information and the ability to control the presence of others during the online transaction (Goodwin, 1991). This is supported by Liebermann & Stashevsky (2002), who conclude that consumers' personal information and Internet credit card information stealing are two other elements of perceived risk related to the process of online shopping.

The level of perceived risk can be decreased by the association with transaction processes (Pavlou, 2003; Koufaris & Hampton-Sosa, 2004). Several past studies found that perceived risk can be reduced by online trust (Gefen & Pavlou, 2006; Mukherjee & Nath, 2007; Park and Jun, 2003). In the study of Chen and Barnes (2007) it is demonstrated that PR has significantly correlated to initial trust in e-commerce. This was supported by Mukherjee & Nath (2007) in their findings that there is a positive relationship between trust and PR (perceived privacy and perceive security) in online retailing.

2.8 Purchase Intention

Purchase intention is defined as consumers' willingness to purchase certain products or services from the online group buying website (Ailawadi, Neslin, & Gedenk, 2001). Online purchase intention refers to the consumers' willingness to be involved in online transaction (Pavlou, 2003). Purchase intention has been broadly used as a focal construct to indicate consumers' buying behavior in market research (Yang & Mao, 2014).

Past studies indicated that PEOU and PU influence consumers' online purchase intention (Gefen et al., 2003; Kamarulzaman, 2007; Ha & Stoel, 2008). However, Shergill and Chen (2005) argued in their findings that information privacy as the consumers' primary concern which affects perceived risk and online purchase intention.

According to Chang and Wildt (1994), the authors identified two attributes used to evaluate consumers' purchase intention. They are consumers' willingness to purchase and their willingness to return to an e-commerce website within a period of time. This is in line with previous findings (Pi et al., 2011; Pavlou & Gefen, 2004) in which they found that purchase intention as a key factor that positively influences consumers' actual purchase behavior and that the purchase intention may influence future transaction activities.

3. Research Proposition Development

Based on the literature above, we offer following propositions:

- Proposition1: Perceived usefulness is positively related to consumers' purchase intention towards online group buying.
- Proposition2: Perceived ease of use is positively related to consumers' purchase intention towards online group buying.
- Proposition3: Price is positively related to consumers' purchase intention towards online group buying.
- Proposition4: Electronic word of mouth is positively related to consumers' purchase intention towards online group buying.
- Proposition5: Trust is positively related to consumers' purchase intention towards online group buying.
- Proposition6: Perceived risk is positively related to consumers' purchase intention towards online group buying.

4. The Proposed Theoretical Framework

Figure 1 demonstrates the proposed conceptual framework for the current study.

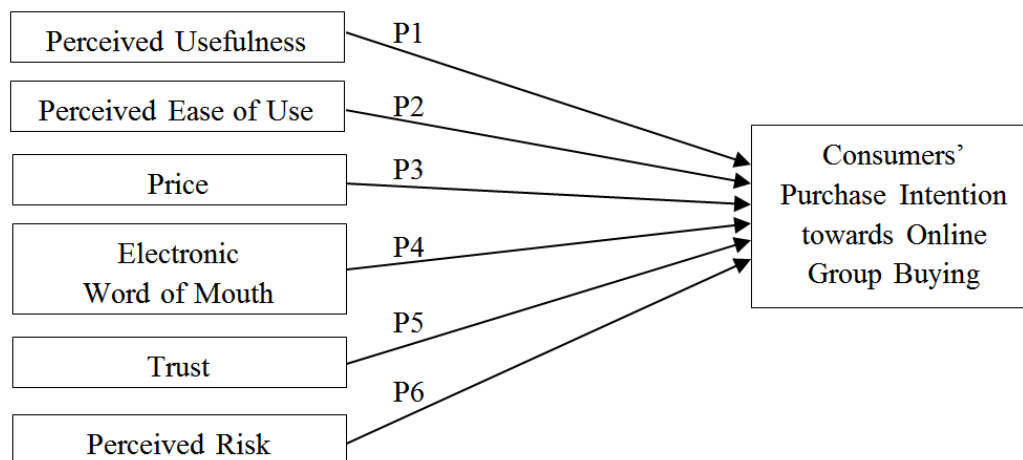


Figure 1. Proposed Theoretical Framework

5. Conclusion and Future Research

This study focuses on the determinants of consumers' purchase intention towards online group buying. There were six factors proposed as propositions that influence consumers' purchase intention towards online group buying. There are limited studies on consumers' purchase intention towards online group buying as it is still in the early stages of development. Therefore, this study aims to provide valuable information and insights to companies and researchers in this area. Firms which are aiming to venture into online group buying may use this paper as a guide for improvement whilst companies that are already running OGB businesses may find this paper useful as a benchmark to improve grey areas.

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Publication

Conceptualising Consumers' Purchase Intention towards Online Group Buying*

Liew Yean Sien ^{1*}, Mohammad Falahat ²

^{1,2} University Tunku Abdul Rahman (UTAR), Jalan Sungai Long, 43000, Kajang, Malaysia

ABSTRACT

Objective – Group-buying is a business model based on the power of collective buying. Consumers with similar product interest come together and obtain a significant volume discount from retailers. Online Group Buying (OGB) is growing rapidly and it has become popular and successful in many countries. However, this area still lacks of research and it is in the early stages of development especially in developing and emerging market. This paper aims to conceptual consumers' purchase intention in online group buying.

Methodology/Technique – Through intensive literature review on consumers' purchase intention and online group buying, a set of factors proposed as leading influencers.

Findings – Findings of this paper reveal that perceived usefulness, perceived ease of use, price, electronic word of mouth, trust and perceived risk are the main determinants of online group buying.

Novelty – This paper propose a framework for conceptualising factors that influence consumer's purchase intention in online group buying.

Type of Paper: Conceptual

Keywords: electronic word of mouth; online group-buying; perceived usefulness; perceived ease-of-use; price; trust; perceived risk.

1. Introduction

Group buying (or collective buying) is a situation where consumers combine their purchasing power in order to obtain significant volume discounts from retailers (Cheng & Huang, 2013). Group-buying pricing mechanisms allow buyers to combine their purchasing power and gain lower prices than they otherwise would be able to get individually (Kauffman & Wang, 2002). Group-buying works the same either online or offline (Yang & Mao, 2014).

* Paper Info: Revised: July, 2015

Accepted: September, 2015

* Corresponding author:

E-mail: jimmy.liewys@gmail.com

Affiliation: Faculty of Accountancy and Management, University Tunku Abdul Rahman (UTAR)

Online group-buying (OGB) has emerged with the advent of e-commerce and social networking. Groupon, established in the year 2008, is the world's fastest growing group-buying website. Other similar websites have followed suit. There are numerous similar type websites mushrooming in China and other countries. In Malaysia, group buying websites such as Groupon Malaysia, MilkADeal, MyDeal.com.my, Dealmates.com.my and Everyday Coupons are websites that give attractive discounts via online shopping.

OGB is a new form of e-commerce, which benefits all parties in the transaction, for instance suppliers, intermediaries, merchants and consumers. Consumers can purchase their preferred products and services at a relatively lower price. Meanwhile, merchants can sell greater volumes and reach more consumers (Lau, 2011). Merchants can also use promotional methods that offer quantity based price discounts or free delivery to attract consumers to buy the goods and services (Chen, Chen, & Song, 2002). Besides, new start-ups can make use of OGB websites to promote their products and their brand at low cost. In all these, OGB certainly changes the way how consumers purchase goods and services online. Firms are able to leverage their business to wider reach to potential customers globally through the Internet (Rakshita & Alok, 2014).

Past studies show that there are several challenges for online group buying, which include retaining existing buyers and attracting customers (Cheng & Haung, 2013; Cheng, Wang, Zheng, & Luo, 2013). Other studies show that the price factor mostly affects the purchase intention (Chen J. , Chen, Kauffman, & Song, 2009) whilst the consumer decision making is affected by personal attitudes and social standards (Pi, Liao, Liu, & Lee, 2011). It is because consumers often make use of the Internet as a tool for product comparison and price searching in order to obtain their desired product at the lowest available price (Haubl & Trifts, 2000).

Thus, this study is aimed at identifying factors that affect consumers' purchase intention towards online group buying websites. There are six factors that will be examined in this study, which are : perceived usefulness, perceived ease of use, price, electronic word of mouth, trust and perceived risk.

2. Literature Review

2.1 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is considered the most influential theory used to explain technology acceptance behavior (Davis, 1989) and it is widely adopted by researchers to explain user acceptance of technology (Bahmanziari, Pearson, & Crosby, 2003). Antecedent studies (Tong, 2010; Rahman, Khan, & Islam, 2013) applied the TAM model in the context of online shopping. Some studies used it to predict consumers' purchase intention through technology (Tsai, Cheng, & Chen, 2011). According to Davis (1989), the TAM consists of five main variables, such as Perceived Ease of Use (PEOU), Perceived Usefulness (PU), Attitude Towards Using (ATU), Behavioral Intention to Use (BI), and Actual Usage (AU). The TAM has proved that both Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) have a significant relationship on behavioral intentions in online group buying (David, 1989; Tsai et al., 2011).

2.2 Perceived Usefulness (PU)

Perceived usefulness is defined as the degree to which an individual believes in using a particular system would enhance his or her performance (Davis, 1989). Henderson and Divett (2003) indicate that consumer perceives the system to be useful if the system present itself as an effective way of performing tasks. According to Gefen, Karahanna and Straub (2003), PU is a measure of the consumer's subjective valuation of the utility offered by the new information technology in an explicit task-related context. According to the study by Pikkarainen, Pikkarainen, Karjaluoto, and Phanila (2004) in the study of TAM acceptance online banking, they found that PU positively affects the actual behavior of Internet banking adoption. Sanchez-Franco and Roldan (2005) indicated in their study that PU and behavioral

intention were correlated and it was strong among goal-directed users. Chau (1996) demonstrated two types of PU, near-term and long-term, in a study to review TAM.

2.3 Perceived Ease of Use (PEOU)

Perceived ease of use is defined as the degree to which an individual believes in using a particular system would be free of effort (Davis, 1989). TAM theorizes that PEOU has an influence on the individual's behavioral intention to conduct financial transaction on a website (Yang & Mao, 2014). Koufaris and Hampton-Sosa (2004) define PEOU as the subjective perception by the consumers regarding the amount of effort required to learn and use the particular website. The work of Selamat, Jaaf and Ong (2009) explained that consumers prefer more a user-friendly and simple system for online shopping. This is supported by Teo (2001) in the study that users are likely to use the particular technology if the system is easy to use and require less effort to learn.

Previous studies indicated that website characteristics play an important role to determine PEOU in online purchase activities (Zeithaml, Parasuraman, & Malhotra, 2002; Beldona, Morrison, & O'Leary, 2005). Further, the study of Lim & Ting (2014) demonstrated that PU and PEOU form the basic measurement towards consumers' acceptance of a particular new website (Lim & Ting, 2014). Several components need to be taken into consideration, such as simple process flow, elastic and easy to become skillful (Rahman et al., 2013). Nevertheless, effective product searching and easy checkout process are two important features that will help to improve PEOU and achieve higher consumer's purchase intention (Yang & Mao, 2014).

A group buying website with higher PEOU encourages consumers' readiness to accept the current website (Davis, 1989) and will possibly motivate them to invite their friends or family members to purchase from the website as well. Previous studies found that PEOU had a positive influence on consumers' behavior towards online purchase activities (Davis, 1989; Yuslihasri, Islam, & Daud, 2011; Rahman et al., 2013). This is consistent with Yuslihasri et al. (2011) research which indicates that PEOU has proved to be a positive and significant influence towards consumers' attitude on online purchasing. Additionally, online shopping websites that are easy-to-use and user friendly may lead to increased trust from new consumers towards the company (Koufaris & Hampton-Sosa, 2004).

2.4 Price

Price is the main factor in stimulating consumers to purchase (Kotler & Keller, 2006). Price consciousness is defined as consumers who are reluctant to pay a higher price for products and mostly pay attention to lower prices (Sinha and Batra, 1999; Pi et al., 2011). Price sensitivity is the extent to which persons perceive and respond to fluctuations in prices for products or services (Wakefield & Inman, 2003; Pi et al. 2011).

Pricing is an effective way for price sensitive consumers to be motivated to purchase a particular product at the lowest prices possible or to get the greatest value for their money (Brassington & Pettitt, 2006). When the prices for products and services show a decrease in the group-buying websites, price sensitive consumers will notice and respond, based on prices (Pi et al., 2011).

According to the study by Erdogmus and Cicek (2011), there are two types of price systems occurring in online group buying. The first type is established based on dynamic pricing mechanisms. It implies that a large group of buyers comes together as a group to perform collective buying and enjoy price discounts through the group buying website. The discount prices rely on the number of buyers predefined by the sellers. If consumers succeed in forming a group within a given period of time, then everyone in the group will enjoy at the same discounted price. The second type refers to the group-buying vendors who offer certain products at bigger discounts, usually more than 50%, but the price does not reduce any further even if the number of buyers increases.

2.5 *Electronic Word of Mouth (e-WOM)*

Westbrook (1987) defined word of mouth (WOM) as any informal communication directed at other customers about the proprietorship, usage, or characteristics of specific goods and services or their sellers. Park & Kim's study defined WOM as an effective routine to deliver product information to potential consumers as of a user perspective (Park & Kim, 2008). In traditional WOM communication, consumers share their products or service-related experiences with their family members. Kotler and Keller (2006) states in their study that family members (including siblings and parents) (is) are the most influential reference groups in traditional WOM communication although people may not stay together with their family.

The advent of the Internet and communication capability has dramatically improved the scale and scope of WOM communication. The online reviews or electronic word of mouth has become a major information source for consumers to post their feedback and gain other comments on particular products or services (Lin, Wu, & Chen, 2013). Riegner (2007) found that consumers' purchase behavior changed due to the increasing accessibility of the Internet. Some studies (Cheng & Huang, 2013; Lin et al., 2014) showed that consumers prefer to get information from virtual communities or website discussion groups such as blogs and Internet forums. These online messages have a robust persuasive influence on other people (Smith, 1993).

Consumers are increasingly getting accustomed to accepting digital information and comments regarding products and brands online (Riegner, 2007). Henning-Thurau, Gwinner, Walsh and Gremler (2004) pointed out that e-WOM happens when potential, current or future consumers comment positively or negatively through the online platform regarding a company or product. Product reviews from professional and experienced users, which are posted in group buying websites can influence consumer perceptions of the product characteristics for example quality and function (Cheng & Huang, 2013). Ye, Law and Gu (2009) indicated that sales increase with the number of positive reviews and Duan, Gu and Whinston (2008) also confirmed the importance of e-WOM as an influence on product sales.

2.6 *Trust*

Trust is defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer, Davis, & Schoorman, 1995). Pi et al. (2011) indicated that trust is the most important issue in purchasing intention. Gefen and Straub (2004) demonstrated that trust can lessen social uncertainty throughout the delivery period of product and services and increase consumers' readiness to purchase from the seller. Shiau and Chau (2013) mentioned that trust is an effective factor to reduce the insecurity and improve the simplicity of online transaction whilst creating a positive intention towards transaction behavior. Jarvenpaa, Tractinsky and Vitale (2000) proved that trust might be a predecessor element for transaction intention and is related to attitude and behavior. According to Sun, Luo and Liu (2010) the level of trust consumers had on initiators influences group buying. The study indicated five ascendants (such as subjective norm, uncertainty avoidance, disposition to trust, interaction and reputation) of perceived risk and trust on the initiator and found that trust on initiator affects the intention of participating online group buying (Sun et al, 2010). Chiu, Huang and Yen (2010) proved in their study that trust is a positive predictor of consumer intention to repeat purchases.

2.7 *Perceived Risk (PR)*

Perceived risk is defined as consumers' subjective expectation of suffering a loss in pursuing a desired outcome (Wang, Wang, & Tang, 2003). Zhou, Dai and Zhang (2007) and Van Noort, Kerkhof and Fennis (2007) defined PR as the consumers' subjective belief of suffering a loss in pursuit of a desired outcome. Several past studies found that PR has a strong impact on consumers' purchase intention over the Internet (Barnes, Bauer, Neumann, & Huber, 2007;

Zhang, Tan, Xu, & Tan, 2012; Tong, 2010). In the work of Tong (2010) it is explained that a greater perception of risk leads to less willingness to purchase.

PR in consumer behavior is defined as consumers' experience of pre-purchase uncertainty as the degree of expected loss resulting from the purchase and use of a particular subject (Ye N. , 2004). The theory of consumers' perceived risk explained consumers perceive risk when they encounter undesirable moments and uncertainty due to inappropriate decision (Taylor, 1974). Wang, J. Ashleigh and Meyer (2006) stated in their study that products or service(s) quality, personal privacy and safety are the essential concerns for consumers who often perform online financial transaction.

The concept of PR can be categorized into various types of risks in marketing literature (Zikmund and Scott, 1974; Peter and Ryan, 1976; Chen and Barnes, 2007; Murkherjee & Nath, 2007). Security risk and privacy risk are said to be predominant in an online shopping environment (Chen & Barnes, 2007; Murkherjee & Nath, 2007). Security risk is one of the factors that affect consumer trust in online retailing. It refers to the safety of the security of the e-commerce website, electronic devices, credit card or financial information of the consumer when engaging in an online purchase transaction (Bart, Shankar, Sultan, & Urban, 2005). Privacy risk refers to the consumers' ability to control the dissemination of information and the ability to control the presence of others during the online transaction (Goodwin, 1991). This is supported by Liebermann & Stashevsky (2002), who conclude that consumers' personal information and Internet credit card information stealing are two other elements of perceived risk related to the process of online shopping.

The level of perceived risk can be decreased by the association with transaction processes (Pavlou, 2003; Koufaris & Hampton-Sosa, 2004). Several past studies found that perceived risk can be reduced by online trust (Gefen & Pavlou, 2006; Mukherjee & Nath, 2007; Park and Jun, 2003). In the study of Chen and Barnes (2007) it is demonstrated that PR significantly correlated to initial trust in e-commerce. This was supported by Mukherjee and Nath (2007) in their findings that there is a positive relationship between trust and PR (perceived privacy and perceive security) in online retailing.

2.8 Purchase Intention

Purchase intention is defined as consumers' willingness to purchase certain products or services from the online group buying website (Ailawadi, Neslin, & Gedenk, 2001). Online purchase intention refers to the consumers' willingness to be involved in an online transaction (Pavlou, 2003). Purchase intention has been broadly used as a focal construct to indicate consumers' buying behavior in market research (Yang & Mao, 2014).

Past studies indicated that PEOU and PU influence consumers' online purchase intention (Gefen et al., 2003; Kamarulzaman, 2007; Ha & Stoel, 2008). However, Shergill and Chen (2005) argued in their findings that information privacy as the consumers' primary concern which affects perceived risk and online purchase intention.

According to Chang and Wildt (1994), the authors identified two attributes used to evaluate consumers' purchase intention. They are consumers' willingness to purchase and their willingness to return to an e-commerce website within a period of time. This is in line with previous findings (Pi et al., 2011; Pavlou & Gefen, 2004) in which they found that purchase intention as a key factor that positively influences consumers' actual purchase behavior and that the purchase intention may influence future transaction activities.

3. Research Proposition Development

Based on the literature above, we offer the following propositions:

- Proposition1: Perceived usefulness is positively related to consumers' purchase intention towards online group buying.
- Proposition2: Perceived ease of use is positively related to consumers' purchase intention towards online group buying.

- Proposition3: Price is positively related to consumers' purchase intention towards online group buying.
- Proposition4: Electronic word of mouth is positively related to consumers' purchase intention towards online group buying.
- Proposition5: Trust is positively related to consumers' purchase intention towards online group buying.
- Proposition6: Perceived risk is positively related to consumers' purchase intention towards online group buying.

4. The Proposed Conceptual Framework

Figure 1 demonstrates the proposed conceptual framework for the current study.

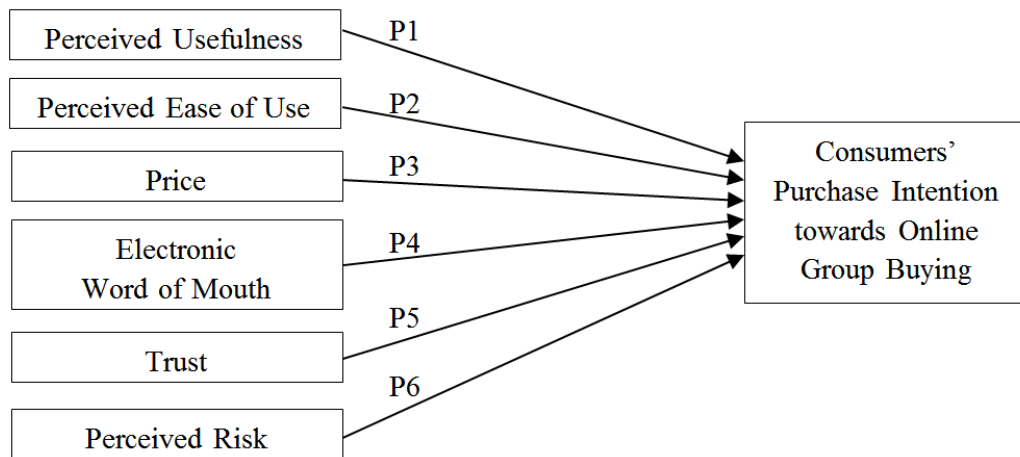


Figure 1. Proposed Conceptual Framework

5. Conclusion and Future Research

This study focuses on the determinants of consumers' purchase intention towards online group buying. There were six factors proposed as propositions that influence consumers' purchase intention towards online group buying. There are limited studies on consumers' purchase intention towards online group buying as it is still in the early stages of development. Therefore, this study aims to provide valuable information and insights to companies and researchers in this area. Firms which are aiming to venture into online group buying may use this paper as a guide for improvement whilst companies that are already running OGB businesses may find this paper useful as a benchmark to improve grey areas.

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