

The Adoption of Social Media for Mobile Commerce Among Micro Entrepreneurs in Indonesia's Retail Industry

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Table of Contents

Table of Contents	ii
List of Tables	vi
List of Figures.....	vii
Abstract.....	viii
Declaration.....	ix
Acknowledgements	x
CHAPTER 1 INTRODUCTION	1
1.1 Background of the Study	1
1.2 Research Motivation.....	3
1.3 Research questions, aims and objectives	4
1.4 Significance of Research	4
1.5 Outline of the Thesis.....	5
CHAPTER 2 LITERATURE REVIEW	7
2. 1 Introduction	7
2.2 Social Media in Business	7
2.2.1 Social Media Definition	7
2.2.2 Social Media Classifications	8
2.2.3 Social Media Adoption in Business Processes.....	11
2.2.4 Accessing Social Media in M-Commerce.....	11
2.2.5 Social Media in C2C	13
2.3 Micro Enterprise in Asia.....	14
2.3.1 Micro Enterprise Characteristics.....	14
2.3.2 Micro Enterprises in ASEAN Economic Community	16
2.3.3 Micro Enterprises and IT Adoption	17

2.4 Social media in Asia.....	17
2.4.1 Social media in Asia Business	17
2.4.2 Social Media Adoption Among Micro Enterprises in Asia	18
2.4.3 Social Media in Indonesia Business.....	19
2.5 Summary of Research Gap.....	20
2.6 Theoretical Framework	21
2.6.1 Technology Adoption Theories in Social Media	22
2.6.2 The Unified Theory of Acceptance and Use of Technology (UTAUT)	23
2.7 Research Model and Hypotheses.....	26
2.7.1 Proposed Research Model and Hypotheses	27
2.7.2 Performance Expectancy.....	27
2.7.3 Effort Expectancy.....	28
2.7.4 Social Influence.....	28
2.7.5 Trust.....	28
2.7.6 Price Value	29
2.7.7 Task-Technology Fit	30
2.7.8 Facilitating Conditions	30
2.7.9 Impact of Attitudes.....	30
2.7.10 Behavioral Intention.....	31
2.7.11 Control Variables	31
CHAPTER 3 RESEARCH METHODOLOGY.....	32
3.1 Introduction	32
3.2 Unit of Analysis	32
3.3 Data Collection and Sample Size.....	34

3.4 Pilot Test.....	36
3.5 Measure of Constructs	37
3.6 Data Analysis.....	41
3.8 Ethical consideration	42
CHAPTER 4 RESULTS.....	43
4.1 Introduction	43
4.2 Analysis of Demographic Profiles	43
4.2.1 Response Rates of participating Micro Enterprises	43
4.2.2 Descriptive Information of Respondent Profiles.....	43
4.2.3 Mapping the Purpose and Type of Social Media Uses in Micro Enterprises	46
4.3 Missing Values Analysis.....	48
4.4 Descriptive Analysis PLS.....	49
4.5 Multicollinearity Analysis.....	49
4.6 Evaluation of Measurement Model.....	49
4.6.1 Reliability Test	50
4.6.2 Content Validity	52
4.6.3 Construct Validity	53
4.7 Evaluation of Structural Model.....	62
4.7.1 Coefficient of Determination (R^2).....	64
4.7.2 Effect Size(f^2).....	64
4.7.3 Predictive Relevance (Q^2)	65
4.7.4 Significance Test of Path Coefficients	66
4.7.5 Control Variables	68
4.8 Conclusion	68

CHAPTER 5 DISCUSSION	69
5.1 Introduction	69
5.2 Discussion of Demographic Profiles of Indonesia Micro Enterprises	69
5.2.1 Types of social media used for C2C M-Commerce among the micro-enterprises in Indonesia’s retail industry	69
5.2.2 How social media are adopted in enabling C2C M-commerce business processes..	70
5.3 Discussion of Structural Model Results.....	71
5.3.1 Factors Contributing to Attitude	72
5.3.2 Factors Contributing to The Use of Social Media	74
5.4 Discussion of the use of Social Media in Indonesia’s Micro Enterprises in Retail Industry.	75
5.5 Conclusion	75
CHAPTER 6 CONCLUSION	77
6.1 Introduction	77
6.2 Research Contribution	77
6.2.1 Theoretical Contribution	77
6.2.2 Practical Contribution	79
6.3 Limitation of the Study and Future Research Implication.....	79
REFERENCES.....	81
APPENDICES.....	87

List of Tables

Table 1 Demographic Statistics of Digital Media Development in Southeast Asia in 2013 Via Internet, Mobile, and Social Media Platform	1
Table 2 Social Media Classification Based on Social Presence/Media Richness and Self Presentation/Self Disclosure	9
Table 3 Examples of Social Media Objective and Metrics.....	10
Table 4 The Average Daily Use of Media in Indonesia	18
Table 5 Definition & Classification of Indonesia MSMEs	33
Table 6 Product classification and the numbers of MSMEs listed in umkm.com	35
Table 7 Top Active Social Platform in Indonesia 2015	36
Table 8 Question items used in the research with adaptation of social media use in Indonesia's Micro Enterprises	38
Table 9 Descriptive Information of Respondent Profiles.....	44
Table 10 Purpose and Type of Social Media Use in Business Process	47
Table 11 The reliability Construct and Indicators	51
Table 12 PLS Loadings of Measurement Model.....	54
Table 13 PLS Weight and T Statistics of Measurement Model.....	56
Table 14 Correlation of latent construct (Fornell-Larcker Criterion)	58
Table 15 PLS Output of Cross-Loadings.....	60
Table 16 Effect Size (f^2)	65
Table 17 Predictive Relevance (Q^2).....	65
Table 18 Path Coefficient Test.....	66
Table 19 Summary results of hypothesis testing in Structural Model.....	67

List of Figures

Figure 1 Original UTAUT Model.....	25
Figure 2 Research Model.....	27
Figure 3 Structural Model Result.....	63

Abstract

This research investigates adoption and utilization of social media for business among micro enterprises in Indonesia's retail industry. It aims to provide better understanding on how micro enterprises in Indonesia use social media applications on mobile technological platforms for customer to customer commerce. To achieve this aim, a research model based on the Unified Theory of Acceptance and Use of Technology (UTAUT) has been adopted and extended by the study. Task-technology fit, price value and trust dimensions are introduced to the UTAUT model. Online surveys were sent out to micro entrepreneurs in Indonesia's retail industry with 153 valid responses received. Structural Equation Modelling with SmartPLS 3 are used as a technique for analysis.

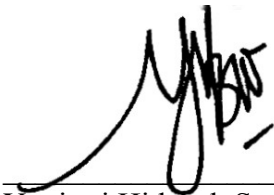
The results show that price value and task-technology fit have significant influence on attitude of micro entrepreneurs in Indonesia, while trust and the original factors of UTAUT (performance expectancy, effort expectancy and social influence) do not have significant influence. In addition, attitude has significant influence on behavior intention. Facilitating conditions and behaviors intention have significant influence on the use of social media.

This research contributes to the literature and to practice in many ways. Firstly, it is among the first study to investigate the adoption of social media in the context of micro enterprises, particularly in Indonesia. Secondly, it tested and extended the UTAUT in the Indonesian context. Task-technology fit, perspectives of price and trust are incorporated into the model. Third, it is pioneering in providing better understanding of how and why social media is adopted among micro enterprise business in Indonesia.

Keywords: Adoption, Social Media, Micro Entrepreneurs, Mobile Commerce, UTAUT, Trust, Price Value, Task-technology Fit, Attitude, Indonesia

Declaration

I hereby certify that this thesis is original, and does not contain without acknowledgment any material previously submitted for a degree or diploma in any university; and does not, to the best of my knowledge, contain any material previously published to which due reference has not been made in the text. The Ethics Committee approval has been obtained for this thesis under protocol number 5201600470 on 4 July 2016.



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CHAPTER 1 INTRODUCTION

1.1 Background of the Study

Globalization and the development of technology has brought tremendous change to how business is conducted. The increasing use of technology, particularly in Southeast Asia has paralleled the development of the open market environment. The following table shows the development of digital consumption figures in Southeast Asia in 2013.

Table 1 Demographic Statistics of Digital Media Development in Southeast Asia in 2013 Via Internet, Mobile, and Social Media Platform

	Singapore (million)	Malaysia (million)	Indonesia (million)	Philippines (million)	Thailand (million)	Vietnam (million)
Total population	5.14	29	240	103	67	92
Internet Users (penetration)	4 (80%)	17 (66%)	42 (16%)	39 (39%)	19 (28%)	39 (43%)
Mobile Platforms Use (penetration)	7.7 (150%)	35 (124%)	220 (92%)	90 (99%)	77 (115%)	121
Facebook Users	1.5	5.2	4	5.2	10.2	N/A

Source: (Chung, 2015)

As shown in the table, Indonesia has the highest total population in Southeast Asia but lowest penetration of internet use among the other Southeast Asia countries. However, according to a survey from Singapore Post (2014), the number of internet users is expected to increase by up to 39 percent by 2016. The figures in Table 1 also indicate that mobile platforms exceed internet penetration across all the countries. This suggests that flexibility, mobility, and real-time connectivity have become the major concern of online users when they are accessing information. This increase provides the opportunity for business to grow, communicate, and connect with potential customers in regional or global spheres. The growth in internet, rapid mobile device adoption, and the increase in social media usage also bring the opportunity for electronic commerce (e-commerce) expansion.

According to the survey, social media platforms such as Facebook, LinkedIn, Twitter, Zynga, and the Korean social-networking site CyWorld are extensively popular among online users in

Southeast Asia. This though is not the case in Vietnam where the government limits the entry of foreign media companies (Chung, 2015). For example, Indonesia was ranked first worldwide in terms of the growth for Twitter's account owners in early 2013 and as the fourth largest user of Facebook in the world with 69 million active Facebook users in 2014. The survey results indicate that Indonesian citizens have high social media activity which can provide opportunities for global businesses to introduce their products and services (SingaporePost, 2014).

Like most emerging markets, business in Indonesia, particularly micro enterprises, play an important role as a significant source of national income and employment. Generally, micro enterprises run in customer to customer (C2C) market rather than the other type of market. However, micro enterprises still face challenges with respect to adoption and implementation of new technologies, infrastructure developments, financial problems and limited human skills. Currently, Indonesia's micro enterprises have to deal with a single market and production among the South East Asian countries with the establishment of the ASEAN Economic Community (AEC). This has made business competition more intense. A highly competitive business environment due to globalization and a single market has forced micro enterprises to find the most effective and efficient way to stay afloat in the business.

The definition of micro enterprise can be varied depend on the origin market or country. For the purpose of this research, the definition of micro enterprises refers to Law Republic of Indonesia No. 28 of 2008 on Micro, Small, and Medium Enterprises (MSMEs). This Indonesia's law defines a micro enterprise as a productive enterprise owned by the individual and / or individual business entities which meet the criteria micro as stipulated in this law which has total net assets of less than or equal to IDR50 million excluding land and buildings or has annual sales of less than or equal to IDR300 million. Meanwhile, a micro entrepreneur refers to the person who sets up or operates a micro enterprise.

Micro enterprises can benefit to run the business in C2C form. C2C is defined as individual consumers sell to or buy from other consumers Turban, King, Lee, Liang, and Turban (2015). C2C reduces the administrative and commission costs or intermediary costs for both buyers and sellers and it gives many individuals and small business owners to run a low-cost business to sell their goods and services (Turban et al., 2015).

To survive and succeed micro enterprises must adopt suitable technology to improve their efficiency and effectiveness, gain competitive advantage, reduce turnaround time, increase transaction speed, have access to current information, reduce data entry errors, and also develop key opportunities in terms of access to new markets (Karjaluoto & Huhtamäki, 2010; Martin &

Halstead, 2004). Therefore, easy and low-cost technology such as social media and the use of mobile technologies will increasingly become more important in how successful micro enterprises conduct their business. Furthermore, according to the survey of SingaporePost (2014), social media technology is classified as a popular platform for online business particularly in retail industry. Thus, this research also focus on the retail industry, particularly in Indonesia.

1.2 Research Motivation

This research is motivated by four key factors. Those key factors are the importance of Indonesia's micro enterprises; the impact of social media and opportunity to harness its benefits; the need to improve communication in the small business market; and limited prior research in the area.

First, micro enterprises play an important role as a significant source of national income and employment (Lieberman-Yaconi, Hooper, & Hutchings, 2010; Marnewick, 2014), but also face drawbacks including limited technology adoption, expertise, and finance (Karjaluo & Huhtamäki, 2010). Therefore, finding suitable and easily adaptable technology can overcome these problems and kick start development.

Second, social media enables social interaction and business participation at several levels (McCann & Barlow, 2015). This technology provides a range of services, technologies and applications such as social networks, blogs, podcasts, wikis, RSS feeds, forums, media sharing and social bookmarking as documented in prior studies (Kaplan & Haenlein, 2010; Kelleher & Sweetser, 2012; Kietzmann, Hermkens, McCarthy, & Silvestre, 2011; Liu, Min, Zhai, & Smyth, 2016; McCann & Barlow, 2015; Wood & Khan, 2016) and offers a low-cost method of connecting with customers (Fischer & Reuber, 2011; McCann & Barlow, 2015). These advantages benefit small business including micro enterprises that have insufficient financial backing or technical expertise (Ainin, Parveen, Moghavvemi, Jaafar, & Mohd Shuib, 2015; Dahnili, Marzuki, Langgat, & Fabeil, 2014; Ghezzi, Gastaldi, Lettieri, Martini, & Corso, 2016; McCann & Barlow, 2015; Wamba & Carter, 2014).

Third, limited funding is a problem in micro enterprises. To overcome the problem, they can prove beneficial of customer to customer (C2C) market as it avoids intermediary cost and the use of C2C market is compatible with social media adoption. The use of social media will be crucial to facilitate the connection between the buyers and sellers in this market. Social media

outlets rely on the internet and mobile technologies to provide interactive platforms for information dissemination, content generation, and interactive communications. Thus, the use of mobile devices to accommodate mobile commerce will be beneficial for micro enterprises.

Fourth, to date, only limited scholarly research has addressed the adoption of social media in micro-enterprises, for example (Mandal & McQueen, 2012; Syuhada & Gambetta, 2013). More research is needed particularly in the context of Indonesia's micro enterprises context. The Indonesian Ministry of Cooperative (2014) indicates that the retail sector has the highest numbers of micro and small medium enterprises after agricultural, animal husbandry, forestry and fishery sectors. It is also likely that the retail sector will experience the most growth in the future. It is related to the nature of a retail business is selling products or services that appeal to customers' needs including the look of product, pricing, and customer service. Social media is well placed to address these needs.

1.3 Research questions, aims and objectives

This research aims to investigate the adoption of social media for C2C mobile commerce (m-commerce) among micro enterprises in Indonesia's retail industry and answer the following research questions:

1. How social media can enable micro-enterprises conduct C2C m-commerce in Indonesia's retail industry?
2. What are the factors influencing the adoption of social media for C2C m-commerce in Indonesia's retail industry?

Therefore, the purpose of this research is

1. To investigate types of social media used for C2C m-commerce among micro-enterprises in Indonesia's retail industry
2. To investigate how social media is adopted in enabling C2C m-commerce business processes.
3. To investigate factors influencing the adoption of social media for C2C m-commerce among micro-enterprises in Indonesia's retail industry

1.4 Significance of Research

This research contributes to: the knowledge of how technology, particularly social media, helps micro enterprises to conduct business; understanding the uses of social media in the business

process, and; the promotion of technology adoption among micro enterprises in future. The mapping results give a broad understanding of how and why Indonesia's micro enterprises use social media in their business process. This initial research will help micro enterprises to plan and provide strategies in conducting business using social media in the future.

This research also contributes, in terms of expanding the Unified Theory of Acceptance and Use of Technology (UTAUT) in Indonesia's micro enterprise context. It includes three additional variables in the model namely trust, price value and task-technology fit. UTAUT model is acknowledged by many scholars as a model that can better explain the acceptance of information technology than most other models. However, the model may disregard individual attributes dealing with online behavior that may influence the interface between individual users and the information system (Oh & Yoon, 2014). Individual characteristics related to online behavior, for examples are trust, price value, and task-technology fit. Trust is important in the use of online services because it is related to privacy and safety online information issues on the use of social media. Price value is related to users' cognitive tradeoff between the perceived benefits of the applications and the monetary cost for using social media. Meanwhile, task-technology fit is associated on how well the technology fits the requirement of a particular task (Goodhue & Thompson, 1995). These three additional variables are used together with the original variables, namely performance expectancy, effort expectancy, social influence. They become the constructs of attitude.

Further, attitude is used to predict behavioral intention to use social media and this research applies a different approach in measuring the use of social media. The measurement of the use of social media is based on the intention or objectives of the particular micro enterprises in using social media. The modified model is tailored to the characteristics of micro enterprises, C2C, and m-commerce in adopting social media in Indonesia's context.

1.5 Outline of the Thesis

This thesis consists of six chapters and is structured as follows.

Chapter 1 addresses the background of the study, research motivation, research questions, aims, and objectives. The significance of the research is presented.

Chapter 2 discusses the relevant literature underpinning this research. The chapter gives an overview of the use of social media in business; micro enterprises and IT adoption; social media

in Asia; summary of the research gap, theoretical framework; and research model and hypotheses.

Chapter 3 describes the research methodology and includes: the unit of analysis; data collection and samples size; measures of constructs; data analysis; and ethical consideration.

Chapter 4 presents the empirical results of research and includes: analysis of demographic profiles; missing value analysis, descriptive analysis PLS; multicollinearity analysis. The evaluation of measurement model, evaluation of structural model and hypotheses will be examined in detail.

Chapter 5 further discusses the findings. It addresses the research questions and hypotheses testing.

Chapter 6 provides the conclusions, research contribution, limitations and further research direction.

CHAPTER 2 LITERATURE REVIEW

2. 1 Introduction

This chapter discusses previous research and theories underpinning this research. The discussion includes: the use of social media in business; micro enterprises and IT adoption; social media in Asia; summary of the research gap; theoretical framework; research model and hypotheses.

2.2 Social Media in Business

This section discusses: the definition of social media in business, how social media is classified; how social media is adopted in the business process; social media in mobile commerce (m-commerce), and social media in the customer to customer (C2C) market.

2.2.1 Social Media Definition

Previous studies highlighted several social media definitions. For example, Cabiddu, Carlo, and Piccoli (2014) define social media as a browser or mobile-based applications that allow users to easily create, edit, access and link to content and/or to other individuals. The examples include blogs, wikis, RSS feeds, and electronic social networks, and user-generated content. While Kaplan and Haenlein (2010) describe social media as a group of internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content. Social media also refers to as user-generated media, are sources of online information created, initiated, circulated, and used by consumer's intent on educating each other about products, brands, services, personalities, and issues (Tang, Gu, & Whinston, 2012). The study of Limaj, Bernroider, and Choudrie (2016) define social media as one of social computing tools of Social Information Systems (SIS). SIS is the web based technologies often available as an open source that enable social interactions and do not have a predetermined number of participants. While, Wood and Khan (2016) use the term of social business which refers it to be the business activities carried out through social media tools and technologies.

For the purpose of this research, all those presented definitions lead to the notion that social media is the media of interactions among individuals, groups or organizations, to create, communicate, share or exchange ideas, opinions, pictures, videos or information in virtual communities and networks using a browser or mobile-based applications.

2.2.2 Social Media Classifications

Given the definition of social media, all business particularly micro enterprises must understand how social media is classified before use it. The classification helps them to plan future strategies, find the most suitable channels for their business and why they have to use social media to support their objectives.

Several previous researches have acknowledged social media classification. For example, Kaplan and Haenlein (2010) categorize social media based on social presence or media richness and self-presentation or self-disclosure. First classification is made based on the richness of the medium and the degree of social presence it allows. Social presence is defined as the acoustic, visual, and physical contact that can be achieved. Social presence is influenced by the intimacy (inter-personal vs. mediated) and immediacy (asynchronous vs. synchronous) of the medium, and can be expected to be lower for mediated (e.g., telephone conversation) than interpersonal (e.g., face-to-face discussion) and for asynchronous (e.g., e-mail) than synchronous (e.g., live chat) communications. The higher the social presence, the larger the social influence that the communication partners have on each other's behavior. Closely related to the idea of social presence is the concept of media richness. Media richness is based on the assumption that the goal of any communication is the resolution of ambiguity and the reduction of uncertainty. It states that media differ in the degree of richness they possess and therefore some media are more effective than others in resolving ambiguity and uncertainty. Meanwhile, second classification in social media context is created based on the degree of self-disclosure it requires and the type of self-presentation it allows. Self-presentation refers to in any type of social interaction people have the desire to control the impressions other people form of them. For example, the key reason why people decide to create a personal webpage is the wish to present themselves in cyberspace. Usually, such a presentation is done through self-disclosure. Self-disclosure is the conscious or unconscious revelation of personal information (e.g., thoughts, feelings, likes, dislikes) that is consistent with the image one would like to give. Self-disclosure is a critical step in the development of close relationships (e.g., during dating) but can also occur between complete strangers. Based on the explanation, the classification map of social media is presented in the following table.

Table 2 Social Media Classification Based on Social Presence/Media Richness and Self Presentation/Self Disclosure

		Social presence/ Media richness		
		Low	Medium	High
Self-presentation/ Self-disclosure	High	Blogs	Social networking sites (e.g., Facebook)	Virtual social worlds (e.g., Second Life)
	Low	Collaborative projects (e.g., Wikipedia)	Content communities (e.g., YouTube)	Virtual game worlds (e.g., World of Warcraft)

Source: (Kaplan & Haenlein, 2010)

In table 1, Kaplan and Haenlein (2010) suggest that blogs and collaborative projects (e.g., Wikipedia) allow the lowest levels of social presence, while virtual social worlds and virtual game worlds promote the highest levels of social presence. In these later types of social media, users are able to interact synchronously, just as they might contact face-to-face. This classification in table 1 gives a clear direction of which social media should be used when approaching the customers.

The study of McCann and Barlow (2015) highlight that prior research has been indicating the classification of social media in several ways. For example, social media is classified based on the functionality associated with the type of application, and how it is used for interaction using the term of the “4Cs”, namely communication, co-operation, collaboration and connection. Meanwhile, Wood and Khan (2016) specify social media based on business activities carried out through social media tools and technologies. For examples, social business incorporates social media tools (blogs, Twitter, LinkedIn, and Facebook), technology based internally developed social networks (the Cisco Learning Network), special purpose social software for enterprise created by third parties (Chatter, Jive or Yammer) or developed in-house, and data derived from social media and technologies (crowdsourcing or marketing intelligence).

Kietzmann et al. (2011) classify social media into seven major functionalities. These functionalities comprise of identity, conversation, sharing, presence, relationships, reputation, and groups. They then illustrated what are the most suitable social media applications fit in each category. For example, LinkedIn and Facebook classified as the identity function-oriented social media type because they allow users to reveal their identities by setting up profiles. However, LinkedIn and Facebook may also be regarded as relationship-oriented social media applications, because they emphasize the maintenance of social connections. Meanwhile, Twitter, may be considered as fitting within both the conversation and sharing types of social

media. Most location-based applications, such as Foursquare, classify as the presence category, because they show users' physical proximity to one another via a "check-in" function. Finally, social media applications in the reputation category include those platforms where rating or voting systems are available (for example, the "like" button on Facebook; the number of followers on Twitter), while group social media applications are those that allow users to build online communities (for example, Flickr and Facebook).

Understanding social media classification as well as the measurement can be used to help micro enterprises in selecting the suitable social media to conduct their business processes. However, McCann and Barlow (2015) also highlight that it is not enough only to introduce social media, but the most important things to consider are why small business using social media, resources availability during the implementation, and how to measure the success of social media adoption. They also propose the metrics to measure the success of social media adoption based on the objectives as presented in the following table.

Table 3 Examples of Social Media Objective and Metrics

Objectives	Examples of metrics
Improve customer service	Track level of positive/negative comments Analyse sentiment of customer comments Measure time taken to resolve a customer service request
Increase sales	Analyse sales volume by product, categories, location Monitor landing pages/click-throughs that lead to purchase, from specific social media platforms
Improve brand awareness	Analyse volume of mentions across channels, e.g. count the number of likes, visitors, followers, brand mentions Track level of positive/negative comments Analyse sentiment of comments Analyse sources of comments
Reduce costs	Ranking in search engines Track change in costs Benchmark number of customers reached through specific social media campaigns compared to other campaigns
Improve promotion of company products/services	Assess customer feedback via social media channels Number of page views Number of RSS feeds Number of comments Track level of positive/negative comments Analyse sentiment of comments
Building relationships with business contacts/customers	Amount of user-generated content Track number of followers/subscribers Track number of unique visitors/regular visitors Analyse sentiment of comments Analyse source/quality of authors
Increasing volume of traffic to web site	Number of incoming links Number of visitors Monitor landing pages/click-throughs from specific social media platforms Ranking in search engines

Source: McCann and Barlow (2015)

The metrics in Table 3 can be used to assist micro enterprises to select suitable social media channel in order to achieve the companies' objectives.

2.2.3 Social Media Adoption in Business Processes

Globalization offers a lot of opportunities as well as threats, enterprises must be able to react more quickly to respond the customers' demands. Therefore, information technology plays a pivotal role in making enterprises more flexible (Draheim, 2010) in accessing information and conducting the business activities. The use of information technology such as social media, make it possible for the companies to connect with the customers using various channels and help the enterprises to conduct their business process. As underlined by Kaplan and Haenlein (2010), many business executives, decision makers, and consultants positioned social media as the top program to identify in which way companies can benefit from the use of social media application such as Wikipedia, YouTube, Facebook, Second Life, and Twitter to improve their business performance.

This technology enables business the companies to conduct business process or activities in more effective and efficient way. For example, social media helps to improve brand affinity, sales opportunities, customer support, customer sentiment and recruitment (Wood & Khan, 2016), improve communication between customers and sellers, build relationships and trust, and identify potential business partners (Kelleher & Sweetser, 2012; Michaelidou, Siamagka, & Christodoulides, 2011), and provide an innovative way for firms to identify high selling potential products and a better method to attracting and retaining online customers Wamba and Carter (2014). Therefore, the adoption of this technology has become one of the alternatives to improve the business.

2.2.4 Accessing Social Media in M-Commerce

As previously discussed in the background of study, the necessity to connect with customers and access the information anywhere and at any time has triggered the increase in the use of mobile technology in the business. Businesses also can easily access social media application or other information via this device, while mobile. Therefore, this section further explores the definition of mobile commerce, types of mobile application are used in business, relationship of social media and mobile technology and why this technology is for micro enterprise.

Previous research discusses the definition of m-commerce. For example, Turban et al. (2015) explain that m-commerce or mobile business (m-business), refers to conducting electronic commerce (e-commerce) using mobile devices and wireless networks. The example of mobile devices are cellular phones and laptops to carry out online business transaction. M-commerce is acknowledged as next-generation e-commerce, that it enables users to access the internet without needing to find a place to plug in (Rouse, 2016). The development of current 3G and 4G network, and free Wi-Fi access support the spread of m-commerce.

M-commerce has some major key characteristics namely ubiquity, convenience and capabilities, interactivity, personalization, and localization (Turban et al., 2015). Ubiquity means can be accessed everywhere, especially at the same time. Convenience and capability mean that the use of mobile devices can increase the convenience of communication, and although their physical size is small, the capability of the device is increased with affordable cost. The use of mobile devices connects to the internet almost instantly compare to traditional computers. In term of interactivity, this technology allows for fast and easy interactions. Personalization means that mobile devices are personal devices. A specific mobile device is usually used by one person. While, localization refers to know where a user is physically located in real time provides an opportunity to offer him or her relevant mobile advertisements, coupons, or other services.

One of the examples of m-commerce tools is the use of smartphone devices. Currently, the smartphone is rising the popularity. The demand for these multifunctional devices comes from both the consumer and business markets Many people that cannot live without the smartphone, both for professional or personal reasons. Initially, smartphones (e.g. RIM's Blackberry) were used by organizations to empower employees with mobile email and internet access (Keith, Babb, Lowry, Furner, & Abdullat, 2015). Prior studies have defined smartphones in various ways. For example, Karanasios and Allen (2014) refers to the mobile technology as handheld devices with computing capability, such as smartphones. Dery, Kolb, and MacCormick (2014) defines smartphones as handheld devices that connect users via telephone and the internet to virtually everyone and everything in the world.

The mobile devices offer a lot of attractions which help people in their life as well as in the business. The important attractions of smartphones include their personalized environment, provide various applications, diverse internet content and multimedia players (Jung, 2014). The business also can benefit from the use of smartphones. Not only for phone calls, short text messages, but also provide increased accessibility and instant communication with customers or business relations, the possibility to independently organize parts of their work since they

can be reached at all times (Prasopoulou, Pouloudi, & Panteli, 2006). The device can be used to access mobile banking (Oliveira, Faria, Thomas, & Popovic, 2014), mobile emails (Middleton & Cukier, 2006), mobile shopping (Huang, Lu, & Ba, 2016), and easier to access social media application provided in smartphones.

Based on the discussion, micro enterprises can have the benefits by applying m-commerce for their business such as quick access to information and conduct business activities anywhere and anytime, as well as increases affordability over the cost of using desktop computing in some countries (Turban et al., 2015).

2.2.5 Social Media in C2C

As e-commerce develops tremendously, the companies can conduct the business in many ways. E-commerce has opened up new commercial opportunities for businesses and consumers. It is not only business to business (B2B), business to customer (B2C), customer to business (C2B) but also customer to customer (C2C). In customer-to-costumer (C2C) e-commerce, customers or individuals not only can buy but also sell with other customers or individuals (Li & Wang, 2015; Vicente, 2014). Turban et al. (2015) also define C2C as individual consumers sell to or buy from other consumers. The examples of C2C are individuals selling computers, musical instruments, or personal services online. Social networks have become a popular place for C2C activities such as selling products and services, for example via Facebook, twitter, Instagram and other social networks. This network enables people to share or sell, exchange, sell virtual properties, and provide personal services.

In C2C markets, trust between consumers and sellers is an important factor influencing customers' purchasing decisions, while sellers' reputation is a significant indicator to present their trust (Li & Wang, 2015), satisfaction has been found to be a key predictor of loyalty because a dissatisfied buyer is more likely to search for alternative information and turn to a competitor than is a satisfied buyer (Huang, Chen, Ou, Davidson, & Hua, 2015) . If the buyers satisfy with C2C platform, they will do more shopping on this platform and recommend this platform to their friends. Study of Vicente (2014) indicates that the profile of users in C2C is relatively different depending on whether they exclusively sell or buy. In particular, those who just sell tend to have a low educational attainment, are unemployed, live in low-income regions and display a narrow use of the internet. In contrast, purchases are positively associated with education, having a job, using social online networks, living in high-income places and using

the internet for a wide variety of activities. Furthermore, women are less likely to participate in C2C e-commerce than men.

In C2C e-commerce, social networks have become a major channel for communication and information sharing and search. Social networks are a platform where buyers can share their experiences with C2C e-commerce. For example, the use of online auction sites is present in these networks and publish ads in them. Social network users are then exposed to those ads. Moreover, an individual can advertise his products over his network (Vicente, 2014). Firms encourage C2C communications on their online brand communities is to strengthen the customer-firm relationship and increase customer purchases (Adjei, Nowlin, & Ang, 2016), C2C communication produces an influence on consumer decision through persuasive information (Zhu, Chang, & Luo, 2016). The example of social media tools use in C2C market is Facebook. Facebook users are increasingly employing the site to conduct business activities, for example by posting advertisements in groups and then conducting business transaction among each other. This type of group is called as a C2C Facebook (Chen, Su, & Widjaja, 2016).

One advantage of running the business in C2C form is eliminating intermediary cost. C2C reduces the administrative and commission costs for both buyers and sellers and it gives many individuals and small business owners to run a low-cost business to sell their goods and services (Turban et al., 2015). Therefore, due to advantage, micro enterprises may run the business in form of C2C in applying e-commerce because it is suitable with the business characteristics which will be further discussed in the following section.

2.3 Micro Enterprise in Asia

This section further discusses the importance of micro enterprise in business, particularly in Asia. The discussion includes micro enterprise characteristics, micro enterprises in ASEAN Economic Community, and IT adoption in micro enterprise.

2.3.1 Micro Enterprise Characteristics

It is inevitable that micro enterprises have been acknowledged as a significant source of income and employment in both developing and developed countries (Lieberman-Yaconi et al., 2010). Study of Marnewick (2014) and The Indonesian Ministry of Cooperative, Micro Small and Medium Enterprises Republic of Indonesia (2014) underline that micro enterprise has been able to be livelihoods sources, absorb more labor and contributes to national Gross Domestic Product. They are a significant part of the economy. The enterprises usually more adaptable

and able to implement changes more quickly than larger enterprises because of a lean organizational structure and centralized decision-making (Karjaluoto & Huhtamäki, 2010). Generally, the number of micro firms is greater than for any other firm category in many countries.

Prior studies highlight notable the characteristics of micro enterprises. For example, micro enterprises are usually owned and controlled by one individual or household, and seldom involve informal contractual agreements with banks, suppliers, customers, or other stakeholders (Lieberman-Yaconi et al., 2010; Roy & Wheeler, 2006). These businesses usually do not formally register and employ no more than five people (Marnewick, 2014), and have a small share market (Lieberman-Yaconi et al., 2010). Karjaluoto and Huhtamäki (2010) found that one of the most prominent characteristics of micro firms is the crucial role of the owner-manager. Thus, the owner manager's personal factors such as attitudes, aspirations, and values are connected to the firm's. It is noted that the owner manager's motivation is one of the most important factors determining e-business development in a micro-enterprise because the control is mainly in the hands of the manager. Furthermore, Roy and Wheeler (2006) indicate that, in term of business activity selection, a microenterprise was usually directed by intuition based on a combination of personal interest in the activity, ease of work, past training and experience both formal and informal, current financial capacity, and a somewhat simple business assessment.

However, micro enterprises also facing challenging drawbacks in conducting the business. Limited resources such as human, financial and skills in using information technology to carry out operations might constrain the adoption and use of electronic channels. Micro enterprises also have the problems in developing business scale, limited access to capital to the banks and financial institutions due to the lack of transparency. Moreover, the availability of government and private agencies that provide services in these areas is also very limited and uneven across regions (The Indonesian Ministry of Cooperative, 2014)

In conjunction with the importance of micro enterprises and the obstacles in conducting the business, it is necessary to find a suitable technology to provide an opportunity for micro enterprises improving their efficiency and effectiveness, and even to gain competitive advantage, reduce turnaround time, increase transaction speed, quick and convenience access to current information, reduction in data entry errors, and also are expected to offer key opportunities to access new markets as identified in the studies of Karjaluoto and Huhtamäki (2010) and Martin and Halstead (2004). Social media can be one of the alternatives technology

to help micro enterprises overcome their problems' nature in conducting the business in a high competitive business environment.

2.3.2 Micro Enterprises in ASEAN Economic Community

Micro enterprises generally operate in emerging market. World Bank recorded two Southeast Asia countries, Brunei Darussalam and Indonesia, have the highest density of formal of micro and small medium enterprises (MSMEs). Brunei Darussalam has 122 formal MSMEs and Indonesia 100 has MSMEs per 1,000 people. The business density is highly correlated with economic development and job creation in the region as well as the existing problems such as access to the funding sources. High-income countries generally have less dense MSMEs (Kushnir, Mirmulstein, & Ramalho, 2010).

Furthermore, micro enterprises currently facing the ASEAN Economic Community (AEC). The ASEAN (the Association of Southeast Asia Nations) countries agree to establish a single market and production in AEC that generates the business in ASEAN has become more dynamic and competitive (ASEANSecretariat, 2013). The main idea is that the regional integration through the AEC should make doing business across ASEAN easier and reduce the cost of doing business. The establishment of AEC influences business environment becomes more complex and high competitive. This condition force the companies from large to small and micro seeking the most efficient and effective ways to conduct daily operations. In line with SMEs, micro enterprises also play the essential role in the ASEAN economy, acting as vehicles to generate and restore growth in their own country and the region.

However, given unique characteristics of micro enterprises, high competitive business conditions and rapid changing of information technology, it can be argued that micro enterprises are in the most vulnerable situation because of their size, shortage of time and knowledge to operate outside of their core business to enter potential market either within ASEAN or globally. Therefore, one of the big steps to overcome those problems is finding the most suitable technology, for example, social media, to make micro enterprises stay connected to the world, saving a lot of funds but still can compete in the healthy competitive business environment. Culnan, McHugh, and Zubillaga (2010) explain the fact that the value of using social media does not come from a social media platform itself, instead, it is the usage of social media that creates the value.

2.3.3 Micro Enterprises and IT Adoption

Many prior studies have been conducted related to the IT adoption in small and medium enterprises. However, studies focus on IT adoption in micro enterprises are still limited. For example, the use of Information and Communication Technology (ICT) in United States of America's micro enterprises through a service-learning course entitled Information Technology for Development (IT4D). The micro-enterprises had received hardware and software through a grant from the eBay Foundation (Wolcott, Kamal, & Qureshi, 2008); attracting micro enterprises with ICT (Martin & Halstead, 2004); the adoption of suitable Advance Manufacturing Technologies (AMT) in India (Singh, Singh, & Yadav, 2014). The study of the adoption of corporate websites to strengthen their brand visibility in Nigeria's micro enterprises (Osakwe & Chovancova, 2016). This study suggested that the Nigeria's policy makers and related stakeholders should support the diffusion and adoption of corporate websites among micro-enterprises.

Most of those studies emphasizes that one of the big problems dealing with the IT adoption due to lack of IT skills, reluctant acceptance from human resources in micro enterprises, lack of infrastructures, lack of government policies in helping the development of IT among the micro enterprises, and financial problems. Therefore, it is necessary to find solutions for the micro enterprises' problems in order to be able to compete with large companies.

2.4 Social media in Asia

This section presents the development of social media in Asia business, social media adoption among micro enterprises in Asia, and social media in Indonesia business.

2.4.1 Social media in Asia Business

The current report from We Are Social surveys (Kemp, 2015) indicates that in 2015, over one-third of Asia Pacific Countries' (APAC) population uses the internet, and more than one-quarter have used social media. Mobile users continue to increase dramatically in line with the increase in the number of cellular connections across the region. Mobile social is the hottest digital trend in APAC at the moment with the number of people in the region accessing social media from mobile devices escalate impressively.

The current report from CPA Australia indicates high numbers of small businesses in Asia countries using social media for their business purposes (92.6 percent) compare to New Zealand

(56.5 percent), and Australia (50.2 percent). The business purposes comprise of communicating with existing customers, promoting their business to potential customers, and selling their products or services. Conducting the businesses through social media is tent to growing in future particularly in Asia countries such as Indonesia, Vietnam, and China (CPAAustralia, 2015).

People also spend more of their time on social media since the number of video views on Facebook, and the number of messages shared on WhatsApp both showing some remarkable development. They also found that the access to social media through mobile devices more convenience than via personal computers. Survey also indicates that Indonesia's users spent in the average of 2 hours 52 minutes on social media using any device as shown in Table 4. Top ten active social platforms use in Indonesia is Facebook, following subsequently by WhatsApp, Twitter, Facebook Messenger, Google+, LinkedIn, Instagram, Skype, Pinterest, and Line (Kemp, 2015).

Table 4 The Average Daily Use of Media in Indonesia

Average Daily Use	Time Spent in Media
The internet via a PC or tablet (internet users)	5 Hours 06 Minutes
The internet via a mobile phone (mobile Internet users)	3 Hours 10 Minutes
Social media via any device (social media users)	2 Hours 52 Minutes

Source: Kemp (2015)

Given the tremendous growth of social media use in Asia, it is essential for every business from large into micro scale to consider the strategies to select suitable social media that can engage with the customers as well as increase company's values and achieve the objectives.

2.4.2 Social Media Adoption Among Micro Enterprises in Asia

Noticeably, most studies related to the social media adoption are conducted for SMEs, for example, the studies from (Ainin et al., 2015; Dahnil et al., 2014; Ghezzi et al., 2016; McCann & Barlow, 2015; Wamba & Carter, 2014). Other studies also suggest to include culture influence in the analysis of social media adoption in SMEs (Ghezzi et al., 2016; Wamba & Carter, 2014). The studies of social media adoption in perspective of Indonesian SMEs also conducted by (Latuperissa, 2014; Sarosa, 2012; Scheepers, Scheepers, Stockdale, & Nurdin, 2013; Syuhada & Gambetta, 2013; Talukder, 2013).

To date, only a few research in the social media adoption in the context of micro enterprises. For example, the study of Syuhada and Gambetta (2013) describes the problems encountered in the adoption of e-commerce in Indonesia and presents the analysis of Indonesian MSMEs condition and needs for the development of the online marketplace for MSMEs. The other study is conducted by Mandal and McQueen (2012) which is emphasized the use of the Unified Theory of Acceptance and Use of Technology (UTAUT) to explain social media adoption by micro businesses and found that the major constructs of performance and effort expectancy played an insignificant role, and social influence and facilitating conditions did not influence the behavioral and adoption intentions of social media by micro business owners. Owner characteristics and codification effort dominated the use behavior. The goal of micro business owners in gaining additional customers leads to the behavioral modification resulting in replacing of behavioral intention with goals as a superior method of predicting adoption behavior within the context of micro businesses. As it is noticed that the study is conducted for two similar micro businesses in food retail business with both an online and physical outlet, and was operated by two owners and one employee that were already using Facebook business pages, the generalization is made upon the condition of those two micro businesses. Therefore, broader sample size might result differently.

2.4.3 Social Media in Indonesia Business

The study of social media adoption in Indonesia is considered a few, for example (Beldad & Citra Kusumadewi, 2015; Harsono & Suryana, 2014; Syuhada & Gambetta, 2013). Beldad and Citra Kusumadewi (2015) study the factors that influence the use of a location sharing application provided in the mobile phone. The research was a paper-based survey implemented to 655 students of six universities in Yogyakarta, Indonesia. Harsono and Suryana (2014) study the use behavior of LINE as one of the most favorite the social media in regular college students in the city of Bandung using. This research employed Unified Theory of Acceptance and Understanding of Technology 2 (UTAUT 2) to examine the use behavior of LINE Behavioral intention and use behaviors by considering the facilitating condition, performance expectancy, effort expectancy, social influence, hedonic motivation, price value, and habit as the independent variables. The results showed that almost all of the independent variables affect the behavior intention and use behavior of LINE except price value.

Meanwhile, Syuhada and Gambetta (2013) highlighted the problems encountered in the adoption of E-Commerce in micro and small medium enterprises in Indonesia based on literature review. This study suggests the use of social media in the form of Facebook

Commerce is provided as the basis of interaction on the Marketplace and can be is done in order to improve trust in the interaction and accelerate word of mouth marketing via the internet and social networks.

Based on the discussion, the research regarding micro enterprises in Indonesia is still rare. Although it is acknowledged that micro enterprises have the prevalent contribution to the country, the government must improve the attention to the companies. Therefore, this research is very important in helping the micro enterprises to overcome the drawbacks as well as stay in the business competition.

2.5 Summary of Research Gap

Based on previous discussion, this section identifies the research gap related to the research in social media, mobile commerce, C2C, and micro enterprises which has become the motivation for this research.

First, research gap in social media studies. Several prior studies indicate the use of social media for business is clear. For example, social media provides additional opportunities to establish and engage business relationships (Kelleher & Sweetser, 2012), generates benefits for business for example expanding brand affinity, sales opportunities, customer support, customer sentiment and recruitment (Wood & Khan, 2016), helps the communication with customers and suppliers, build relationships and trust, and identify prospective business partners (Michaelidou et al., 2011) and provide an innovative way for firms to identify high selling potential products and better channel to attracting and retaining online customers Wamba and Carter (2014). The research suggests the implementation of social media is still limited.

Second, previous research also categorizes the dimension of social media. For example, Kaplan and Haenlein (2010) classify social media based on social presence/media richness and self-presentation/self-disclosure, Wood and Khan (2016) specifies social media based on objectives, Kietzmann et al. (2011) use the seven major functionalities afforded by social media as the means for classification that include identity, conversation, sharing, presence, relationships, reputation, and groups. However, none of those studies map the type of social media and the purpose of using social media in micro enterprises in terms of business process. Thus, this research aims to map the type of social media and the purpose of using social media in micro enterprises in terms of business process. The mapping will describe how micro enterprises uses social media related to the business process and help them to plan the strategy and select the suitable social media channels for future to achieve companies' goals.

Third, research gap in mobile commerce studies. Business can benefit with the uses of m-commerce. As m-commerce utilizes mobile technologies, these technologies provide unique features such as portability, user verification, instant connectivity, have a unique value proposition for business such as ubiquity, personalization, unison and convenience which can have the impact on the internal operation and business procurement (Jung, 2014; Picoto, Bélanger, & Palma-dos-Reis, 2014). The benefits of this type of technologies are prevalent and predicted to be applicable to C2C Market and among micro enterprises, but limited research in this area has been done.

Fourth, research gap in C2C market studies. Given the motivation from previous studies, this research focuses on the micro enterprises that run the business in C2C mobile commerce reflect the companies' characteristics. For micro enterprises, C2C market can cut off the intermediaries cost, more flexible in conducting the business but still can maintain the buyer and seller relationship through direct participation and communication.

Fifth, research gap in micro enterprises studies. It is inevitable that micro enterprises have been recognized as a significant source of income and employment in both developing and developed countries (Lieberman-Yaconi et al., 2010), flexible business transaction, simple organizational structure, and centralized decision-making (Karjaluoto & Huhtamäki, 2010). The companies also have been able to be livelihoods sources, absorb more labor and contribute to the National Gross Domestic Product (Marnewick, 2014). These micro enterprises are a significant part of the economy. However, limited resources such as human, financial and skills in using information technology to carry out operations might inhibit the adoption and use of technology.

To date, several empirical studies have been conducted to explore the use of social media in small medium enterprises, for example (Ainin et al., 2015; Dahnil et al., 2014; Ghezzi et al., 2016; McCann & Barlow, 2015; Wamba & Carter, 2014), but limited studies for micro enterprises such as (Mandal & McQueen, 2012; Syuhada & Gambetta, 2013). Research in finding low-cost and easy to use technology like social media in micro enterprises will be necessary.

2.6 Theoretical Framework

This section discusses supporting theories that used in this research, proposed research model and hypotheses.

2.6.1 Technology Adoption Theories in Social Media

Hillmer (2009) classified technology adoption theories based on purpose into diffusion theories, user acceptance theories, decision-making theories, personality theories, organizational structure theories. Diffusion theories focus on technology innovation on the environment, and on the use in the organization. User acceptance theories focus on user intentions to use technology. Decision-making theories emphasize on the rational organizational or management interest. Personality theories look at the individual cognitive interest towards the technology. While organizational structure theories study technology acceptance behavior to organization culture, structure, or values.

Among these theories, diffusion theories and user acceptance theories are widely used in the research of social media adoption. The example of diffusion theories is Innovation Diffusion Theory (IDT) or is known as Diffusion of Innovation Theory (DOI). The theory proposed by Rogers in 1995, predicts that media, as well as interpersonal contacts, provide information and influence opinion and judgment. IDT describes the patterns of adoption, illustrates the process and assists in understanding whether and how a new invention will be successful (Hillmer, 2009). The examples of social media adoption research using IDT are conducted by Folorunso, Vincent, Adekoya, and Ogunde (2010) study diffusion of innovation in social networking sites among university students in Nigeria. Wamba and Carter (2014) study social media tools adoption use by SMEs, and Mpele (2013) investigate the cultural influence on the diffusion and adoption of social media technologies by entrepreneurs in rural South Africa.

Meanwhile, the theory of reasoned behavior (TRA), the theory of planned behavior (TPB), technology acceptance model (TAM), motivational model, and the unified theory of acceptance and use of technology (UTAUT) are classified as user acceptance theories (Hillmer, 2009). TAM theorizes that perceived usefulness and perceived ease of use determine an individual's intention to use a system. Intention to use serving as a mediator of actual system use. Perceived usefulness is also seen as being directly impacted by perceived ease of use. TPB posits that individual behavior is driven by behavioral intentions where behavioral intentions are a function of an individual's attitude toward the behavior, the subjective norms surrounding the performance of the behavior, and the individual's perception of the ease with which the behavior can be performed (Ngai, Tao, & Moon, 2015). In conjunction with the social media adoption, the use of TAM and TPB to investigate users' behavior from intention to action related to different social media technologies use (Casaló, Flavián, & Guinalíu, 2010).

TRA postulates that individual behavior is driven by behavioral intentions where behavioral intentions are a function of an individual's attitude toward the behavior and subjective norms

surrounding the performance of the behavior (Venkatesh, Morris, Davis, & Davis, 2003). In social media adoption, this theory represents the situation where people voluntarily take part and involve in social activities (Ngai et al., 2015). The example of social media adoption using TRA is the research of Hsu and Lin (2008) investigating the acceptance of blog usage, social influence, and knowledge sharing motivation.

Another user acceptance theory is UTAUT proposed by Venkatesh et al. (2003). UTAUT is the integration of eight dominant theories and models namely the theory of reasoned action (TRA), the technology acceptance model (TAM), the motivational model (MM), the theory of planned behavior (TPB), a model combining the technology acceptance model and the theory of planned behavior (Combined TAM-TPB), the model of PC utilization (MPCU), the innovation diffusion theory (IDT), and the social cognitive theory (SCT). The model in this theory is considered by many scholars that can better explain the acceptance of technology services than most of another model (Oh & Yoon, 2014).

In terms of social media adoption, UTAUT has been employed in several studies. For examples, Gruzdt, Staves, and Wilk (2012) examine the use of social media by scholars, Günther, Krasnova, Riehle, and Schöndienst (2009) study microblogging in the enterprises, Mandal and McQueen (2012) investigate social media adoption by micro businesses, Salim (2012) studies an application of UTAUT model for acceptance of social media in Egypt, Talukder (2013) investigates the impact of social influence on individuals' adoption of social networks in SMEs. Wong, Tan, Loke, and Ooi (2015) explore the factors that influence users' behavioral intention to adopt mobile social networking sites in facilitating formal or informal learning, and Yueh, Huang, and Chang (2015) investigate factors affecting students' continued Wiki use for individual and collaborative learning.

In this regard, this research uses the UTAUT as underpinned theory to explain the adoption of social media Indonesia's micro enterprises and modified the theory to fit the characteristics of Indonesia's micro enterprises. Further discussion of this theory is presented in the following section

2.6.2 The Unified Theory of Acceptance and Use of Technology (UTAUT)

The original UTAUT proposed by Venkatesh et al. (2003) is argued to provide a useful instrument to assess the user acceptance and usage behavior in information technology. The theory helps managers to assess the prospect of success of new technology introduction and

assists them to understand the drivers of acceptance in order to proactively design interventions such as training, marketing, and etc. It targeted at populations of users that may be less motivated to accept and use new systems. The authors of the UTAUT expect that the future studies would need not to search, collate and integrate constructs from numerous different models but instead could just apply UTAUT to gain an understanding of a variety of problems related to Information Systems (IS) /Information Technology (IT) adoption and diffusion (Williams, Rana, & Dwivedi, 2012).

The original UTAUT proposes three direct determinants of behavioral intention to use: performance expectancy, effort expectancy, and social influence, and two direct determinants of usage behavior: behavioral intention and facilitating conditions. Venkatesh et al (2003) and it is confirmed by study of Oh and Yoon (2014) explained the definition and roles of those six components of UTAUT model as follows.

1. Performance Expectancy is the degree to which individual believes that using the system will help him or her to attain gains in job performance.
2. Effort Expectancy is the degree of ease associated with the use of the system.
3. Social Influence is the degree to which an individual perceives that important others believe he or she should use the new system.
4. Facilitating Conditions are the degree to which an individual believes that an organizational and technical infrastructure exists to support the use of the system.
5. Behavioral intention is known to have a direct effect on individuals' actual use of a given technology. This construct derives from the TRA and is defined as 'a measure of the strength of one's intention to perform a specified behavior'.
6. Use behavior is measuring the actual use of information technology. Like behavioral intentions, use behavior was not explicitly defined in the development of the UTAUT model, although in the original UTAUT model, actual use was measured via system logs.

The original model of UTAUT is illustrated in the following figure.

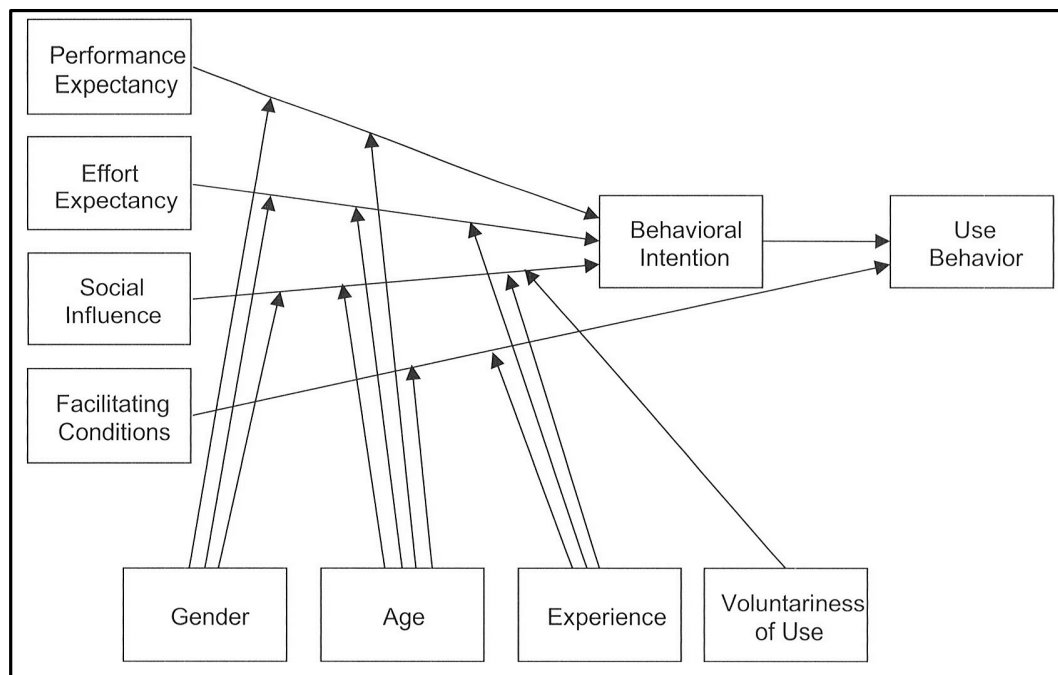


Figure 1 Original UTAUT Model

Adapted from Venkatesh et al. (2003)

As shown in figure 1, the theory also assumes that the effect of four core constructs namely performance expectancy, effort expectancy, social influence, and facilitating conditions are moderated by gender, age, experience, and voluntariness of use. The UTAUT adopted in this research is be able to account for 70% of the variance (adjusted R^2) in usage intention, better than any of the eight models alone. The finding suggests that future work can be developed related to the clarity and purpose of the measurement of system use, identify the magic number of age where effects begin to appear for effort expectancy or disappear for performance expectancy, include computer literacy and social or cultural background among others, identify and test additional boundary conditions, investigate potential constructs such as behavioral expectation, association between user acceptance and individual or organizational usage outcome, and study the degree to which systems perceived as successful from an IT adoption perspective.

Due to the rapid changing of technology, the UTAUT theory also extended to deliver a better explanation of technology acceptance and use behavior. For example, the research of Venkatesh, Brown, and Maruping (2008) that introduces behavioral expectation as a predictor that addresses some of the key limitations and provides a better understanding of system use. System use is examined in terms of three key conceptualizations: duration, frequency, and intensity. The study develops a model that employs behavioral intention, facilitating conditions, and behavioral expectation as predictors of the three conceptualizations of system use. It is

argued that each of these three determinants play different roles in predicting each of the three conceptualizations of system use.

The UTAUT model is recognized as a prominent model to explain the acceptance of information technology. The model has been widely adopted in various technology adoption studies in online behavior, for example online banking behavior (Al-Qeisi, Dennis, Hegazy, & Abbad, 2015; Oh & Yoon, 2014), mobile device acceptance (Carlsson, Carlsson, Hyvönen, Puhakainen, & Walden, 2006), factors contributing to the acceptance of social media as a platform among student entrepreneurs (Shokery, Nawi, Nasir, & Al Mamun, 2016). Some of those studies provide mixed results. Although, the authors of the UTAUT expect that the future studies would just apply the theory to explain the user acceptance regarding certain technology, several factors should be considered due to different environment. Other variables should be considered in order to further describe and explain the adoption of social media in micro enterprises.

2.7 Research Model and Hypotheses

The model and hypotheses are developed based on UTAUT theory. Additional factors namely trust, price value and task-technology fit are incorporated in the model to predict whether they have any influence on the behavior to use social media. These additional factors are linked to the characteristics of micro enterprises, C2C, and mobile commerce environment and are expected to have the significant influence on the adoption of social media to assess the likelihood of success of technology adoption.

The different environment might result in different user acceptance behavior of information system. For example, in the case of micro enterprises, the technology acceptance of users that may be less motivated to adopt and use new systems because of limited technological skills. Although UTAUT model is recognized as prominent model in information system adoption, the model has not yet addressed the other factors that are important in online behavior, micro enterprise's characteristics, and the use of social media for business. Those important factors for instance, trust, price value, and whether social media is fit well in micro enterprises' business activities (task-technology fit) that may affect users' acceptance and provide further explanation of social media adoption among micro enterprises. Trust is important in online behavior which is dealing with privacy and safety of online information distributed by micro enterprises through social media. Price value is dealing with user's perspective of tradeoff between the perceived benefits of the applications and the monetary cost for using social media.

Meanwhile, task-technology fit related to how well social media fit in helping micro enterprises to conduct business activities.

2.7.1 Proposed Research Model and Hypotheses

Figure 2 illustrates the research model. The research model incorporates trust, price value and task-technology fit and attitudes into UTAUT. Based on research model, the following section will discuss each research variables and proposed hypotheses.

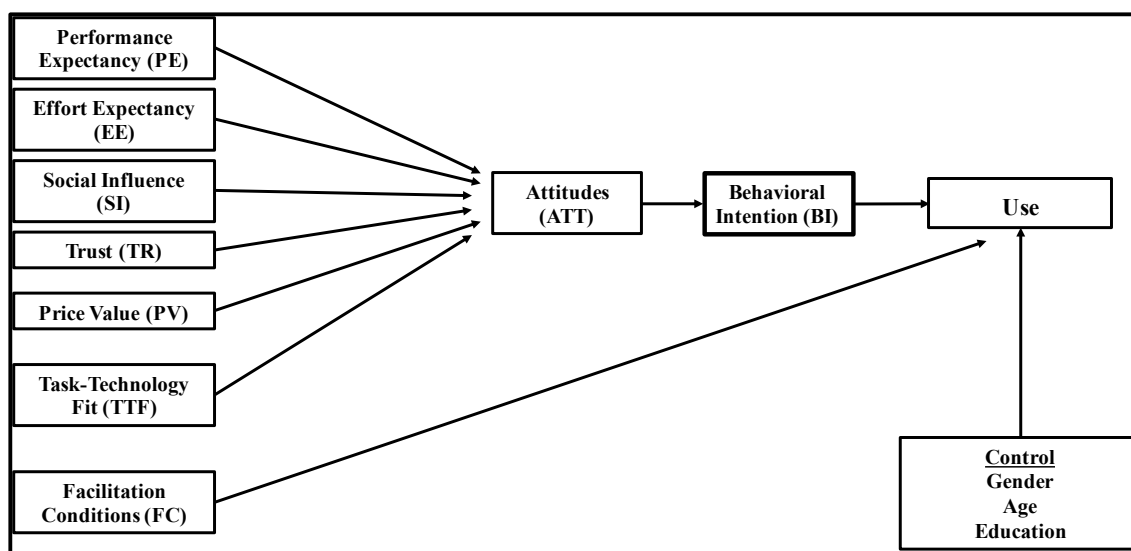


Figure 2 Research Model

2.7.2 Performance Expectancy

Performance expectancy is the degree to which an individual believes that using the system will provide the benefit or enhance job performance (Venkatesh et al., 2003). Performance expectancy is perceived usefulness in TAM theory. Perceived usefulness and perceived ease of use in TAM theory are the determinant variables of attitudes (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989; Venkatesh et al., 2003).

In this research, micro enterprises may have the certain expectation that the use of social media can improve their business performance. If they believe or have a positive feeling that social media can improve business performance, they will continue to use it to facilitate their business processes. Therefore, we proposed, the first hypothesis:

H1: Performance expectancy will influence attitude toward the use of social media

2.7.3 Effort Expectancy

Effort expectancy is the degree of ease an individual associated with the use of a system (Venkatesh et al., 2003). As it is previously explained, effort expectancy is derived from perceived ease of use in TAM theory, and it is one of the determinants variables of attitudes (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989). In this research, micro enterprises may have the certain expectation that social media is easy to use to help them conduct the business. If they believe or have a positive feeling that social media is easy to operate, they will continue to use it. Therefore, we propose the second hypothesis in the following.

H2: Effort expectancy will influence attitude toward the use of social media

2.7.4 Social Influence

Social influence describes the situation in which an individual perceives that important of others believe that he or she should use the new technology (Venkatesh et al., 2003). Study of Ajzen (1991) and is confirmed by Venkatesh, Morris, & Ackerman (2000) Social influence is derived from subjective norm, refers to perceived social pressure to perform or not perform the behavior. Related to this research, the attitude of micro enterprises to use social media can come from the influence of the person or group (for example, family, friend, competitor) which the belief is important to the micro enterprises.

Therefore, we propose the third hypothesis:

H3: Social influence will effect attitude toward the use of social media

2.7.5 Trust

Trust is defined as ‘a positive expectation and attitude towards others and the degree of confidence with which one can depend on others’(Oh & Yoon, 2014). Venkatesh, Thong, Chan, Hu, and Brown (2011) and Oh and Yoon (2014) theorize trust as a three-dimensional construct, comprising competence, benevolence, and integrity. Competence is the belief in the trustee’s ability to do what the trustor expects. Benevolence is the belief that the trustee will act in the trustor’s interests. Integrity is the belief that the trustee will be honest and keep its promise. Trust is a critical issue in the context of IS particularly when there is an indication that

user privacy and security are at risk. For instance, when using e-commerce Web sites, consumers have to provide personal and sensitive information (e.g. credit card number, phone number) to vendors via the internet (Venkatesh et al., 2011).

Further, trust in the online environment is characterized by greater complexity (e.g. trust in the website vs. trust in technology), the need for structural assurances of security and privacy, and the lack of tangible brand indications. The impersonality, anonymity, and automation of electronic transactions and communications make it difficult for consumers to evaluate the trustworthiness of online vendors and other consumers. Yet, trust is critical for both attracting traffic and completing successful online interactions, as well as creating and maintaining online communities and virtual groups (Pentina, Zhang, & Basmanova, 2013).

Therefore, based on the discussion it is expected social media providers should build their customers' trust by confirming their privacy and safety, which are the substantial issues on the social media. Thus, in this research, is proposed the following hypothesis.

H4: Trust will influence attitude toward the use of social media

2.7.6 Price Value

The cost and pricing structure may have a significant impact on consumers' technology use (Venkatesh, Thong, & Xu, 2012). For instance, there is evidence that the popularity of short messaging services (SMS) in China is because of the low pricing of SMS relative to other types of mobile Internet applications (Chan et al. 2008). In marketing research, the monetary cost or price is usually conjectured together with the quality of products or services to establish the perceived value of products or services. As well as social media, affordable technology with a lot of benefits can attract the micro enterprises to use it.

For this research purposes, we follow the idea of Venkatesh et al. (2012) which define price value as users' cognitive tradeoff between the perceived benefits of the applications and the monetary cost for using them. The users in this research are micro enterprises have to responsible for their cost or price value of using social media. The price value is positive when the benefits of using a technology are perceived to be greater than the monetary cost and therefore price value has a positive impact on intention. Thus, we add price value as a predictor of the attitudes of intention to use a social media technology. Then, we propose the following hypothesis.

H5: Price value will influence attitude toward the use of social media

2.7.7 Task-Technology Fit

Task-Technology Fit (TTF) model suggest that user adoption depends on how well the technology fits the requirement of a particular task (Goodhue & Thompson, 1995). TTF connects between task requirements, individual abilities, and the functionality of the technology. In e-commerce, the use may be related to how well the consumer feels web technology fits the task (Klopping & McKinney, 2004). Another implementation of TTF is the attraction of traditional banks to adopt mobile banking (Zhou, Lu, & Wang, 2010), and the adoption of mobile banking in Portugal (Oliveira et al., 2014). Those studies confirmed that TTF is a significant predictor on user adoption on certain technology.

Since social media obtain a growing popularity in Indonesia, it is essential to investigate how well the technology fit with the task or business activities conducted by micro enterprises influences the attitude to use social media. Therefore, hypothesis 6 is proposed as follows.

H6: Task-Technology Fit will influence attitude toward the use of social media

2.7.8 Facilitating Conditions

Facilitating conditions are defined as the degree of belief in the existence of the technical and organizational infrastructure to support the usage of a new technology (Venkatesh et al., 2003). The facilitating conditions refer to the availability of technological or organizational resources such as knowledge, resources, and availability that can eliminate obstacles to using a system (Venkatesh et al., 2008). The facilitating conditions do have a direct influence on the usage of technology. In this study, micro enterprises will use social media in conducting their business when the resource and support are available. Therefore, the following hypothesis is proposed.

H7: The effect of facilitating conditions on will influence the social media use

2.7.9 Impact of Attitudes

The connection between attitude and behavior has been well documented in persuasion literature. TRA and TAM suggest that attitudes are significant predictors of behavioral

intentions which in turn are predictive of behavior (Davis et al., 1989; Krishnan & Hunt, 2015). Attitude toward using technology is defined as an individual's overall affective reaction to using a system (Venkatesh et al., 2003). It is the individual's positive or negative feelings about performing a behavior (Klopping & McKinney, 2004; Krishnan & Hunt, 2015). Four constructs from existing models align closely with this definition: attitude toward behavior (TRA, TPB/DTPB, C-TAM-TPB), intrinsic motivation (MM), affect toward use (MPCU) and affect (SCT).

Empirical testing indicates that the attitude construct in some cases (e.g. TRA, TPB/DTPB, and MM) is significant across all three time periods (post training, 1 month after implementation, and 3 months after implementation) and is also the strongest predictor of behavioral intention. However, in some cases (C-TAM-TPB, MPCU, and SCT), the construct is not significant. Upon closer examination, the attitudinal constructs are significant only when specific cognitions related to performance and effort expectancies are excluded from the model (Venkatesh et al., 2003). Related to this research, we consider any observed relationship between attitude and behavioral intention in Indonesia's micro enterprises. Therefore, we propose the hypothesis:

H8: Attitude toward the use of social media will positively predicting the behavioral intention

2.7.10 Behavioral Intention

Behavioral intention defines as a measure of the strength of one's intention to perform a specified behavior (Davis et al., 1989). Empirically, behavior intention has demonstrated as the important determinant of technology use, for example, research in (Oh & Yoon, 2014; Venkatesh et al., 2008; Venkatesh et al., 2003). This suggests a positive linear relationship between behavioral intention and the use of technology, such as social media in this research. Therefore, this research proposed the following hypothesis.

H9: Behavioral intention will positively predict social media use behavior

2.7.11 Control Variables

Gender, age, and education are used as control variables in this research to indicate whether there is any different result across these variables to the social media adoption among Indonesia's micro enterprises.

CHAPTER 3 RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents details of the research strategy adopted in this research. A quantitative research is appropriate for this study. Survey questions were designed by following the process of the UTAUT development. Unit of analysis, data collection and sample size, measures of constructs, data analysis, and ethical consideration in this research will be discussed in this section.

3.2 Unit of Analysis

This research is conducted in Indonesia. The unit of analysis in this research is micro enterprises which conducting the business in the retail industry in Indonesia. For the purpose of this research, the definition of a micro enterprise is according to Law Republic of Indonesia No. 28 of 2008 on Micro, Small, and Medium Enterprises (MSMEs) . This Indonesia's law defines a micro enterprise as a productive enterprise owned by the individual and / or individual business entities which meet the criteria micro as stipulated in this law which has total net assets of less than or equal to IDR50 million excluding land and buildings or has annual sales of less than or equal to IDR300 million. The comprehensive definition and classification of MSMEs are shown in the following table.

Table 5 Definition & Classification of Indonesia MSMEs

Enterprises	Definition	Total Net Assets (IDR)	Annual Sales (IDR)
Micro	A productive enterprise owned by the individual and / or individual business entities which meet the criteria Micro as stipulated in this Law	≤ 50 million excluding land and buildings	≤300 million
Small	Stand-alone productive economic activities, which is carried out by an individual or entity a business that is not a subsidiary or branches of companies that owned, controlled, or be part either directly or indirectly of medium or large businesses that meet the criteria of small enterprises as stipulated in this Law	50 up to 500 million excluding land and buildings	300 million up to 2.5 billion
Medium	Stand-alone productive economic activities that carried out by individuals or a business entity that is not a subsidiary or branches of companies owned, controlled, or be part either directly or indirectly with Small or large businesses with total net assets or annual sales revenue as stipulated in this Law	500 million up to 10 billion excluding land and buildings	2.5 billion up to 5 billion

Source: Law Republic of Indonesia No. 28 of 2008 on Micro, Small, and Medium Enterprises

The retail industry has become the focus of this research based on several considerations. First, according to the statistical data The Indonesia Ministry of Cooperative, Micro, Small, and Medium Enterprises (2014), the retail sector has the high numbers of MSMEs after agricultural, animal husbandry, forestry and fishery sectors. Second, the retail industry is one of the sectors in Indonesia that potentially use social media for its business process. The survey from Singapore Post (2014) recorded that there were four preferred e-commerce channels for online shopping in Indonesia namely through messenger groups (27 percent), online forums or

classified sites (26.6 percent), social media platform (26.4 percent), and conventional online shopping sites (20 percent). The number indicated that social media technology is classified as a popular platform for online business among Indonesian retailers. Further results from the survey also documented the most popular Indonesian online shop products are clothing and apparel (67.1 percent), shoes (20.2 percent), and bags (20 percent).

All those micro enterprises in the retail industry in this study run the business in C2C m-commerce. The m-commerce transaction uses mobile technologies devices for examples smartphones, laptops, or tablets. This research is focused on the use of social media in mobile technologies, because mobile technologies enable the micro enterprises to access social media in a wide geographic area, anytime and anywhere. The unique features of mobile technologies such as portability, user verification, instant connectivity, have the unique value proposition for business, and convenience (Picoto et al., 2014) can have the impact on the internal operation and business.

3.3 Data Collection and Sample Size

Online questionnaire in this research is constructed using Qualtrics and distributed to Indonesia's micro enterprises in the retail industry. Data is collected during two the periods from July to August 2016. Data of Indonesia's micro enterprises in retail industry were obtained from:

1. Publicly open website that is umkm.com. The website is basically a micro, small and medium enterprises (MSMEs) directory. To date, the website has 1,025 members which are classified as MSMEs and advertised their products on the website. Table 6 describes all product classification and the numbers of MSMEs.
2. Data from Indonesia's Ministry of Cooperative, Micro Small, and Medium Enterprises, Trade Chambers Republic of Indonesia, and related organizations to increase the response rate
3. Retailer groups available in popular social media for example Facebook, WhatsApp, Line etc.

The product classification and the numbers of MSMEs listed in website of umkm.com is described in the following table.

Table 6 Product classification and the numbers of MSMEs listed in umkm.com

Product Classification	Numbers
Agro Business	59
Job Market	7
Electronics	29
Export - Import	17
Fashion	96
Hobbies, Sports, Entertainment (including books, magazines)	45
Internet	43
Services	176
Health & Beauty	20
Financial	13
Computers	40
Food & Beverage	121
Other retail shop	87
Automotive	17
Tourism	17
Education & Training	25
Property	22
Household	45
Telecommunications	11
Handicraft	135
Total	1025

Source: umkm.com (2016)

After a further examination based on the criteria stipulated in Indonesia's Law No. 28 of 2008 on Micro, Small, and Medium Enterprises, 600 Indonesia's micro enterprises in the retail industry are selected. Data collection process is described as follows:

1. Invitation email with the link of questionnaire are sent to 600 selected Indonesia's micro enterprises in retail industry. It is expected 150 to 200 participants (20 percent) will response to the email.
2. Two weeks after the survey have been sent out, follow-up emailed is conducted to all micro enterprises by the researcher to give a kind reminder of the survey

Meanwhile, the category of social media used by micro enterprises in Indonesia is based on We Are Social surveys presented in Table 7. This category is used to map the type and purposes of the use of social media in this research.

Table 7 Top Active Social Platform in Indonesia 2015

No	Top Active Social Platform	Users (%)	Type
1	Facebook	14	Social Network
2	WhatsApp	12	Messenger/Chat App/Void
3	Twitter	11	Social Network
4	Facebook Messenger	9	Messenger/Chat App/Void
5	Google+	9	Social Network
6	LinkedIn	7	Social Network
7	Instagram	7	Social Network
8	Skype	6	Messenger/Chat App/Void
9	Pinterest	6	Social Network
10	Line	6	Messenger/Chat App/Void

Source: Kemp (2015)

153 valid responses were received during the period of study, giving a response rate of 25.50% based on 600 questionnaires distributed. This number has exceeded the minimum samples requires for Partial Least Square analysis that is 30 to 100 participants.

3.4 Pilot Test

Since the actual study was conducted in Indonesian context, all data collected is in Indonesia Language. Once the first version of survey questionnaires is developed in English, a pre-test was conducted among 15 Indonesian scholars who have the experience to conduct online business via social media to ensure:

1. The translation of survey questionnaire from English to Indonesia version is accurate, easy to understand and free from bias.
2. The wording of the survey
3. Accessibility of online survey
4. Reliability and Validity of results.

The pretest data were analyzed for reliability and validity. The analysis is using SmartPLS 3. Reliability provides an indication of the average correlation among all of the items that structure the scale. Generally, Cronbach Alpha is used to measure the reliability. Values range from 0 to 1, with higher values indicates greater reliability. Depending on the nature and purpose of the scale, it is recommended the Cronbach alpha coefficient should above 0.7 (Pallant, 2016). Meanwhile, validity test refers to the degree to which it measures what it supposed to measure. Validity test in SmartPLS 3 can be checked by looking at the outer loading of indicators, average variance extracted (AVE), and cross loading (Pallant, 2016). The statistical results indicate reliability test is confirmed with all the Cronbach's alpha scales were above the acceptable limit of 0.7, as well as validity is confirmed with the loading factors are more than 0.7. The implications of pretest study are some questions are rewording to ensure the clarity and easy to understand.

3.5 Measure of Constructs

Table 8 provides a list of items used in the survey. All the items were measured using a seven-point Likert-type scale ranging from "strongly disagree" (1) to "strongly agree" (7). The questions are modified in conjunction with social media adoption in Indonesia's micro enterprises.

Table 8 Question items used in the research with adaptation of social media use in Indonesia's Micro Enterprises

Questions Items				Adapted From
Independent Variables	Performance Expectancy	PE	<p>PE1: Social media useful in my job</p> <p>PE2: Using social media helps me to accomplish tasks more quickly</p> <p>PE3: Using social media increases the effective use of my time in handling my tasks</p> <p>PE4: If I use social media, I will increase my chances of getting a rise</p>	(Oh & Yoon, 2014; Venkatesh et al., 2003; Venkatesh et al., 2012)
	Effort Expectancy	EE	<p>EE1: Learning how to use social media is easy for me.</p> <p>EE2: My interaction with social media is clear and understandable.</p> <p>EE3: I find social media easy to use.</p> <p>EE4: It is easy for me to become skillful at using social media.</p>	(Oh & Yoon, 2014; Venkatesh et al., 2003; Venkatesh et al., 2012)
	Social Influence	SI	<p>SI1: My family influence me</p> <p>SI2: My friend and colleagues influence me</p> <p>SI3: Most of my competitors use social media</p>	(Oh & Yoon, 2014; Venkatesh et al., 2003; Venkatesh et al., 2012)
	Trust	TR	TR1: I trust social media that I used,	(Gefen, Karahanna, & Straub, 2003; Lemire, Pare,

			<p>because it provides good services</p> <p>TR2: I believe social media that I used is trustworthy</p> <p>TR3: I feel safe to share information through social media because it has a good reputation</p> <p>TR4: I feel comfortable to use social media because the original content of information will remain unchanged during or after the on-line transaction</p>	Sicotte, & Harvey, 2008)
	Price Value	PV	<p>PV1: Cost to set up mobile internet connection is reasonable</p> <p>PV2: At the current price, I can experience of social media facilities reasonably</p> <p>PV3: Using social media can save my operational expense</p>	(Venkatesh et al., 2012)
	Facilitating Conditions	FC	<p>FC1: I have the resources necessary to use social media.</p> <p>FC2: Social media is compatible with other technologies I use.</p> <p>FC3: The quality of internet connection is good enough to operate the business</p>	(Oh & Yoon, 2014; Venkatesh et al., 2008; Venkatesh et al., 2003; Venkatesh et al., 2012)
	Task-Technology Fit	TTF	<p>TTF1: Social media are compatible with all aspects of my work</p> <p>TTF2: Social media fits well with the way I like</p>	(Klopping & McKinney, 2004; Lee, Choi, Kim, & Hong, 2007;

			to work. TTF3: Social media fits into my work style	Vatanasakdakul, 2008)
Dependent Variables	Attitude toward the use of social media	ATT	ATT1: Using social media is a good idea ATT 2: Social media makes work more interesting ATT 3: Working with social media is fun ATT4: The effect of using social media makes me feel satisfied	(Venkatesh et al., 2003; Venkatesh et al., 2011)
	Behavioral Intention	BI	BI1: I intend to continue using social media in the future BI2: I will always try to use social media in my daily life BI3: I plan to use social media frequently	(Oh & Yoon, 2014; Venkatesh et al., 2003; Venkatesh et al., 2008; Venkatesh et al., 2012)
	Use	Use	Use1: Using social media improves, my customer service Use2: Using social media increase my sales Use3: Using social media increase the number of visitors/ likes/ comments/followers/ brand mentions Use4: Using social media, I can build relationships with customers or business contacts Use5: Using social media, I can improve promotion of company's	(McCann & Barlow, 2015)

			products	
			Use6: Using social media, I can reduce operational cost	
			Use6: Using social media, I use time more efficiently in business process	

3.6 Data Analysis

There was two statistic software used in this research. Descriptive statistics analysis used IBM SPSS version 22, while Partial Least Square Structural Equation Modeling (PLS-SEM) analysis used SmartPLS 3 software. Details of the analysis are presented in the following.

Demographic data of micro enterprises is examined using IBM SPSS version 22. Meanwhile, the evaluation of the structural model and measurement model and hypotheses testing is examined using PLS-SEM approach by employing SmartPLS 3. PLS-SEM approach is preferable because of the suitability of the technique to the nature of this study. PLS-SEM provides better prediction capability and it can be used for analysis of a high complexity model with small sample sizes compared to a large number of independent variables. In addition, it has no requirement of a normal distribution assumption which suits the nature of the data collected (Hair, Hult, Ringle, & Sarstedt, 2014; Vatanasakdakul, 2008).

The analysis of the model is described in the following steps as suggested by (Hair et al., 2014).

1. Missing value analysis

The first step is checking the missing value. The analysis of missing values carried out to produce clean data for the structural model analysis. Missing value data happen when a respondent is either purposely or unintentionally fails to answer one or more question (s). In SmartPLS 3.0, there are two ways offered to treat missing values using mean value replacement or removing all cases from the analysis that include missing values in any of the indicators used in the model (casewise deletion).

2. Multicollinearity Analysis

The second step is analyzing multicollinearity problem. The multicollinearity analysis was employed to test the collinearity of the relationship between constructs. The

multicollinearity is calculated directly from SmartPLS 3 software by looking at the Variance Inflation Factor (VIF) number. Since in this research all variables have reflective measurement, the Inner VIF values is used to indicate potential multicollinearity problems.

3. Bootstrapping Procedure

PLS-SEM relies on a nonparametric bootstrap procedure to test the significance of estimated path coefficients. In bootstrapping, subsamples are created with randomly drawn observations from the original set of data (with replacement). The subsample is then used to estimate the PLS path model. This process is repeated until a large number of random subsamples has been created, typically about 5,000.

4. Evaluation of Measurement Model

The evaluation of measurement model ensures the researcher to assess the reliability and validity of the construct measures, which including the reliability (internal consistency or composite reliability and indicator reliability) and validity (content validity and construct validity).

5. Evaluation of Structural Model

The evaluation of the structural model includes the following assessments: coefficient of determination (R^2), f^2 effect sizes, predictive relevance (Q^2), and significance of path coefficients.

6. Control Variables Testing

Control variables are also tested in order to detect any different pattern in model. Control variables used in this research are gender, age, and education.

3.8 Ethical consideration

As this research involves human participants, ethics approval has been obtained prior to distribution from the Macquarie University Human Research Ethics Committee to ensure ethical principles of merit and integrity, beneficence, respect, and justice.

The questionnaire has been granted ethics approval No. 5201600470. The questionnaire with participant concerned is presented in appendix H.

CHAPTER 4 RESULTS

4.1 Introduction

This chapter presents the empirical results of the research for demographic profiles and the operational model using techniques discussed in previous methodology chapter. The analysis presents, first, analysis of demographic profiles. Then, the results of modified UTAUT are introduced. This is followed by discussion of measurement model evaluation and analysis of research hypotheses.

4.2 Analysis of Demographic Profiles

4.2.1 Response Rates of participating Micro Enterprises

The survey to Indonesia's micro enterprises was conducted between 5 July to 19 August 2016. Invitation email with the link to the questionnaire was sent to 600 Indonesia micro enterprises in retailing sector listed on the website of umkm.com and retailer groups in popular social media website. 153 full responses were received during the period, giving a response rate of 25.50 percent based on 600 questionnaires distributed.

4.2.2 Descriptive Information of Respondent Profiles

The respondent refers to a micro entrepreneur, the person who sets or operate the micro enterprise. It includes owner, manager or employee who is appointed to complete the survey. The descriptive information regarding respondent profiles is presented in the following table.

Table 9 Descriptive Information of Respondent Profiles

		n	Frequency (%)
Main Product Sells in Online Business	Clothing & footwear (including bag, scarf)	51	33.3
	Food & Beverages	53	34.6
	Electronics (e.g. laptop, computers, phone & accessories)	6	3.9
	Handicraft	10	6.5
	Pharmaceutical, Cosmetics & Toiletries	10	6.5
	Furniture	2	1.3
	Others	19	12.4
	No Response	2	1.3
Payment Method	Cash on Delivery (COD)	135	47.4
	Bank Transfer	109	38.2
	Credit Card	36	12.6
	Other	5	1.8
Gender	Male	61	39.9
	Female	91	59.5
	No Response	1	0.7
Age	Under 20 years	12	7.8
	20 - 29	60	39.2
	30 - 39	51	33.3
	40 - 49	14	9.2
	50 - 59	12	7.8
	60 or over	2	1.3
	No Response	2	1.3
Highest Educational Background	Basic Education (SD/SMP)	9	5.9
	High School (SMA)	37	24.2
	Vocation / Diploma	10	6.5
	Bachelor Degree	66	43.1
	Master Degree	18	11.8
	Doctorate / PhD	6	3.9
	No Response	7	4.6
Position in the Company	Owner	115	75.2
	Manager	15	9.8
	Employee	23	15

		n	Frequency (%)
Technology used to access Social Media	Smartphone	145	62.8
	Laptop	49	21.2
	Tablet	37	16
Time spent for social media in online business	Less than 1 hour	13	8.5
	1 to 2 hours	33	21.6
	More than 2 hours	96	62.7
	24 hours	10	6.5
	No Response	1	0.7

(n=153)

The participants in this research are classified into eight groups based on their main product provide in their business namely clothing and footwear, food and beverages, electronic, handicraft, pharmaceutical, cosmetics and toiletries, furniture, and another product. Most of the respondents were from clothing and footwear (33.3 percent) and food and beverages (34.6 percent). These two lines of business include on top favorite main products in Indonesia online retail industry.

Regarding the payment in the online business transaction, generally, the micro enterprises provide the payment method options, for example, cash on delivery (COD), bank transfer, credit card, and another payment method such as PayPal. The research response indicated that most of the micro enterprises used the payment method via COD (47.4 percent), following by bank transfer (38.2 percent) and credit card (12.6 percent). For the online business, payment using the credit card in Indonesia particularly in micro and small companies is not as popular as cash on delivery or bank transfer. Another payment method that is used in online business is through PayPal, giro transfer, and cheques (1.8 percent).

In terms of demographic distribution, the samples in this research included 59.5 percent of females (n=91), 39.9 percent of males (n=61). Female respondents in this research are beyond male respondents. Gender has one (n=1) missing value (0.7 percent). Meanwhile, the age of respondents' majority is in the range of 20 to 29 years (39.2 percent) and 30 to 39 years (33.3 percent). Only a few number of respondents under the age of 20 years (7.8 percent), 40 to 49 years (9.2 percent), 50 to 59 years (1.3 percent), and over 60 years (1.3 percent), with the missing value of 1.3 percent (n=2). Furthermore, in terms of highest educational background, 43.1 percent of respondents hold the education in Bachelor degree, followed by high school graduate (24.2 percent), and Master Degree (11.8 percent). Only a few number of respondents hold Doctorate degree (3.9 percent), with 4.6 percent (n=7) missing values.

The majority of respondents indicated themselves as the owner of the company (75.2 percent), manager (9.8 percent) and as the employee (15 percent). They used the technologies to access social media through mobile devices such as the smartphone (62.8 percent), laptop (21.2 percent) and tablet (16 percent). Meanwhile, most of the respondents spent time for online business through social media is more than 2 hours (62.7 percent).

4.2.3 Mapping the Purpose and Type of Social Media Uses in Micro Enterprises

Table 10 presents the purpose and type of social media used in the business process of micro enterprises. There are six major activities related to the business process that can be done through social media included promotion, product inquiry, sales order process, information of payment process, information of the delivery process, and after-sales activities, for example, customer's complaint and compliments.

The results indicate that majority of the respondents use Facebook and WhatsApp in conducting the business process rather than the other social media. Interestingly, the result also shows that the use of Blackberry Messenger in Indonesia micro enterprises is still prevalent (14.38 percent) in conducting business process.

Table 10 Purpose and Type of Social Media Use in Business Process

Purpose	Type	n	Frequency (%)
Promotion	Facebook	132	33.2
	WhatsApp	128	32.2
	Twitter	24	6
	Line	22	5.5
	Google+	7	1.8
	YouTube	4	1
	LinkedIn	2	0.5
	Instagram	35	8.8
	Skype	6	1.5
	Pinterest	2	0.5
	Offline	35	8.8
Inquiry	Facebook	126	33.7
	WhatsApp	134	35.8
	Twitter	24	6.4
	Line	19	5.1
	Google+	3	0.8
	YouTube	-	-
	LinkedIn	-	-
	Instagram	25	6.7
	Skype	9	2.4
	Pinterest	-	-
	Offline	34	9.1
Sales Order	Facebook	117	31.7
	WhatsApp	136	36.9
	Twitter	22	6
	Line	18	4.9
	Google+	3	0.8
	YouTube	1	0.3
	LinkedIn	1	0.3
	Instagram	23	6.2
	Skype	9	2.4
	Pinterest	2	0.5
	Offline	37	10
Info Payment	Facebook	117	32.6
	WhatsApp	136	37.9
	Twitter	20	5.6
	Line	20	5.6
	Google+	3	0.8
	YouTube	1	0.3

Purpose	Type	n	Frequency (%)
	LinkedIn	1	0.3
	Instagram	14	3.9
	Skype	11	3.1
	Pinterest	2	0.6
	Offline	34	9.5
Delivery	Facebook	114	31.5
	WhatsApp	139	38.4
	Twitter	23	6.4
	Line	22	6.1
	Google+	3	0.8
	YouTube	1	0.3
	LinkedIn	1	0.3
	Instagram	18	5
	Skype	9	2.5
	Pinterest	1	0.3
	Offline	31	8.6
After Sales	Facebook	113	30.7
	WhatsApp	141	38.3
	Twitter	26	7.1
	Line	21	5.7
	Google+	3	0.8
	YouTube	1	0.3
	LinkedIn	1	0.3
	Instagram	19	5.2
	Skype	9	2.4
	Pinterest	-	-
	Offline	34	9.2
Others	Blackberry Messenger	22	14.38
	Snapchat	1	0.65

(n=153)

4.3 Missing Values Analysis

The analysis of missing values was carried out to produce clean data for the structural model analysis. All the missing values appeared in data of main product (n=2), gender (n=1), age (n=2), education (n=7), and time spent in social media for online business (n=1). According to the information gained by the researcher during the data collection, the possible reasons for this could be that the respondents did not keep track of this information. However, no extreme case was found in these cases. The results revealed that missing values had occurred in a random way (See Appendix C).

4.4 Descriptive Analysis PLS

Appendix D shows the descriptive statistics of all constructs in the measurement model that showing sufficient range and variance. The mean, standard deviation, variance, minimum value, and maximum value for each indicator in the input data were generated using descriptive statistics in SPSS. The frequency distribution for each indicator was also examined. Most of the indicators are not normally distributed, but skewed to the left. However, this has not created any problems for this study because PLS makes no distributional assumption (Hair et al., 2014; Vatanasakdakul, 2007).

4.5 Multicollinearity Analysis

The multicollinearity analysis was employed to test the collinearity of the relationship between constructs. The multicollinearity is calculated directly from SmartPLS 3 software by looking at the Variance Inflation Factor (VIF) number. Since in this research all variables have the reflective measurement, the Inner VIF values are used to indicate potential multicollinearity problems. All constructs were set as the latent variables, and tested for the potential multicollinearity problems included performance expectancy, effort expectancy, social influence, trust, price value, task-technology fit, facilitating conditions, attitude, behavioral intention and use.

Variance Inflation Factor (VIF) and a condition index were used as indicators of multicollinearity among these variables. Large VIF values (greater than 5) or a condition index greater than 15 indicates a possible problem with multicollinearity. If the VIF is greater than 10 and the condition index greater than 30, this indicates a serious problem (Hair et al., 2014; Pallant, 2016; Vatanasakdakul, 2007). As shown in Appendix E, the inner VIF values of the latent variables in this study were less than 5. From this test, it indicated that there was no multicollinearity problem among the constructs in this study.

4.6 Evaluation of Measurement Model

The evaluation of measurement model ensures the researcher to assess the reliability and validity of the construct measures (Hair et al., 2014). The validity and reliability of the scale development need to be tested to confirm the accuracy of the structural model analysis

(Churchill, 1979). The reliability of a scale indicates how free it is from random error. Meanwhile, the validity of the scale refers to the degree to which it measures what it is supposed to measure.

In this research, all variables in the models are reflective, therefore, the evaluation of measurement models includes the following stage:

1. Reliability: internal consistency (composite reliability) and indicator reliability
2. Validity: content validity and construct validity.

4.6.1 Reliability Test

The internal consistency can be used as reliability indicator. Internal consistency can be measured in several ways. The most commonly used statistic to measure internal consistency is Cronbach's coefficient alpha. This statistic provides an indication of the average correlation among all of the items that structure the scale. Values range from 0 to 1, with higher values indicates greater reliability. Depending on the nature and purpose of the scale, it is recommended the Cronbach alpha coefficient should above 0.7 (Pallant, 2016). However, due to Cronbach Alpha's limitation in the population, it is suggested to apply different measures of internal consistency. Therefore, Hair et al. (2014) recommended further the assessment of reliability by looking at:

1. Outer-loadings of indicator variables
2. Composite reliability which was used to determine the reliability of each construct. It is suggested that the composite reliability should be greater than 0.7.
3. AVE (Average Variance Extracted) should be greater than 0.5

The results of the reliability of constructs and indicators are presented in Table 11.

Table 11 The reliability Construct and Indicators

Construct and Items	PLS Loadings	Composite Reliability	AVE	Cronbach Alpha
Attitude		0.950	0.827	0.930
ATT1	0.922			
ATT2	0.912			
ATT3	0.914			
ATT4	0.890			
Behavioral Intention		0.916	0.784	0.861
BI1	0.834			
BI2	0.924			
BI3	0.896			
Task-Technology Fit		0.950	0.864	0.921
TTF1	0.905			
TTF2	0.946			
TTF3	0.937			
Effort Expectancy		0.965	0.874	0.952
EE1	0.966			
EE2	0.940			
EE3	0.887			
EE4	0.946			
Facilitating Conditions		0.902	0.754	0.836
FC1	0.885			
FC2	0.921			
FC3	0.795			
Performance Expectancy		0.944	0.849	0.911
PE2	0.883			
PE3	0.949			
PE4	0.932			
Price Value		0.941	0.843	0.906
PV1	0.948			
PV2	0.939			
PV3	0.865			
Social Influence		0.887	0.725	0.809
SI1	0.862			
SI2	0.909			
SI3	0.779			
Trust		0.933	0.824	0.893
TR1	0.872			
TR2	0.940			
TR3	0.910			

Construct and Items	PLS Loadings	Composite Reliability	AVE	Cronbach Alpha
Use		0.959	0.771	0.950
USE1	0.841			
USE2	0.857			
USE3	0.905			
USE4	0.886			
USE5	0.902			
USE6	0.869			
USE7	0.883			

The statistical results in Table 11 indicate all the Cronbach's alpha scales were above the acceptable limit of 0.7. The individual item reliability on the reflective measure by PLS is also determined by examining the loadings of each of the construct's indicators. For an item to be reliable a minimum loading of 0.7 is required and this indicates that more than 50 percent of the variance of the measurer is accounted for by the respective construct (Vatanasakdakul, 2007). All the items are above the requirement. In addition, according to Chin (1998), composite reliability calculated by PLS is suitable for assessing internal consistency. All the reflective scales demonstrate acceptable performance above the minimum value of composite reliability, which is greater than 0.7. The third standard for reliability is that the AVE scales should exceed 0.5, indicating that the construct clarifies 50 percent or more of the variance of its indicators (Hair et al., 2014). It can be seen that all the scales performed acceptably on this standard. Thus, the all reflective constructs are reliable.

After the reliability test is confirmed, the next section will discuss the validity test. The validity test includes content validity and construct validity.

4.6.2 Content Validity

Content validity refers to the adequacy with which a measure or a scale has sampled from the intended universe or domain of content. An instrument valid in content is one that has drawn representative questions from a universal pool (Pallant, 2016). A content-valid instrument is difficult to create and perhaps even more difficult to verify because the universe of possible content is virtually infinite (Vatanasakdakul, 2007). (Cronbach, 1971) suggests a review process whereby experts in the field familiar with the content universes evaluate versions of the instrument again and again until a form of consensus is reached.

In term of this research, content validity was examined to ensure that the survey instrument was valid in content. First, the survey questions were developed based on original version of UTAUT (Venkatesh et al., 2003) . The survey was created in the English language and translated into Indonesian language. Then, it was translated from Indonesian into English again. These translation processes were done by three bi-lingual experts from academic and industry and compared by the researcher.

4.6.3 Construct Validity

Pallant (2016) explains that construct validity is explored by investigating the relationship with other constructs, both related (convergent validity) and unrelated (discriminant validity). Hair et al. (2014) further justify that convergent validity is the extent to which a measure correlates positively with alternative measure of the same construct. To establish convergent validity, researcher considers the outer loadings of the indicators and average variance extracted (AVE). Meanwhile, discriminant validity refers to the extent to which a construct is truly distinct from other construct by empirical standards. One of the methods of assessing discriminant validity is by examining cross-loadings of the indicator (Hair et al., 2014). The valid construct should contain relatively high correlations between measures of the same construct (Vatanasakdakul, 2007).

We used the recommendation from Hair et al. (2014) in this study to confirm the validity of the data collected. The construct validity is tested by examining:

1. The loadings and weight.

It is expected the loading factors of indicators is more than 0.7

2. Average Variance Extracted (AVE).

AVE is defined as the grand mean value of the squared loadings of the indicators associated with the construct. An AVE value of 0.5 or higher indicates that, on the average, the construct explains more than half of the variance of its indicators

3. Cross-loadings of the indicator.

Specifically, an indicator's outer loading of associated construct should be greater than all of its loadings on the other constructs. The presence of cross loadings that exceed the indicators' outer loadings represents a discriminant validity problem.

4.6.3.1 Loadings and Weights

All the first order constructs in this research are reflective indicators. The bootstrapping procedure was generated to obtain the PLS loading, weight, and T-statistics. Chin (1998) suggests that the loading should be greater than 0.707. T-statistics for their path coefficient should be more than 1.645 for significance level at 0.05 and more than 2 for significance level at 0.01. The model loadings and the weights are shown in figure 4, while the values of loadings, weight and t-statistics show in table 12 and 13.

Table 12 PLS Loadings of Measurement Model

Construct and Items	PLS Loadings	T Statistics	P Values	Significance Level
Attitude				
ATT1	0.922	46.036	0.000	0.01
ATT2	0.912	38.378	0.000	0.01
ATT3	0.914	41.210	0.000	0.01
ATT4	0.890	26.843	0.000	0.01
Behavioral Intention				
BI1	0.834	23.954	0.000	0.01
BI2	0.924	36.612	0.000	0.01
BI3	0.896	35.195	0.000	0.01
Task-Technology Fit				
TTF1	0.905	35.970	0.000	0.01
TTF2	0.946	72.119	0.000	0.01
TTF3	0.937	57.271	0.000	0.01
Effort Expectancy				
EE1	0.966	82.521	0.000	0.01
EE2	0.940	40.271	0.000	0.01
EE3	0.887	23.362	0.000	0.01
EE4	0.946	50.498	0.000	0.01
Facilitating Conditions				
FC1	0.885	32.076	0.000	0.01
FC2	0.921	60.724	0.000	0.01
FC3	0.795	14.848	0.000	0.01
Performance Expectancy				
PE2	0.883	32.453	0.000	0.01
PE3	0.949	76.639	0.000	0.01
PE4	0.932	59.996	0.000	0.01

Construct and Items	PLS Loadings	T Statistics	P Values	Significance Level
Price Value				
PV1	0.948	75.740	0.000	0.01
PV2	0.939	64.771	0.000	0.01
PV3	0.865	20.736	0.000	0.01
Social Influence				
SI1	0.862	38.699	0.000	0.01
SI2	0.909	52.430	0.000	0.01
SI3	0.779	12.696	0.000	0.01
Trust				
TR1	0.872	29.505	0.000	0.01
TR2	0.940	55.700	0.000	0.01
TR3	0.910	40.949	0.000	0.01
Use				
USE1	0.841	20.777	0.000	0.01
USE2	0.857	21.601	0.000	0.01
USE3	0.905	37.261	0.000	0.01
USE4	0.886	36.739	0.000	0.01
USE5	0.902	36.548	0.000	0.01
USE6	0.869	35.011	0.000	0.01
USE7	0.883	44.373	0.000	0.01

Table 13 PLS Weight and T Statistics of Measurement Model

Construct and Items	PLS Weight	T Statistics	P Values	Significance Level
Attitude				
ATT1	0.277	25.725	0.000	0.01
ATT2	0.258	20.008	0.000	0.01
ATT3	0.270	32.841	0.000	0.01
ATT4	0.295	25.043	0.000	0.01
Behavioral Intention				
BI1	0.373	15.459	0.000	0.01
BI2	0.371	21.983	0.000	0.01
BI3	0.387	22.586	0.000	0.01
Task-Technology Fit				
TTF1	0.333	25.994	0.000	0.01
TTF2	0.371	27.491	0.000	0.01
TTF3	0.371	31.447	0.000	0.01
Effort Expectancy				
EE1	0.276	21.786	0.000	0.01
EE2	0.282	18.753	0.000	0.01
EE3	0.224	13.152	0.000	0.01
EE4	0.286	19.413	0.000	0.01
Facilitating Conditions				
FC1	0.385	15.471	0.000	0.01
FC2	0.427	15.496	0.000	0.01
FC3	0.335	11.555	0.000	0.01
Performance Expectancy				
PE2	0.365	24.491	0.000	0.01
PE3	0.360	24.571	0.000	0.01
PE4	0.361	26.581	0.000	0.01
Price Value				
PV1	0.385	23.812	0.000	0.01
PV2	0.373	23.244	0.000	0.01
PV3	0.329	21.558	0.000	0.01
Social Influence				
SI1	0.405	13.296	0.000	0.01
SI2	0.435	16.537	0.000	0.01
SI3	0.329	10.442	0.000	0.01
Trust				
TR1	0.387	18.365	0.000	0.01
TR2	0.365	26.757	0.000	0.01
TR3	0.352	16.330	0.000	0.01

Construct and Items	PLS Weight	T Statistics	P Values	Significance Level
Use				
USE1	0.159	16.832	0.000	0.01
USE2	0.151	17.399	0.000	0.01
USE3	0.164	22.771	0.000	0.01
USE4	0.161	18.220	0.000	0.01
USE5	0.175	23.654	0.000	0.01
USE6	0.161	18.933	0.000	0.01
USE7	0.167	17.344	0.000	0.01

According to the statistical results in Table 12, overall the condition of the loading scores was met in this study. Most of the items loaded higher than 0.707 with 99 percent of significance level. Meanwhile, the weight in table 13 shows that indicators are somewhat important in shaping their constructs with 99 percent of significance level.

The next procedures can be used to confirm discriminant validity are the calculation of AVE and cross loadings.

4.6.3.2 Average Variance Extracted (AVE)

The discriminant validity can be assessed by comparing the AVEs of the latent variables and the correlations among the latent variables (LVs) as suggested in Fornell and Larcker criterion (Hair et al., 2014). Fornell and Larcker recommend that the AVE of the latent variables should be greater than the square of the correlations among the LVs. This indicated more variance was shared between the LV component and its block of indicators than with another component representing a different block of indicators. In other words, the square root of AVE should be greater than the correlations among the LVs (Vatanasakdakul, 2007).

The correlation matrix in Table 14 shows that the square roots of AVE are greater than the corresponding off-diagonal elements. The result indicates that each measure was not tapping into different concepts. Thus, the discriminant validity is confirmed. The cross-loadings procedure was also calculated to confirm discriminant validity. This procedure implies whether the indicators were to be declined or kept.

Table 14 Correlation of latent construct (Fornell-Larcker Criterion)

Measures	Attitude	Behavioral Intention	Effort Expectancy	Facilitating Conditions	Performance Expectancy	Price Value	Social Influence	Task-Technology Fit	Trust	Use
Attitude	0.909*									
Behavioral Intention	0.763	0.885								
Effort Expectancy	0.711	0.574	0.935							
Facilitating Conditions	0.700	0.641	0.594	0.868						
Performance Expectancy	0.705	0.692	0.681	0.610	0.922					
Price Value	0.773	0.597	0.758	0.784	0.684	0.918				
Social Influence	0.710	0.703	0.657	0.682	0.793	0.740	0.851			
Task-Technology Fit	0.803	0.740	0.706	0.672	0.764	0.739	0.764	0.929		
Trust	0.756	0.703	0.749	0.677	0.818	0.764	0.789	0.812	0.908	
Use	0.807	0.777	0.650	0.706	0.732	0.760	0.740	0.781	0.709	0.878

*Diagonal elements are square root of average variance extracted (AVE)

4.6.3.3 Cross Loadings

Cross-loadings analysis is presented in table 15 below as the results from the cross-loadings procedure by PLS. The results show a good loading among the items in each construct. Each indicator loaded higher with its corresponding latent variable. In other words, it was found that the loading in each block was higher than any other block in both vertical and horizontal lines. This indicated that the latent component scores definitely predict each indicator in its block better than indicators in other blocks (Chin, 1998). The loading clearly separated each latent variable as theorized in the conceptual level (Vatanasakdakul, 2007). Thus, it is confirmed that the validity criteria in this research have been met.

Table 15 PLS Output of Cross-Loadings

	Attitude	Behavioral Intention	Effort Expectancy	Facilitating Conditions	Performance Expectancy	Price Value	Social Influence	Task- Technology Fit	Trust	Use
ATT1	0.922	0.692	0.644	0.689	0.641	0.700	0.679	0.743	0.699	0.741
ATT2	0.912	0.665	0.587	0.600	0.598	0.617	0.602	0.686	0.648	0.658
ATT3	0.914	0.654	0.717	0.656	0.615	0.750	0.659	0.703	0.669	0.726
ATT4	0.890	0.756	0.634	0.601	0.703	0.737	0.640	0.783	0.726	0.801
BI1	0.698	0.834	0.495	0.580	0.537	0.503	0.597	0.571	0.589	0.651
BI2	0.665	0.924	0.504	0.583	0.632	0.495	0.599	0.674	0.643	0.675
BI3	0.662	0.896	0.523	0.538	0.666	0.586	0.669	0.718	0.633	0.735
EE1	0.682	0.543	0.966	0.587	0.627	0.714	0.615	0.659	0.717	0.597
EE2	0.697	0.564	0.940	0.568	0.662	0.743	0.644	0.707	0.709	0.664
EE3	0.554	0.418	0.887	0.443	0.584	0.669	0.542	0.542	0.631	0.500
EE4	0.707	0.599	0.946	0.603	0.667	0.706	0.645	0.713	0.735	0.653
FC1	0.578	0.540	0.436	0.885	0.544	0.683	0.624	0.543	0.561	0.613
FC2	0.678	0.573	0.565	0.921	0.569	0.740	0.648	0.675	0.652	0.682
FC3	0.562	0.562	0.550	0.795	0.472	0.612	0.494	0.522	0.546	0.534
PE2	0.655	0.580	0.657	0.629	0.883	0.702	0.712	0.664	0.725	0.665
PE3	0.646	0.635	0.601	0.534	0.949	0.591	0.735	0.716	0.780	0.660
PE4	0.647	0.698	0.624	0.522	0.932	0.596	0.743	0.733	0.758	0.699
PV1	0.752	0.574	0.712	0.718	0.647	0.948	0.684	0.732	0.739	0.714
PV2	0.729	0.570	0.722	0.737	0.618	0.939	0.708	0.695	0.745	0.702
PV3	0.642	0.497	0.651	0.706	0.621	0.865	0.646	0.600	0.613	0.677

	Attitude	Behavioral Intention	Effort Expectancy	Facilitating Conditions	Performance Expectancy	Price Value	Social Influence	Task- Technology Fit	Trust	Use
SI1	0.623	0.718	0.497	0.566	0.692	0.595	0.862	0.682	0.667	0.664
SI2	0.670	0.628	0.659	0.609	0.771	0.732	0.909	0.689	0.716	0.724
SI3	0.507	0.424	0.513	0.572	0.540	0.550	0.779	0.572	0.632	0.476
TTF1	0.692	0.595	0.560	0.581	0.611	0.615	0.648	0.905	0.708	0.616
TTF2	0.772	0.749	0.749	0.638	0.734	0.731	0.739	0.946	0.779	0.777
TTF3	0.772	0.712	0.652	0.651	0.778	0.708	0.737	0.937	0.774	0.774
TR1	0.719	0.631	0.690	0.688	0.719	0.737	0.741	0.730	0.872	0.688
TR2	0.679	0.653	0.651	0.585	0.791	0.667	0.733	0.742	0.940	0.640
TR3	0.654	0.627	0.695	0.562	0.717	0.670	0.668	0.737	0.910	0.596
USE1	0.667	0.668	0.582	0.607	0.641	0.673	0.673	0.675	0.605	0.841
USE2	0.682	0.666	0.522	0.527	0.635	0.631	0.654	0.650	0.599	0.857
USE3	0.680	0.697	0.565	0.608	0.637	0.619	0.672	0.714	0.633	0.905
USE4	0.702	0.683	0.486	0.602	0.624	0.574	0.616	0.676	0.586	0.886
USE5	0.773	0.739	0.608	0.655	0.697	0.673	0.670	0.727	0.676	0.902
USE6	0.722	0.643	0.627	0.663	0.624	0.755	0.639	0.669	0.635	0.869
USE7	0.729	0.677	0.601	0.669	0.640	0.743	0.628	0.684	0.620	0.883

4.7 Evaluation of Structural Model

After evaluate the measurement model, the next step is the evaluation of structural model. The evaluation of the structural model includes the following assessments:

- Coefficient of determination (R^2)
- f^2 effect sizes
- Predictive Relevance (Q^2)
- Significance of path coefficients

The structural model is shown in Figure 3. The figure presents the full partial least square graphic output for this research. Meanwhile, the full PLS results after bootstrapping is presented in Appendix F.

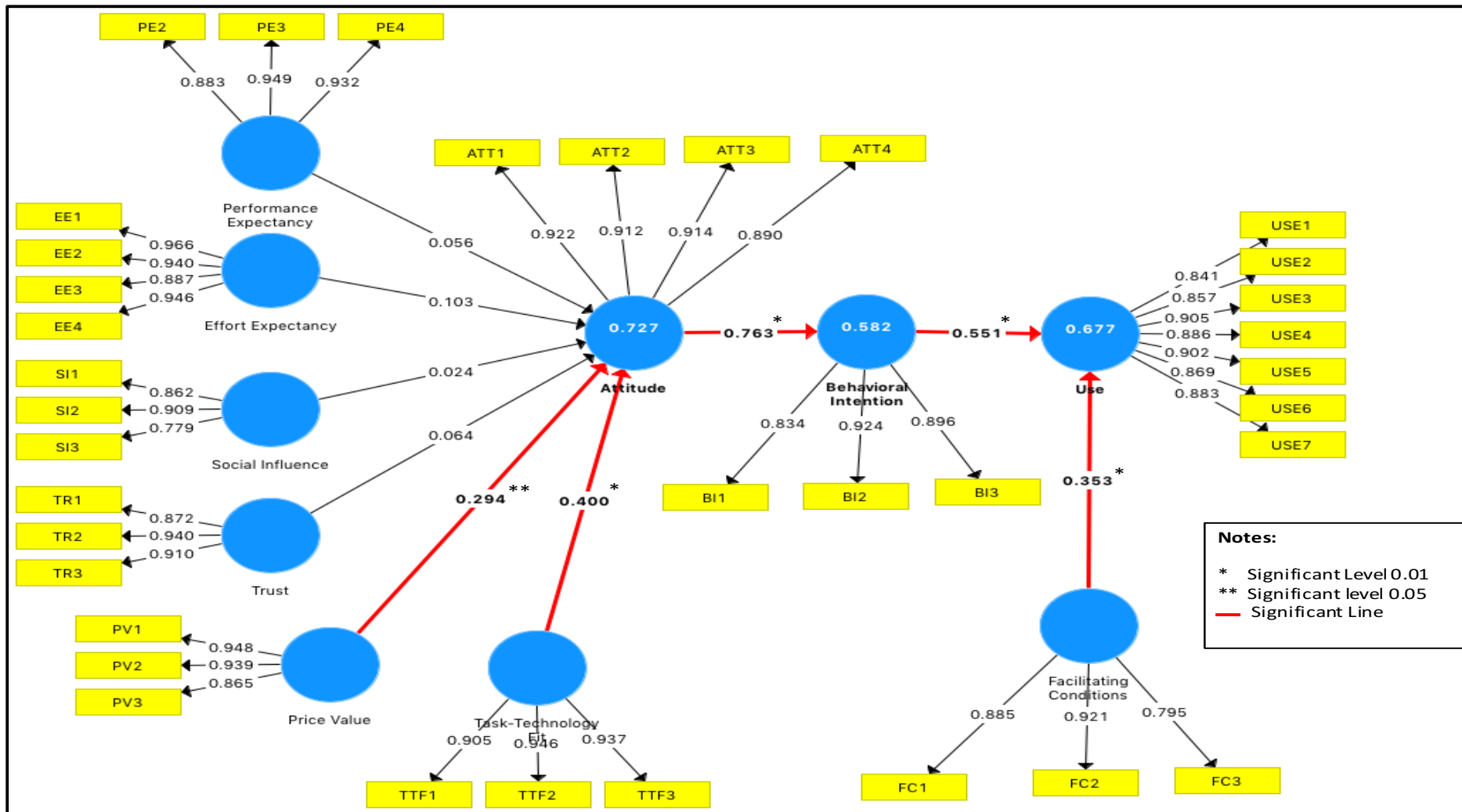


Figure 3 Structural Model Result

4.7.1 Coefficient of Determination (R^2)

The coefficient of determination is commonly used to assess the structural model. The R^2 value is a measure of the model's predictive accuracy and is calculated as the squared correlation between a specific endogenous construct's actual and predicted values. It is expected that the research results have high R^2 values. However, the exact interpretation of R^2 values in PLS rely on the particular model and research discipline. Generally, R^2 values of 0.75, 0.50, or 0.20 for the endogenous constructs can be described respectively substantial, moderate, and weak (Hair et al., 2014).

4.7.1.1 R^2 of Attitude

R^2 value suggests to what extent the independent constructs help to predict or explain the dependent constructs. The bigger R^2 is, the more predictive power the model implies. The R^2 of 0.727 of Attitude indicates that the Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Trust (TR), Price Value (PV) and Task-Technology Fit (TTF) are accounted for 72.7 percent of the variance of the construct.

4.7.1.2 R^2 of Behavioral Intention

The R^2 of 0.582 of behavioral intention indicates that attitude are accounted for 58.2 percent of the variance of the construct.

4.7.1.3 R^2 of Use

The R^2 of 0.677 of Use indicates that behavioral intention and facilitating conditions are accounted for 67.7 percent of the variance of the construct.

4.7.2 Effect Size(f^2)

The strength of the effect of a particular independent construct on the dependent construct in the model can be investigated by looking at the effect size or f square (f^2). The effect size can be obtained by run PLS. Hair et al. (2014) recommend the criteria for determining the degree of the effect size as $f^2 = 0.02$ is classified as small effect; $f^2 = 0.15$ is classified as medium effect, and $f^2 = 0.35$ is large effect. Table 16 present the effect size of the construct.

Table 16 Effect Size (f^2)

Construct	Original Sample	T Statistics	P Values	Degree of Effect
Attitude -> Behavioral Intention	1.392	3.246	0.001	Large
Behavioral Intention -> Use	0.554	2.102	0.036	Large
Effort Expectancy -> Attitude	0.013	0.315	0.753	Small
Facilitating Conditions -> Use	0.228	1.209	0.227	Medium
Performance Expectancy -> Attitude	0.003	0.174	0.862	Small
Price Value -> Attitude	0.094	0.919	0.358	Small
Social Influence -> Attitude	0.001	0.033	0.974	Small
Task-Technology Fit -> Attitude	0.160	1.616	0.106	Medium
Trust -> Attitude	0.003	0.140	0.889	Small

The results in table 16 indicate that attitude has a large influence on behavioral intention, with the size effect of 1.392, as well as behavioral intention effects the use of social media (0.554). Task-technology fit affects attitude moderately while facilitating conditions has medium effect size on the use of social media.

4.7.3 Predictive Relevance (Q^2)

Stone-Geisser's Q^2 value should be examined as an additional evaluation of the magnitude of R^2 values. Q^2 values larger than zero for certain reflective endogenous latent variable indicate that the path model's predictive relevance for this particular construct (Hair et al., 2014). Blindfolding procedure was used to obtain cross-validated redundancy measures for each endogenous construct. Table 17 shows the Q^2 Values.

Table 17 Predictive Relevance (Q^2)

Construct	SSO	SSE	$Q^2 (=1-SSE/SSO)$
Attitude	612	259.851	0.575
Behavioral Intention	459	251.713	0.452
Task-Technology Fit	459	459	
Effort Expectancy	612	612	
Facilitating Conditions	459	459	
Performance Expectancy	459	459	
Price Value	459	459	
Social Influence	459	459	
Trust	459	459	
Use	1,071.00	520.394	0.514

As indicated in table 17, the predictive values of attitude, behavioral intention, and use are larger than 0 indicate that the model has predictive relevance for these constructs.

4.7.4 Significance Test of Path Coefficients

In the structural model, path coefficients represent the predictive connection among constructs. All the path coefficients between the research constructs are expressed in a standardized form to permit comparison of their relative strengths. In order to access the statistical significance of the path coefficients, a bootstrapping analysis was performed in order to estimate the precision of the PLS estimates. It is suggested for final result, 5000 sub-samples were created for the bootstrapping procedure (Hair et al., 2014). The following table presents the path coefficient test.

Table 18 Path Coefficient Test

	Actual Effect	Path Coefficient	T Statistics	P Values	Significance Level
Attitude -> Behavioral Intention	+	0.763	17.384	0.000	0.01
Behavioral Intention -> Use	+	0.551	5.135	0.000	0.01
Effort Expectancy -> Attitude	+	0.103	0.905	0.365	Not Significant
Facilitating Conditions -> Use	+	0.353	3.049	0.002	0.01
Performance Expectancy -> Attitude	+	0.056	0.588	0.557	Not Significant
Price Value -> Attitude	+	0.294	2.043	0.041	0.05
Social Influence -> Attitude	+	0.024	0.224	0.823	Not Significant
Task-Technology Fit -> Attitude	+	0.400	3.930	0.000	0.01
Trust -> Attitude	+	0.064	0.520	0.603	Not Significant

Critical values for a two-tailed test are 1.65 (significance level = 10%), 1.96 (significance level = 5%), and 2.57 (significance level = 1%). The results in table 18 indicate that effort expectancy, performance expectancy, social influence, and trust have insignificant influence to attitude.

Based on the statistical outcome from table 18, the results of hypothesis testing in structural model are reviewed in Table 19.

Table 19 Summary results of hypothesis testing in Structural Model

Research Question	Research Hypothesis	Independent Variable	Dependent Variable	Results
What are the factors influencing the adoption of social media for C2C M-commerce in Indonesia's retail industry?	H1: Performance expectancy will influence attitude toward the use of social media	Performance Expectancy	Attitude	Not Supported
	H2: Effort expectancy will influence attitude toward the use of social media	Effort Expectancy	Attitude	Not Supported
	H3: Social influence Effort expectancy will effect attitude toward the use of social media	Social Influence	Attitude	Not Supported
	H4: Trust will influence attitude toward the use of social media	Trust	Attitude	Not Supported
	H5: Price value will influence attitude toward the use of social media	Price Value	Attitude	Supported
	H6: Task-Technology Fit will influence attitude toward the use of social media	Task-Technology Fit	Attitude	Supported
	H7: Facilitating conditions will effect directly on the social media use	Facilitating Conditions	Use	Supported
	H8: Attitude toward the use of social media will positively predicting the behavioral intention	Attitude	Behavioral Intention	Supported
	H9: Behavioral intention will positively predict social media use behavior	Behavioral Intention	Use	Supported

The results of this research did not support hypothesis 1, 2, 3 and 4. The results of path coefficients indicate that performance expectancy, effort expectancy, social influence, and trust had no significant influence on the attitude toward the use of social media. Meanwhile, the results of analysis support hypothesis 5 and 6. It means that the dimension of price value and task-technology fit had the significant impact on attitude toward using social media. Task-technology fit is significant in level 0.01, but price value is significant at the level of 0.05. Furthermore, facilitating conditions directly support the use of social media, therefore, hypothesis 7 is accepted.

Attitude is defined as the individual's positive or negative feelings about performing a behavior. It is a significant predictor of behavioral intentions. Therefore, the results support the hypotheses 8 that attitude toward the use of social media will positively predict the behavioral intention. The path coefficient of all together attributes' items shows a positive effect of 0.763 to behavior intention which significant in the level of 0.01. The results also indicate that behavioral intention positively predicts the use of social media with the path coefficient of 0.551 and significant at the level of 0.01. Thus, hypothesis 9 is supported.

4.7.5 Control Variables

Control variables are also tested in order to detect any different pattern in the model. Control variables used in this research are gender, age, and education. First, to control the possibility of gender effect, male and female are used as classification. Second, age is used to find out the possibility of different use of social media among the different group of age. Third, the level of education is used to detect any influence on the use of social media in retailing industry Indonesia micro enterprises. The evaluation of structural model with control variables indicates that all control variables have no effect on the use of social media. (See Appendix G).

4.8 Conclusion

In the research of adoption of social media among the Indonesia's micro enterprises in retailing industry, it is empirically proven that attitudes have a large effect to predict behavioral intentions to use social media and behavioral intentions have positive influence to predict the use behavior of social media. Furthermore, the significant impact of price value and task-technology fit on the attitude have been identified. Facilitating conditions are directly contributing to the use behavior of social media. Therefore, the next chapter will discuss the implications and key contributions of this research.

CHAPTER 5 DISCUSSION

5.1 Introduction

This chapter provides further discussion of the data analysis presented in chapter 4 and hypothesis testing results. The research implications for each research objective are presented.

5.2 Discussion of Demographic Profiles of Indonesia Micro Enterprises

This section aims to answer the first research question: **“How social media can enable micro enterprises conduct C2C m-commerce in Indonesia’s retail industry”** The discussions refer to the types of social media used for C2C m-commerce among micro-enterprises in Indonesia’s retailing industry and how social media is adopted to enable C2C m-commerce business processes.

5.2.1 Types of social media used for C2C M-Commerce among the micro-enterprises in Indonesia’s retail industry

The findings indicate that the use of social media is popular among the Indonesia’s micro enterprises in the retail industry. The results in control variables testing show that there is no significant difference between males and females, age, and education in the use of social media in Indonesia’s micro enterprises. The finding indicates that social media can be classified as easy to use and therefore there is no difficulty to use the technology across gender, age, and education. No need complicated technical skills to operate the technology. The findings support the argument of Fischer and Reuber (2011) and McCann and Barlow (2015) that social media is easy to use and it can provide businesses with a relatively quick and low-cost method of connecting with customers. Furthermore, the result in Table 6 also in the previous chapter shows that entrepreneurs who used social media the most in business are in the age of 20-29 years and 30-39 years, with the level of education of bachelor degree and high school. This finding indicates that the users of social media in this research are considered as in young and productive age. Generally, the younger generation is more willing to learn or to adopt technology rather than the older generation.

Since social media relies on the internet, the availability of mobile technology will help micro enterprises to get the information more quickly. As presented in table 6, the technology used most by micro enterprises to access social media in business is through the smartphone (62.8 percent), followed by laptop (21.2 percent) and tablet (16 percent) respectively. These mobile devices help micro enterprises to access their business information while they mobile or stay at home. The mobile technologies enable micro enterprises connect with customers or business relations more quickly at any time in more convenience way, and just like they meet face to face. The findings support the study of Hislop et al. (2015) that mobile device such as smartphones can be used for any type of worker, whether they are worked at home or not. The findings also confirm the study of Prasopoulou et al. (2006) that mobile devices increase accessibility and instant communication to users at all times. It is also aligned with current development that people are more convenience accessing social media via mobile devices rather than through work station.

Furthermore, most of the respondents in this research spent time more than 2 hours on social media per day to conduct their business. The finding is aligned with the report from We Are Social Survey (Kemp, 2015) that indicates Indonesia users spent on the average of 2 hours 52 minutes on social media using any device. These range of time at least allows micro enterprises to engage with their customers through social media.

5.2.2 How social media are adopted in enabling C2C M-commerce business processes.

Business process is as forms of work undertaken by people in an enterprise to achieve a goal (Draheim, 2010). In relation to the business processes, Table 7 indicates six major activities related to the business process can be done through social media. The business processes include product promotion, product inquiry, sales order process, information of payment process, information of the delivery process, and up to after-sales activities. The results also show that majority of the respondents are using Facebook and WhatsApp in conducting the business process rather than the other social media. This finding support the survey from We are Social (Kemp, 2015), that top ten active social platforms use in Indonesia is Facebook, following subsequently by WhatsApp, Twitter, Facebook Messenger, Google+, LinkedIn, Instagram, Skype, Pinterest, and Line. While the survey from SingaporePost (2014) shows Facebook, Twitter, and Google Plus are popular social media in Indonesia.

The findings indicate that micro enterprises can benefit from the use of social media in conducting business process, for example maintaining and building relationships with

customers and business partners in real time, improving products and services, improving promotion, customer services, and reduce cost (such as traveling expenses, phone calls). As underlined by Kaplan and Haenlein (2010) that business can make profits by identifying the ways of conducting the business using the social media applications such as Wikipedia, YouTube, Facebook, Second Life, Twitter., or Facebook. Micro enterprises can use type social media depend on their business process. McCann and Barlow (2015) explain that social media can be used to expand customer service, increase sales, improve brand awareness, reduce costs, improve promotion of company's product or services, building relationships with business contacts, and increase the volume of traffic to the website. Wood and Khan (2016) highlight that organizations use social media technologies to create innovative ideas that can enhance both a firm's product offerings and the ways in which it conducts its business activities. Optimizing the menu or services provide in social media application would be the great advantage business without cost them too much.

Interestingly, the result also shows that the use of Blackberry Messenger (BBM) in Indonesia micro enterprises is still prevalent (14.38 percent) in conducting business process. The use of BBM is still popular in Indonesia. Keith et al. (2015) note that initially, smartphones such as RIM's Blackberry were used by organizations to empower employees with mobile email and internet access. Furthermore, one of the nature of Indonesian customers is Indonesians are very social people and express their strong preference for shopping on social channels (SingaporePost, 2014). Therefore, messenger groups such as BBM, LINE or WhatsApp has existed. The Indonesia's micro enterprises in this research use BBM as an additional way of conducting the business process, particularly for product promotion to increase the sales order and a number of customers.

5.3 Discussion of Structural Model Results

This section aims to answer the second research question: **“What are the factors influencing the adoption of social media for C2C m-commerce in Indonesia's retail industry?”**

In order to answer the second research question, the following nine hypothesizes are tested. The model used in this research is the modification of original model UTAUT proposed by Venkatesh et al. (2003). The modification includes the use of attitude to predict behavioral intention and the additional variables of trust, price value, and task-technology fit. Performance expectancy, effort expectancy, social influence, trust, price value, and task-technology fit are

hypothesized to have an influence on the attitude which leads to the behavioral intention of use social media.

5.3.1 Factors Contributing to Attitude

Performance expectancy, effort expectancy, social influence, trust, price value and task-technology fit are the constructs of attitude towards the use of social media among Indonesia's micro enterprises in retail industry. The further discussion of the hypothesis testing in chapter 4 is presented as follows.

H1: Performance expectancy will influence attitude toward the use of social media (Not supported)

H2: Effort expectancy will influence attitude toward the use of social media (Not supported)

H3: Social influence will effect attitude toward the use of social media (Not supported)

H4: Trust will influence attitude toward the use of social media (Not supported)

H5: Price value will influence attitude toward the use of social media (Supported)

H6: Task-technology fit will influence attitude toward the use of social media (Supported)

The hypothesized testing using SmartPLS 3, path coefficient of performance expectancy, effort expectancy, social influence and trust show insignificant influence to the attitude toward the use of social media. Meanwhile, price value and task-technology fit have significant influence to attitude.

The rejection of hypothesis 1 and 2 shows that performance expectancy and effort expectancy was not significantly influencing attitude toward the use of social media. However, for overall, path coefficient of attitude shows significant influence to behavior intention. The results in Indonesia's micro enterprises in retail industry support the notion that the attitude construct is the strongest predictor of behavioral intention. Although in some cases (C-TAM-TPB, MPCU, and SCT), the construct is not significant. However, on closer examination, the attitudinal constructs are significant only when specific cognitions related to performance and effort expectancies are excluded from the model (Venkatesh et al., 2003). Therefore, for further research, performance expectancy and effort expectancy should be excluded from the model to find out the impact on the behavioral intention.

Hypothesis 3 testing results reveals that social influence was not significantly affecting attitude toward the use of social media. Social influence describes the situation in which an individual perceives that important others believe the person should use the new technology (Venkatesh et al., 2003). It conjectures that the influence from family, friend, colleagues and competitors did not affect the attitude of Indonesia micro enterprises to use social media technology in their business. The attitude to use social media is more influenced by the task-technology fit, whether the social media is or not fit with their jobs/task. This evidence leads to the acceptance of hypothesis 6 related to task-technology fit.

Hypothesis 4 testing indicates that trust was not having a significant influence to attitude toward the use of social media. Trust in the online environment is characterized by greater complexity (e.g. trust in the website vs. trust in technology), need for structural assurances of security and privacy, and the lack of tangible brand cues. The impersonality, anonymity, and automation of electronic transactions and communications make it difficult for consumers to evaluate the trustworthiness of online vendors and other consumers (Pentina et al., 2013). In the case of Indonesia's micro enterprises in retail industry, trust is not a major concern to attitude toward the use of social media because the activities related to business are merely providing information to the customers of the products such as promotion, product inquiry, how to place sales order, payment process, delivery process, and after sales transactions. The high-risk business transaction, such as financial transactions are not conducted via social media yet for the entrepreneurs in this research.

Hypothesis 5 testing result supports the notion that price value as a predictor of the attitude of intention to use a technology among the Indonesia's micro enterprises in the retail industry. As defined by Venkatesh et al. (2011), price value is users' cognitive tradeoff between the perceived benefits of the applications and the monetary cost for using them. The price value is positive when the benefits of using a technology are perceived to be greater than the monetary cost and such price value has a positive impact on intention. The findings in this research suggest that the Indonesia's micro enterprises perceived the benefits using social media in their online business are outweighed the monetary cost, including the benefits to save operational expense, for example, traveling expenses and phone expense.

Meanwhile, the testing result of hypothesis 6 shows that task-technology fit influence attitude toward the use of social media among Indonesia's micro enterprises in the retail industry. In this research, user perceptions play a critical role in the adoption of a specific IT such as social media. The perceptions or beliefs are likely to change as users obtain direct experience of the IT because more and richer information is available through direct experience with technologies

than through word-of-mouth. The results of the hypothesis testing of task-technology fit influence attitude towards the use of social media indicate that micro enterprise perceived the use of social media technology is fitting with their business process. The finding supports the study of Klopping and McKinney (2004) that technology adoption depends on how well the technology fits with the certain task.

5.3.2 Factors Contributing to The Use of Social Media

The hypotheses related to the construct of attitude has been discussed in the previous chapter. This section will further discuss the facilitating conditions, attitude and behavioral intention as the constructs of the use of social media. The results of proposed hypotheses are presented in the following.

H7: Facilitating conditions will effect directly on the social media use (Supported)

H8: Attitude toward the use of social media will positively predicting the behavioral intention (Supported)

H9: Behavioral intention will positively predict social media use behavior (Supported)

Hypothesis 7 result indicates that facilitating conditions have direct significant influence to the use of social media among the Indonesia's micro enterprises in the retail industry. The result supports the notion that the facilitating conditions do have a direct influence on the usage of technology (Venkatesh et al., 2003), in this case is social media.

The result of hypothesis 8 reveals that attitude toward the use of social media will positively predict the behavioral intention. Attitude is the individual's positive or negative feelings about performing a behavior (Klopping & McKinney, 2004; Krishnan & Hunt, 2015). Empirical testing indicates that the attitude construct in some cases (e.g. TRA, TPB/DTPB, and MM) is significant across all three time periods (post training, 1 month after implementation, and 3 months after implementation) and is also the strongest predictor of behavioral intention. The results of hypothesis testing indicate that Indonesia's micro enterprises have positive feeling which lead to the behavioral intention to use social media for their business.

Meanwhile, the testing result of hypothesis 9 shows that behavioral intention will positively predict social media use behavior. Behavioral intentions are known to have a direct effect on individuals' actual use of a given technology. This construct derives from the TRA and is

defined as ‘a measure of the strength of one’s intention to perform a specified behavior’ (Venkatesh et al., 2003).

5.4 Discussion of the use of Social Media in Indonesia’s Micro Enterprises in Retail Industry

Previous research indicates several measurements of actual usage behavior, such as duration of use via system log (Venkatesh et al., 2003); duration, frequency and intensity (Venkatesh et al., 2008) and it confirmed by the study of Mandal and McQueen (2012); and usage frequency (Venkatesh et al., 2012) . This research uses the different dimension of measuring the actual usage behavior for Indonesia’s micro enterprises in the retailing industry. In order to understand the value of social media usage for business, this research is using the reflective measurement based on the objectives explained in McCann and Barlow (2015) hat include improve customer service, increase sales, improve brand awareness, reduce costs, improve promotion of company products, building relationships with customers or business relations and timing. It is expected that the use of different approach in measuring the usage give the broader understanding of the impact of adoption social media among Indonesia’s micro enterprises in a retailing industry is important for their business.

The results also indicate that behavioral intention positively predicts the use of social media with the path coefficient of 0.551 and significant at the level of 0.01. It means that the Indonesia microenterprises believe that the use of social media benefits and important for their business and therefore lead them to continue to use it.

5.5 Conclusion

This chapter delivered the explanation of the type of social media and how social media helps the Indonesia's micro enterprises in retail industry conduct the business. The findings and discussions give a broadened understanding on how micro enterprises that may have the financial backing or technical expertise can benefit from social media. Price value and task-technology fit are the significant factors which influence the attitude of the use social media among Indonesia micro enterprises.

In the case of Indonesia’s micro enterprises in retail industry, the findings indicate that performance expectancy, effort expectancy, and social influence are not the main factors

influence the attitude to use social media. However, several previous studies also found mixed results in the use of UTAUT main variables in different countries. For examples, the use of mobile device/service in Finland, performance expectancy and effort expectancy could be found as explanations for behavioral intention, but that social influence could not be used as such for explanations. The research also found that attitudes towards mobile devices/services influence behavioral intention but that mobile device/service anxiety did not. Facilitating conditions did not have a link to the use of mobile services (Carlsson et al., 2006). Another evidence associated with the use of UTAUT model in non-western context such as Jordan, Saudi Arabia, and Egypt also found mixed result whereas facilitating conditions is insignificant determinant of usage behavior and social influence is weak predictor of behavior intention (Al-Qeisi et al., 2015). Different characteristics of environment, users, and technology might result differently in the use of UTAUT model.

Meanwhile, trust is a critical issue in the context of IS particularly when there is an indication that user privacy and security are at risk such as the users have to provide personal and sensitive information (e.g. credit card number, phone number) to vendors via the internet when using e-commerce Web sites (Venkatesh et al., 2011). However, in the case of Indonesia' micro enterprises, trust is not the main factor in the intention of using social media because the business activity levels are mostly in promotion, product inquiry, sales order process, information on how to pay, information of the delivery process, and customer's complaint or compliments. Private information usually is not publicly open in social media, but via private channel.

The next chapter will discuss the contributions of this research, limitation, and future research implications.

CHAPTER 6 CONCLUSION

6.1 Introduction

This chapter provides, first, the potential contribution of the research in understanding the adoption of social media among Indonesia's micro enterprises in the retail industry. Second is identifying the limitation of the research and possible future research implications.

6.2 Research Contribution

As the results and discussion have been presented, some of the major contributions and implication for practice will be discussed in the following sections.

6.2.1 Theoretical Contribution

This research contributes to the literature of IT adoption in several ways. First, this research expands the Unified Theory of Acceptance and Use of Technology (UTAUT) developed by Venkatesh et al. (2003), by including three additional predictors identified in the model namely trust, price value and task-technology fit which are tailored to the characteristics of micro enterprises, C2C, and mobile commerce in adopting social media. Unlike the original UTAUT, in this research, performance expectancy, effort expectancy, social influence together with trust, price value and task-technology fit are aligned to explain attitude. As suggested in the Theory of Reasoned Action (TRA), attitude is a significant predictor of behavioral intention which in turn is predictive of behavior in using technology (Krishnan & Hunt, 2015). The findings in the case of adoption of social media among Indonesia's micro enterprises in this research indicate that attitude has a large and significant effect in behavioral intention that leads to the use of social media in their business activities.

Second, two new independent variables of price value and task-technology fit had the significant influence on attitude. These two variables have the ability to predict the use of social media among the Indonesia's micro enterprises in the retail industry. The Indonesia's micro enterprises will decide to use social media because they have positive feelings related to the benefits of using social media. This is particularly the case where the benefits outweigh the

costs (price value), and social media is compatible with the business activities conducted in micro enterprises (task-technology fit).

Third, this research is the first study to address the issue of task-technology fit in the adoption of social media among Indonesia's micro enterprises. Although an increase in numbers using social media in Indonesia is prevalent, the adoption of technology in developing countries cannot be necessarily compared to western developed countries. A McKinsey survey report in 2013 indicates that Indonesians are risk averse and late adopters of new products and technology (SingaporePost, 2014), and therefore they have to make sure whether the technology has the advantages and fits with the way they conduct this business before committing to use the technology. This research suggests that task-technology fit is relevant to the successful adoption of social media for conducting the business among Indonesia's micro enterprises. This research also demonstrates that in addressing future research, having regard to the original UTAUT that cultural background should be considered as an underlying influential factor in the adoption of technology.

Fourth, all constructs have used reflective measurement including the use of social media variables, which are different from the original UTAUT that all constructs are using reflective measurement except the use of technology. This research is using a different approach to measuring the use of social media. In the original UTAUT by (Venkatesh et al., 2003), an important direction for future research was addressing the link between user acceptance and individual or organizational usage outcomes. In this research, the reflective measurement of the use social media is based on the intentions or objectives proposed by McCann and Barlow (2015) to adapt to the need of micro enterprises in business. The use of social media measurement includes improve customer service, increase sales, improve brand awareness, reduce costs, improve promotion of company products, building relationships with customers or business relations and timing. The different approach aims to understand the impact of adoption of social media among Indonesia's micro enterprises in the retail industry is important for their business.

To date, there is a little research focus on micro enterprises particularly in Indonesia, yet it is unquestionable that this type of business has a significant contribution to the national GDP. Another contribution of this research is its focus on the use of mobile technology in C2C market and micro enterprises in Indonesia.

6.2.2 Practical Contribution

In terms of practical contribution, the findings provide an understanding of factors affecting the adoption of social media among Indonesia's micro enterprises particularly in retail industry. The findings will benefit to the Indonesian government in facilitating improvement of Indonesia's micro enterprises in terms of providing the technology infrastructure and opportunities to companies that wish to expand their IT products in micro enterprises. Price value and task-technology fit are among the contributing factors to be considered.

Research in mapping the use of social media among Indonesia's micro enterprises is rare. The results in the mapping of the use of social media provide an understanding of how micro enterprises use social media in conducting their business processes. The results can be used to plan and set the strategies in selecting suitable social media to achieve company's goals.

This research also contributes to the understanding of how Indonesia's micro enterprises in C2C market use mobile technology in accessing social media for their business. The benefits of social media, as well as the mobile technology, will help Indonesia's micro enterprises stay connected with the world regarding the business process just like face to face and reduce the operational cost.

6.3 Limitation of the Study and Future Research Implication

This study has some limitations. First, during the period of data collection, a low response rate was experienced due to a long religious national holiday in Indonesia. Small sample sizes limit the generalizability of the results and provide less statistical power. Therefore, future research should validate this study by using a larger sampling.

Second, time constraints limited the results of the findings. For example, trust variable is better tested in a longitudinal study. According to Venkatesh et al. (2011), models that examine the longitudinal effects of trust on various behavioral outcomes are still rare. Thus, it is important to take into account the longitudinal nature of trust and examine the effects of trust over time.

Third, since price value and task-technology fit have the significant influence on the attitude towards the use of social media, future research should consider enhancing the reflective measurement of price value and task-technology fit that influence the attitude to develop the deeper understanding of these constructs. Another direction for future research is measuring

the impact of performance expectancy, effort expectancy, social influence, trust, and task-technology fit as the direct construct of behavior intention.

Fourth, the scope of the unit analysis is focused on the adoption of social media in the retail industry. Although the retail industry is one of the sectors that use social media for its business activities, this might limit the findings in capturing the general profile of Indonesia's micro enterprises. Therefore, future research should expand to other sectors in order to understand more widely factors in social media adoption in Indonesia's micro enterprises.

Fifth, this research is employing demographic profiles as control variables to find out whether there is any significant different across different age, gender and education. The results indicate control variables have insignificant influence on the use of social media among Indonesian micro enterprises due to the smaller sampling size. Therefore, future research can be expanded by increasing the sample sizes and modifying the model, for example using the demographic profile as moderating variables and employing multi-group analysis.

Sixth, this research is not yet considering how social media fit with Indonesia's culture. The cultural difference between developed and developing countries may influence a degree to which an individual perceives a match of the use of technology within their culture. Thus, future research can be lead to how social media will fit with Indonesia cultures, particularly in micro enterprises.

Seventh, this research has not yet address hedonic motivation in micro entrepreneurs' perspective. the determinant factors in consumer acceptance and the use of technology (Venkatesh et al., 2012). Hedonic motivation is defined as the fun or pleasure derived from using a technology, and it has been shown to play an important role in determining technology acceptance and use. When consumers begin to use a particular technology, they will pay more attention to its innovation such as the new interface and function, and may even use it for the novelty (Venkatesh et al., 2012). Individual experience to use a particular technology is influenced by either the hedonic value associated with the object of experience associated with what is desirable/undesirable about it, the pleasure/displeasure taken in it and the motivational experience (Mirabello & Pagani, 2011). As micro-entrepreneurs are more individual rather than organizational on the adoption of social media, future research applies hedonic motivation variable should be considered to further explain social media adoption and utilization. This hedonic motivation might encourage micro entrepreneurs to use social media in their business.

REFERENCES

- Adjei, M. T., Nowlin, E. L., & Ang, T. (2016). The Collateral Damage of C2C Communications on Social Networking Sites: The Moderating Role of Firm Responsiveness and Perceived Fairness. *Journal of Marketing Theory and Practice*, 24(2), 166-185. doi:10.1080/10696679.2016.1131057
- Ainin, S., Parveen, F., Moghavvemi, S., Jaafar, N. I., & Mohd Shuib, N. L. (2015). Factors influencing the use of social media by SMEs and its performance outcomes. *Industrial Management & Data Systems*, 115(3), 570-588. doi:10.1108/imds-07-2014-0205
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision*, 50(2), 179-211.
- Al-Qeisi, K., Dennis, C., Hegazy, A., & Abbad, M. (2015). How Viable Is the UTAUT Model in a Non-Western Context? *International Business Research*, 8(2). doi:10.5539/ibr.v8n2p204
- ASEANSecretariat. (2013). *SME Guidebook – Towards the AEC 2015*
- Beldad, A., & Citra Kusumadewi, M. (2015). Here's my location, for your information: The impact of trust, benefits, and social influence on location sharing application use among Indonesian university students. *Computers in Human Behavior*, 49, 102-110. doi:10.1016/j.chb.2015.02.047
- Cabiddu, F., Carlo, M. D., & Piccoli, G. (2014). Social media affordances: Enabling customer engagement. *Annals of Tourism Research*, 48, 175-192. doi:10.1016/j.annals.2014.06.003
- Carlsson, C., Carlsson, J., Hyvönen, K., Puhakainen, J., & Walden, P. (2006). *Adoption of Mobile Devices/Services – Searching for Answers with the UTAUT*. Paper presented at the Proceedings of the 39th Hawaii International Conference on System Sciences - 2006, Hawaii.
- Casaló, L. V., Flavián, C., & Guinalíu, M. (2010). Determinants of the intention to participate in firm-hosted online travel communities and effects on consumer behavioral intentions. *Tourism Management*, 31(6), 898-911. doi:10.1016/j.tourman.2010.04.007
- Chen, J. V., Su, B.-c., & Widjaja, A. E. (2016). Facebook C2C social commerce: A study of online impulse buying. *Decision Support Systems*, 83, 57-69. doi:10.1016/j.dss.2015.12.008
- Chin, W. W. (1998). Issues and Opinion on Structural Equation Modeling. *MIS Quarterly*, 22(1 (Mar., 1998)), vii-xvi.
- Chung, P. (2015). The globalization of game art in Southeast Asia from: Routledge Handbook of New Media in Asia Routledge. In L. Hjorth & O. Khoo (Eds.), *Routledge Handbook of New Media in Asia* Retrieved from <https://www.routledgehandbooks.com/doi/10.4324/9781315774626.ch35>. doi:10.4324/9781315774626.ch35
- Churchill, G. A. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16(1 (Feb., 1979)), pp. 64-73.
- CPAAustralia. (2015). *The CPA Australia Asia-Pasific Small Business Survey 2015 – Australia Report*. Retrieved from Australia:
- Cronbach, L. (1971). Test Validation', in R Thorndike (ed.), *Educational Measurement*, 2nd edn. *American Council on Education, Washington D.C.*, 443-507.
- Culnan, M. J., McHugh, P. J., & Zubillaga, J. I. (2010). How Large U.S. Companies Can Use Twitter and Other Social media to gain Business Value. *MIS Quarterly Executive*, Vol. 9 (No. 4), 241-259.
- Dahnil, M. I., Marzuki, K. M., Langgat, J., & Fabeil, N. F. (2014). Factors Influencing SMEs Adoption of Social Media Marketing. *Procedia - Social and Behavioral Sciences*, 148, 119-126. doi:10.1016/j.sbspro.2014.07.025

- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3 (Sep., 1989)), 319-340.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8 (Aug., 1989)), 982-1003.
- Dery, K., Kolb, D., & MacCormick, J. (2014). Working with connective flow: how smartphone use is evolving in practice. *European Journal of Information Systems*, 23, 558–570. doi:10.1057/ejis.2014.13
- Draheim, D. (2010). *Business Process Technology: A Unified View on Business Processes, Workflows and Enterprise Applications* doi:10.1007/978-3-642-01588-5
- Fischer, E., & Reuber, A. R. (2011). Social interaction via new social media: (How) can interactions on Twitter affect effectual thinking and behavior? *Journal of Business Venturing*, 26(1), 1-18. doi:10.1016/j.jbusvent.2010.09.002
- Folorunso, O., Vincent, R. O., Adekoya, A. F., & Ogunde, A. O. (2010). Diffusion of Innovation in Social Networking Sites among University Students. *International Journal of Computer Science and Security (IJCSS)*, 4(3), 361-372.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in Online Shopping: An Integrated Model. *MIS Quarterly*, 27(1 (Mar., 2003)), 51-90.
- Ghezzi, A., Gastaldi, L., Lettieri, E., Martini, A., & Corso, M. (2016). A role for startups in unleashing the disruptive power of social media. *International Journal of Information Management*. doi:10.1016/j.ijinfomgt.2016.04.007
- Goodhue, D. L., & Thompson, R. L. (1995). Task-Technology Fit and Individual Performance. *MIS Quarterly*, 19(2 (Jun., 1995)), 213-236.
- Gruzd, A., Staves, K., & Wilk, A. (2012). Connected scholars: Examining the role of social media in research practices of faculty using the UTAUT model. *Computers in Human Behavior*, 28(6), 2340-2350. doi:10.1016/j.chb.2012.07.004
- Günther, O., Krasnova, H., Riehle, D., & Schöndienst, V. (2009, August 6th-9th 2009). *Modeling Microblogging Adoption in the Enterprise*. Paper presented at the 15th Americas Conference on Information Systems, San Francisco, California.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks, California: Sage.
- Harsono, L. D., & Suryana, L. A. (2014, 1-3 August 2014). *Factors Affecting the Use Behavior of Social Media Using UTAUT 2 Model*. Paper presented at the The First Asia-Pacific Conference on Global Business, Economics, Finance and Social Sciences Singapore
- Hillmer, U. (2009). *Technology Acceptance in Mechatronics, The Influence of Identity on Technology Acceptance*
- Hislop, D., Axtell, C., Collins, A., Daniels, K., Glover, J., & Niven, K. (2015). Variability in the use of mobile ICTs by homeworkers and its consequences for boundary management and social isolation. *Information and Organization*, 25 222–232. doi:10.1016/j.infoandorg.2015.10.001
- Hsu, C.-L., & Lin, J. C.-C. (2008). Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation. *Information & Management*, 45(1), 65-74. doi:10.1016/j.im.2007.11.001
- Huang, L., Lu, X., & Ba, S. (2016). An empirical study of the cross-channel effects between web and mobile shopping channels. *Information & Management*, 53 265–278. doi:10.1016/j.im.2015.10.006
- Huang, Q., Chen, X., Ou, C. X., Davison, R. M., & Hua, Z. (2015). Understanding buyers' loyalty to a C2C platform: the roles of social capital, satisfaction and perceived effectiveness of e-commerce institutional mechanisms. *Information Systems Journal*, n/a-n/a. doi:10.1111/isj.12079
- Jung, Y. (2014). What a smartphone is to me: understanding user values in using smartphones. *Information Systems Journal*, 24, 299–321. doi:10.1111/isj.12031

- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59-68. doi:10.1016/j.bushor.2009.09.003
- Karanasios, S., & Allen, D. (2014). Mobile technology in mobile work: contradictions and congruencies in activity systems. *European Journal of Information Systems*, 23, 529–542. doi:10.1057/ejis.2014.20
- Karjaluoto, H., & Huhtamäki, M. (2010). The Role of Electronic Channels in Micro-Sized Brick-and-Mortar Firms. *Journal of Small Business & Entrepreneurship*, 23(1), 17-38. doi:10.1080/08276331.2010.10593471
- Keith, M. J., Babb, J. S., Lowry, P. B., Furner, C. P., & Abdullat, A. (2015). The role of mobile-computing self-efficacy in consumer information disclosure. *Information Systems Journal*, 25, 637–667. doi:10.1111/isj.12082
- Kelleher, T., & Sweetser, K. (2012). Social Media Adoption Among University Communicators. *Journal of Public Relations Research*, 24(2), 105-122. doi:10.1080/1062726x.2012.626130
- Kemp, S. (2015). SPECIAL REPORTS: DIGITAL, SOCIAL & MOBILE IN APAC IN 2015. Retrieved from <http://wearesocial.com/sg/special-reports/digital-social-mobile-in-apac-in-2015>
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54(3), 241-251. doi:10.1016/j.bushor.2011.01.005
- Klopping, I. M., & McKinney, E. (2004). EXTENDING THE TECHNOLOGY ACCEPTANCE MODEL AND THE TASK TECHNOLOGY FIT MODEL TO CONSUMER E-COMMERCE. *Information Technology, Learning, and Performance Journal*, 22(1).
- Krishnan, A., & Hunt, D. S. (2015). Influence of a multidimensional measure of attitudes on motives to use social networking sites. *Cyberpsychol Behav Soc Netw*, 18(3), 165-172. doi:10.1089/cyber.2014.0423
- Kushnir, K., Mirmulstein, M. L., & Ramalho, R. (2010). Micro, Small, and Medium Enterprises Around the World: How Many Are There, and What Affects the Count? *World Bank / IFC*.
- Latuperissa, R. (2014). Network Mapping of SME's in Borobudur Cluster Using Social Network Analysis for Strengthening Local Economic Development Platform. *IJCSI International Journal of Computer Science Issues*, 11(Issue 3, No 1, May 2014).
- Law Republic of Indonesia No. 28 of 2008 on Micro, Small, and Medium Enterprises (MSMEs). , (2008).
- Lee, I., Choi, B., Kim, J., & Hong, S.-J. (2007). Culture-Technology Fit: Effects of Cultural Characteristics on the Post-Adoption Beliefs of Mobile Internet Users. *International Journal of Electronic Commerce*, 11(4), 11-51. doi:10.2753/jec1086-4415110401
- Lemire, M., Pare, G., Sicotte, C., & Harvey, C. (2008). Determinants of Internet use as a preferred source of information on personal health. *Int J Med Inform*, 77(11), 723-734. doi:10.1016/j.ijmedinf.2008.03.002
- Li, H., & Wang, Z. (2015). *Determinants of Polarized Sales Distribution in E-market: C2C Mobile Phone Market Scenario of China*. Paper presented at the WHICEB 2015 Proceedings. Paper 28.
- Liberman-Yaconi, L., Hooper, T., & Hutchings, K. (2010). Toward a Model of Understanding Strategic Decision-Making in Micro-Firms: Exploring the Australian Information Technology Sector. *Journal of Small Business Management*, 48(1), 70–95.
- Limaj, E., Bernroider, E. W. N., & Choudrie, J. (2016). The impact of social information system governance, utilization, and capabilities on absorptive capacity and innovation: A case of Austrian SMEs. *Information & Management*, 53(3), 380-397. doi:10.1016/j.im.2015.12.003

- Liu, Z., Min, Q., Zhai, Q., & Smyth, R. (2016). Self-disclosure in Chinese micro-blogging: A social exchange theory perspective. *Information & Management*, 53(1), 53-63. doi:10.1016/j.im.2015.08.006
- Mandal, D., & McQueen, R. J. (2012). Extending UTAUT to Explain Social Media Adoption by Microbusinesses. *International Journal of Managing Information Technology*, 4(4), 1-11. doi:10.5121/ijmit.2012.4401
- Marnewick, C. (2014). Information and communications technology adoption amongst township micro and small business: The case of Soweto. *SA Journal of Information Management*, 16(1). doi:10.4102/sajim.v16i1.618
- Martin, L. M., & Halstead, A. (2004). Attracting Micro-Enterprises To Learning. *Community, Work & Family*, 7(1), 29-42. doi:10.1080/1366880042000200280
- McCann, M., & Barlow, A. (2015). Use and measurement of social media for SMEs. *Journal of Small Business and Enterprise Development*, 22(2), 273-287. doi:10.1108/jsbed-08-2012-0096
- Michaelidou, N., Siamagka, N. T., & Christodoulides, G. (2011). Usage, barriers and measurement of social media marketing: An exploratory investigation of small and medium B2B brands. *Industrial Marketing Management*, 40(7), 1153-1159. doi:10.1016/j.indmarman.2011.09.009
- Middleton, C. A., & Cukier, W. (2006). Is mobile email functional or dysfunctional? Two perspectives on mobile email usage. *European Journal of Information Systems*, 15, 252-260. doi:10.1057/palgrave.ejis.3000614
- Mirabello, A., & Pagani, M. (2011). The Influence of Personal and Social-Interactive Engagement in Social TV Web Sites. *International Journal of Electronic Commerce*, 16(2), 41-68. doi:10.2753/jec1086-4415160203
- Mpele, L. (2013). Cultural Influence on The Diffusion and Adoption of Social Media Technologies by Entrepreneurs In Rural South Africa. *International Business & Economics Research Journal*, 12 (12), 1563-1574.
- Ngai, E. W. T., Tao, S. S. C., & Moon, K. K. L. (2015). Social media research: Theories, constructs, and conceptual frameworks. *International Journal of Information Management*, 35(1), 33-44. doi:10.1016/j.ijinfomgt.2014.09.004
- Oh, J.-C., & Yoon, S.-J. (2014). Predicting the use of online information services based on a modified UTAUT model. *Behaviour & Information Technology*, 33(7), 716-729. doi:10.1080/0144929x.2013.872187
- Oliveira, T., Faria, M., Thomas, M. A., & Popovic, A. (2014). Extending the understanding of mobile banking adoption: When UTAUT meets TTF and ITM. *International Journal of Information Management*, 34 689-703. doi:10.1016/j.ijinfomgt.2014.06.004
- Osakwe, C. N., & Chovancova, M. (2016). Can micro-enterprises leverage on the adoption of corporate websites to bolster their brand visibility? Examining salient adoption issues in Nigeria. *Information Development*, 32(4), 904-919.
- Pallant, J. (2016). *SPSS Survival Manual, 6th Edition*. Australia: Allen & Unwin.
- Pentina, I., Zhang, L., & Basmanova, O. (2013). Antecedents and consequences of trust in a social media brand: A cross-cultural study of Twitter. *Computers in Human Behavior*, 29(4), 1546-1555. doi:10.1016/j.chb.2013.01.045
- Picoto, W. N., Bélanger, F., & Palma-dos-Reis, A. (2014). An organizational perspective on m-business: usage factors and value determination. *European Journal of Information Systems*, 23, 571-592. doi:10.1057/ejis.2014.15
- Prasopoulou, E., Pouloudi, A., & Panteli, N. (2006). Enacting new temporal boundaries: the role of mobile phones. *European Journal of Information Systems*, 15, 277-284. doi:10.1057/palgrave.ejis.3000617
- Rouse, M. (2016). Definition M-commerce (mobile commerce). Retrieved from <http://searchmobilecomputing.techtarget.com/definition/m-commerce>
- Roy, M.-A., & Wheeler, D. (2006). A survey of micro-enterprise in urban West Africa: drivers shaping the sector. *Development in Practice*, 16(5), 452-464. doi:10.1080/09614520600792432

- Salim, B. (2012). An Application of UTAUT Model for Acceptance of Social Media in Egypt: A Statistical Study. *International Journal of Information Science*, 2(6), 92-105. doi:10.5923/j.ijis.20120206.05
- Sarosa, S. (2012). Adoption of Social Media Networks by Indonesian SME: A Case Study. *Procedia Economics and Finance*, 4, 244-254. doi:10.1016/s2212-5671(12)00339-5
- Scheepers, H., Scheepers, R., Stockdale, R., & Nurdin, N. (2013). The dependent Variable in Social Media Use. *The Journal of Computer Information Systems*, 54, pg. 25.
- Shokery, N. M. b. A. H., Nawi, N. B. C., Nasir, N. A. B. M., & Al Mamun, A. (2016). Factors Contributing to the Acceptance of Social Media as a Platform among Student Entrepreneurs: A Review. *Mediterranean Journal of Social Sciences*, 7 (2), 42-51.
- SingaporePost. (2014). *Indonesia's eCommerce Landscape: Insights into One of Asia Pacific's Fastest Growing Markets*. Retrieved from
- Singh, B., Singh, A., & Yadav, R. C. (2014). Reluctant Workforce may Derail the Adoption of Advance Manufacturing Technology in Micro, Small and Medium Enterprises of India. *Global Journal of Enterprise Information System*, 6(2), 12. doi:10.15595/gjeis/2014/v6i2/51842
- Syuhada, A. A., & Gambetta, W. (2013). Online Marketplace for Indonesian Micro Small and Medium Enterprises based on Social Media. *Procedia Technology*, 11, 446-454. doi:10.1016/j.protcy.2013.12.214
- Talukder. (2013). Impact of Social Influence on Individuals' Adoption of Social Networks in Smes. *Journal of Computer Science*, 9(12), 1686-1694. doi:10.3844/jcssp.2013.1686.1694
- Tang, Q., Gu, B., & Whinston, A. B. (2012). Content Contribution for Revenue Sharing and Reputation in Social Media: A Dynamic Structural Model. *Journal of Management Information Systems*, 29(2), 41-76. doi:10.2753/mis0742-1222290203
- The Indonesian Ministry of Cooperative, M., Small and Medium Enterprises Republic of Indonesia. (2014). *Statistical Data of Micro, Small and Medium Enterprises Republic of Indonesia Year 2012-2013*. Jakarta: Ministry of Cooperative, Micro, Small and Medium Enterprises Republic of Indonesia Retrieved from <http://www.depkop.go.id/>.
- Turban, E., King, D., Lee, J. K., Liang, T.-P., & Turban, D. C. (2015). *Electronic Commerce: A Managerial and Social Networks Perspective*, Springer Texts in Business and Economics doi:DOI 10.1007/978-3-319-10091-3_6
- umkm.com. (2016). Indonesia's Business Directory for Micro, Small, and Medium Enterprises. Retrieved from <http://www.umkm.com/>
- Vatanasakdakul, S. (2007). *An Investigation of the Appropriateness of Internet Technology for Inter-firm communication in the Thai Tourism Industry*. (Doctor of Philosophy), University of New South Wales.
- Vatanasakdakul, S. (2008). Introducing Cultural Fit Factors to Investigate the Appropriateness of B2B Technology Adoption to Thailand. *21st Bled eConference. eCollaboration: Overcoming Boundaries through Multi-Channel Interaction*.
- Venkatesh, V., Brown, S. A., & Maruping, L. M. (2008). Predicting Different Conceptualization of System Use: The Competing Roles of Behavioral Intention, Facilitating Conditions, and Behavioral Expectation. *MIS Quarterly*, 32 (3), 483-502.
- Venkatesh, V., Morris, M. G., & Ackerman, P. L. (2000). A Longitudinal Field Investigation of Gender Differences in Individual Technology Adoption Decision-Making Processes. *Organ Behav Hum Decis Process*, 83(1), 33-60. doi:10.1006/obhd.2000.2896
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward A Unified View. *MIS Quarterly*, 27(3), 425-478.
- Venkatesh, V., Thong, J. Y. L., Chan, F. K. Y., Hu, P. J.-H., & Brown, S. A. (2011). Extending the two-stage information systems continuance model: incorporating UTAUT predictors and the role of context. *Information Systems Journal*, 21(6), 527-555. doi:10.1111/j.1365-2575.2011.00373.x

- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer Accetance and Use of Information Technology: Extending The Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36 (1), 157-178.
- Vicente, M. R. (2014). Determinants of C2C e-commerce: an empirical analysis of the use of online auction websites among Europeans. *Applied Economics Letters*, 22(12), 978-981. doi:10.1080/13504851.2014.993127
- Wamba, S. F., & Carter, L. (2014). Social MEdia Tools Adoption and Used By SMEs: An Empirical Study. *Journal of Organizational and End User Computing*, 26(2), 1-17.
- Williams, M. D., Rana, N. P., & Dwivedi, Y. K. (2012). A Bibliometric Analysis of Articles Citing the Unified Theory of Acceptance and Use of Technology. In Y. K. Dwivedi, M. R. Wade, & S. L. Schneberger (Eds.), *Information Systems Theory: Explaining and Predicting Our Digital Society*. In Y. K. Dwivedi, M. R. Wade, & S. L. Schneberger (Series Eds.), *Integrated Series in Information Systems* 28 (Vol. 1, pp. 37-62). New York: Springer Science+Business Media, LLC. doi:10.1007/978-1-4419-6108-2
- Wolcott, P., Kamal, M., & Qureshi, S. (2008). Meeting the challenges of ICT adoption by micro-enterprises. *Journal of Enterprise Information Management*, 21(6), 616-632. doi:10.1108/17410390810911212
- Wong, C.-H., Tan, G. W.-H., Loke, S.-P., & Ooi, K.-B. (2015). Adoption of mobile social networking sites for learning? *Online Information Review*, 39(6), 762-778. doi:10.1108/oir-05-2015-0152
- Wood, J., & Khan, G. F. (2016). Social business adoption: An empirical analysis. *Business Information Review*, 33(1), 28-39. doi:10.1177/0266382116631851
- Yueh, H.-P., Huang, J.-Y., & Chang, C. (2015). Exploring factors affecting students' continued Wiki use for individual and collaborative learning: An extended UTAUT perspective. *Australasian Journal of Educational Technology*, 31(1).
- Zhou, T., Lu, Y., & Wang, B. (2010). Integrating TTF and UTAUT to explain mobile banking user adoption. *Computers in Human Behavior*, 26(4), 760-767. doi:10.1016/j.chb.2010.01.013
- Zhu, D. H., Chang, Y. P., & Luo, J. J. (2016). Understanding the influence of C2C communication on purchase decision in online communities from a perspective of information adoption model. *Telematics and Informatics*, 33(1), 8-16. doi:10.1016/j.tele.2015.06.001

APPENDICES

APPENDIX A: Descriptive Information of Respondent Profiles

Frequencies

Statistics							
		Gender	Age	Edu	Position	MainProduct	Influence
N	Valid	152	151	146	153	151	153
	Missing	1	2	7	0	2	0

Statistics		
		Time
N	Valid	152
	Missing	1

Frequency Table

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	61	39.9	40.1	40.1
	Female	91	59.5	59.9	100.0
	Total	152	99.3	100.0	
Missing	System	1	.7		
Total		153	100.0		

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 20 years	12	7.8	7.9	7.9
	20 - 29	60	39.2	39.7	47.7
	30 - 39	51	33.3	33.8	81.5
	40 - 49	14	9.2	9.3	90.7
	50 - 59	12	7.8	7.9	98.7
	60 or over	2	1.3	1.3	100.0
	Total	151	98.7	100.0	
Missing	System	2	1.3		
Total		153	100.0		

		Edu			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Basic Education (SD/SMP)	9	5.9	6.2	6.2
	High School (SMA)	37	24.2	25.3	31.5
	Vocation / Diploma	10	6.5	6.8	38.4
	Bachelor Degree	66	43.1	45.2	83.6
	Master Degree	18	11.8	12.3	95.9
	Doctorate / PhD	6	3.9	4.1	100.0
	Total	146	95.4	100.0	
Missing	System	7	4.6		
Total		153	100.0		

		Position			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Owner	115	75.2	75.2	75.2
	Manager	15	9.8	9.8	85.0
	Employee	23	15.0	15.0	100.0
	Total	153	100.0	100.0	

		MainProduct			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Clothing & footwear (including bag, scarf)	51	33.3	33.8	33.8
	Food & Beverages	53	34.6	35.1	68.9
	Electronics (e.g. laptop, computers, phone & accessories)	6	3.9	4.0	72.8
	Handicraft	10	6.5	6.6	79.5
	Pharmaceutical, Cosmetics & Toiletries	10	6.5	6.6	86.1
	Furniture	2	1.3	1.3	87.4
	Others	19	12.4	12.6	100.0
	Total	151	98.7	100.0	
Missing	System	2	1.3		
Total		153	100.0		

Influence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	My Family	70	45.8	45.8	45.8
	My Friend	27	17.6	17.6	63.4
	My Competitor	17	11.1	11.1	74.5
	Myself	39	25.5	25.5	100.0
	Total	153	100.0	100.0	

Time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 hour	13	8.5	8.6	8.6
	1 to 2 hours	33	21.6	21.7	30.3
	More than 2 hours	96	62.7	63.2	93.4
	24 hours	10	6.5	6.6	100.0
	Total	152	99.3	100.0	
Missing	System	1	.7		
Total		153	100.0		

APPENDIX B: DESCRIPTIVE MULTIPLE RESPONSE

Multiple Response

Case Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
\$Promotion ^a	153	100.0%	0	0.0%	153	100.0%
\$Inquiry ^a	153	100.0%	0	0.0%	153	100.0%
\$SalesOrder ^a	153	100.0%	0	0.0%	153	100.0%
\$InfoPayment ^a	153	100.0%	0	0.0%	153	100.0%
\$Delivery ^a	153	100.0%	0	0.0%	153	100.0%
\$AfterSales ^a	153	100.0%	0	0.0%	153	100.0%

a. Dichotomy group tabulated at value 1.

\$Promotion Frequencies

		Responses		Percent of Cases
		N	Percent	
\$Promotion ^a	PROMFacebook	132	33.2%	86.3%
	PROMWhatsApp	128	32.2%	83.7%
	PROMTwitter	24	6.0%	15.7%
	PROMLine	22	5.5%	14.4%
	PROMGoogleplus	7	1.8%	4.6%
	PROMYouTube	4	1.0%	2.6%
	PROMLinkedIn	2	0.5%	1.3%
	PROMInstagram	35	8.8%	22.9%
	PROMSkype	6	1.5%	3.9%
	PROMPinterest	2	0.5%	1.3%
	PROMOffline	35	8.8%	22.9%
Total		397	100.0%	259.5%

a. Dichotomy group tabulated at value 1.

\$Inquiry Frequencies

		Responses		Percent of Cases
		N	Percent	
\$Inquiry ^a	INQFacebook	126	33.7%	82.4%
	INQWhatsApp	134	35.8%	87.6%
	INQTwitter	24	6.4%	15.7%
	INQLine	19	5.1%	12.4%
	INQGoogleplus	3	0.8%	2.0%
	INQInstagram	25	6.7%	16.3%
	INQSkype	9	2.4%	5.9%
	INQOffline	34	9.1%	22.2%
Total		374	100.0%	244.4%

a. Dichotomy group tabulated at value 1.

\$SalesOrder Frequencies

		Responses		Percent of Cases
		N	Percent	
\$SalesOrder ^a	SOFacebook	117	31.7%	76.5%
	SOWhatsApp	136	36.9%	88.9%
	SOTwitter	22	6.0%	14.4%
	SOLine	18	4.9%	11.8%
	SOGoogleplus	3	0.8%	2.0%
	SOTYouTube	1	0.3%	0.7%
	SOLinkedIn	1	0.3%	0.7%
	SOInstagram	23	6.2%	15.0%
	SOSkype	9	2.4%	5.9%
	SOPinterest	2	0.5%	1.3%
	SOOffline	37	10.0%	24.2%
Total		369	100.0%	241.2%

a. Dichotomy group tabulated at value 1.

\$InfoPayment Frequencies

		Responses		Percent of Cases
		N	Percent	
\$InfoPayment ^a	INFOPAYFacebook	117	32.6%	76.5%
	INFOPAYWhatsApp	136	37.9%	88.9%
	INFOPAYTwitter	20	5.6%	13.1%
	INFOPAYLine	20	5.6%	13.1%
	INFOPAYGoogleplus	3	0.8%	2.0%
	INFOPAYYouTube	1	0.3%	0.7%
	INFOPAYLinkedIn	1	0.3%	0.7%
	INFOPAYInstagram	14	3.9%	9.2%
	INFOPAYSkype	11	3.1%	7.2%
	INFOPAYPinterest	2	0.6%	1.3%
	INFOPAYOffline	34	9.5%	22.2%
	Total	359	100.0%	234.6%

a. Dichotomy group tabulated at value 1.

\$Delivery Frequencies

		Responses		Percent of Cases
		N	Percent	
\$Delivery ^a	DELFacebook	114	31.5%	74.5%
	DELWhatsApp	139	38.4%	90.8%
	DELTwitter	23	6.4%	15.0%
	DELLine	22	6.1%	14.4%
	DELGoogleplus	3	0.8%	2.0%
	DELYoutube	1	0.3%	0.7%
	DELLinkedIn	1	0.3%	0.7%
	DELInstagram	18	5.0%	11.8%
	DELSkype	9	2.5%	5.9%
	DELPinterest	1	0.3%	0.7%
	DELOffline	31	8.6%	20.3%
	Total	362	100.0%	236.6%

a. Dichotomy group tabulated at value 1.

\$AfterSales Frequencies

		Responses		Percent of Cases
		N	Percent	
\$AfterSales ^a	AFTFacebook	113	30.7%	73.9%
	AFTWhatsApp	141	38.3%	92.2%
	AFTTwitter	26	7.1%	17.0%
	AFTLine	21	5.7%	13.7%
	AFTGoogleplus	3	0.8%	2.0%
	AFTYouTube	1	0.3%	0.7%
	AFTLinkedIn	1	0.3%	0.7%
	AFTInstagram	19	5.2%	12.4%
	AFTSkype	9	2.4%	5.9%
	AFTOffline	34	9.2%	22.2%
Total		368	100.0%	240.5%

a. Dichotomy group tabulated at value 1.

Case Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
\$Access ^a	152	99.3%	1	0.7%	153	100.0%

a. Dichotomy group tabulated at value 1.

\$Access Frequencies

		Responses		Percent of Cases
		N	Percent	
\$Access ^a	Smartphone	145	62.8%	95.4%
	Laptop	49	21.2%	32.2%
	Tablet	37	16.0%	24.3%
Total		231	100.0%	152.0%

a. Dichotomy group tabulated at value 1.

Case Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
\$PayScheme ^a	153	100.0%	0	0.0%	153	100.0%

a. Dichotomy group tabulated at value 1.

\$PayScheme Frequencies

		Responses		Percent of Cases
		N	Percent	
\$PayScheme ^a	COD	135	47.4%	88.2%
	BankTransfer	109	38.2%	71.2%
	CreditCard	36	12.6%	23.5%
	Other	5	1.8%	3.3%
Total		285	100.0%	186.3%

a. Dichotomy group tabulated at value 1.

APPENDIX C: MISSING VALUES ANALYSIS

MVA

Notes

Output Created		22-AUG-2016 23:44:40	
Comments			
Input	Data	C:\Users\44691580\Documents\Yuni\Yuni_Clean DataSM_ForSPSS Descriptives_EN_20Aug16_153.sav	
	Active Dataset	DataSet0	
	Filter	<none>	
	Weight	<none>	
	Split File	<none>	
	N of Rows in Working Data File	153	
Syntax	MVA VARIABLES=Gender Age Edu Position MainProduct Influence Time.		
Resources	Processor Time	00:00:00.00	
	Elapsed Time	00:00:00.02	

Univariate Statistics

	N	Mean	Std. Deviation	Missing		No. of Extremes ^a	
				Count	Percent	Low	High
Gender	152	1.60	.492	1	.7	0	0
Age	151	2.74	1.088	2	1.3	0	14
Edu	146	3.45	1.276	7	4.6	0	0
Position	153	1.40	.738	0	.0	.	.
MainProduct	151	2.85	2.325	2	1.3	0	0
Influence	153	2.16	1.254	0	.0	0	0
Time	152	2.68	.724	1	.7	0	0

a. Number of cases outside the range (Q1 - 1.5*IQR, Q3 + 1.5*IQR).

APPENDIX D: DESCRIPTIVE STATISTICS MEASUREMENT MODEL

This table presents the descriptive statistics by each construct showing sufficient range and variance. The column labelled “Measures” includes the construct in bold and the questionnaire items that relate to each construct. Frequency statistics for measure revealed scores that span across the entire seven-point Likert scales.

Measures	CODE	N	Min	Max	Mean	Std. Deviation
Performance Expectancy						
Social media is useful in my job	PE1	153	1	7	6.58	0.75
Using social media helps me to accomplish tasks more quickly	PE2	153	4	7	6.50	0.70
Using social media increases the effective use of my time in handling my tasks	PE3	153	2	7	6.44	0.84
Using social media increases my work efficiency	PE4	153	2	7	6.58	0.77
Effort Expectancy						
Learning how to use social media is easy for me	EE1	153	2	7	6.46	0.83
My interaction with social media is clear and understandable.	EE2	153	2	7	6.45	0.80
I find social media easy to use	EE3	153	2	7	6.51	0.74
It is easy for me to become skillful at using social media.	EE4	153	2	7	6.45	0.84
Social Influence						
My family influence me to use social media for my business	SI1	153	2	7	6.04	1.42
My friend and colleagues influence me to use social media for my business	SI2	153	2	7	6.41	0.91
Most of my competitors use social media for business	SI3	153	4	7	6.52	0.69
Trust						
I trust social media that I used, because it provides good services	TR1	153	3	7	6.50	0.72
I believe social media that I used is trustworthy	TR2	153	2	7	6.46	0.85
I feel safe to share information through social media because it has a good reputation	TR3	153	2	7	6.40	0.93

Measures	CODE	N	Min	Max	Mean	Std. Deviation
Price Value						
Cost to set up social media is reasonable	PV1	153	4	7	6.44	0.77
At the current price, I can experience of social media facilities reasonably	PV2	153	4	7	6.44	0.76
Using social media can save operational expense (for example travelling expense, phone expense)	PV3	153	2	7	6.54	0.80
Facilitating Conditions						
I have the resources necessary to use social media	FC1	153	2	7	6.53	0.72
Social media is compatible with other technologies I use	FC2	153	4	7	6.50	0.68
The quality of internet connection is good enough to operate the business	FC3	153	3	7	6.38	0.90
Task-Technology Fit						
Social media are compatible with all aspects of my work	TTF1	153	2	7	6.33	0.97
Social media fits well with the way I like to work.	TTF2	153	3	7	6.44	0.79
Social media fits into my work style	TTF3	153	3	7	6.41	0.89
Attitude						
Using social media is a good idea	ATT1	153	4	7	6.54	0.68
Social media makes work more interesting	ATT2	153	4	7	6.58	0.61
Working with social media is fun	ATT3	153	4	7	6.57	0.68
The effect of using social media makes me feel satisfied	ATT4	153	4	7	6.49	0.77
Behavioral Intention						
I intend to continue using social media in the future	BI1	153	4	7	6.64	0.62
I will always try to use social media in my daily life	BI2	153	3	7	6.43	0.90
I plan to use social media frequently	BI3	153	3	7	6.40	0.96

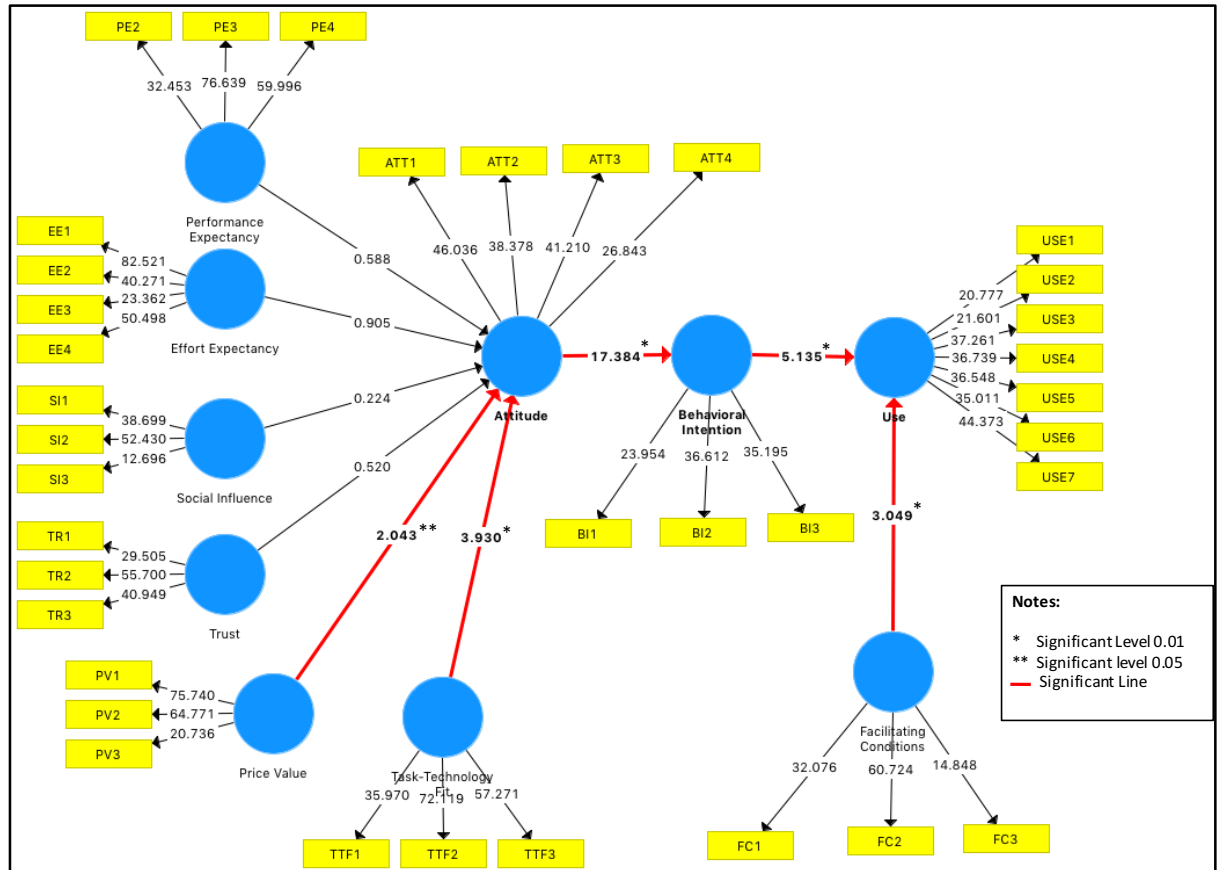
Measures	CODE	N	Min	Max	Mean	Std. Deviation
Social Media Use						
Using social media improves my customer service	USE1	153	3	7	6.51	0.79
Using social media increase my sales	USE2	153	3	7	6.58	0.76
Using social media increase the number of visitors /likes/comments/ followers/brand mentions	USE3	153	3	7	6.56	0.68
Using social media, I can build relationships with customers or business contacts	USE4	153	2	7	6.61	0.67
Using social media, I can improve promotion of company's products	USE5	153	4	7	6.61	0.62
Using social media, I can reduce operational cost	USE6	153	4	7	6.58	0.66
Using social media, I use time more efficiently in business process	USE7	153	4	7	6.58	0.69

APPENDIX E: COLLINEARITY STATISTICS (VIF)

Inner VIF Values are run using SmartPLS 3 software

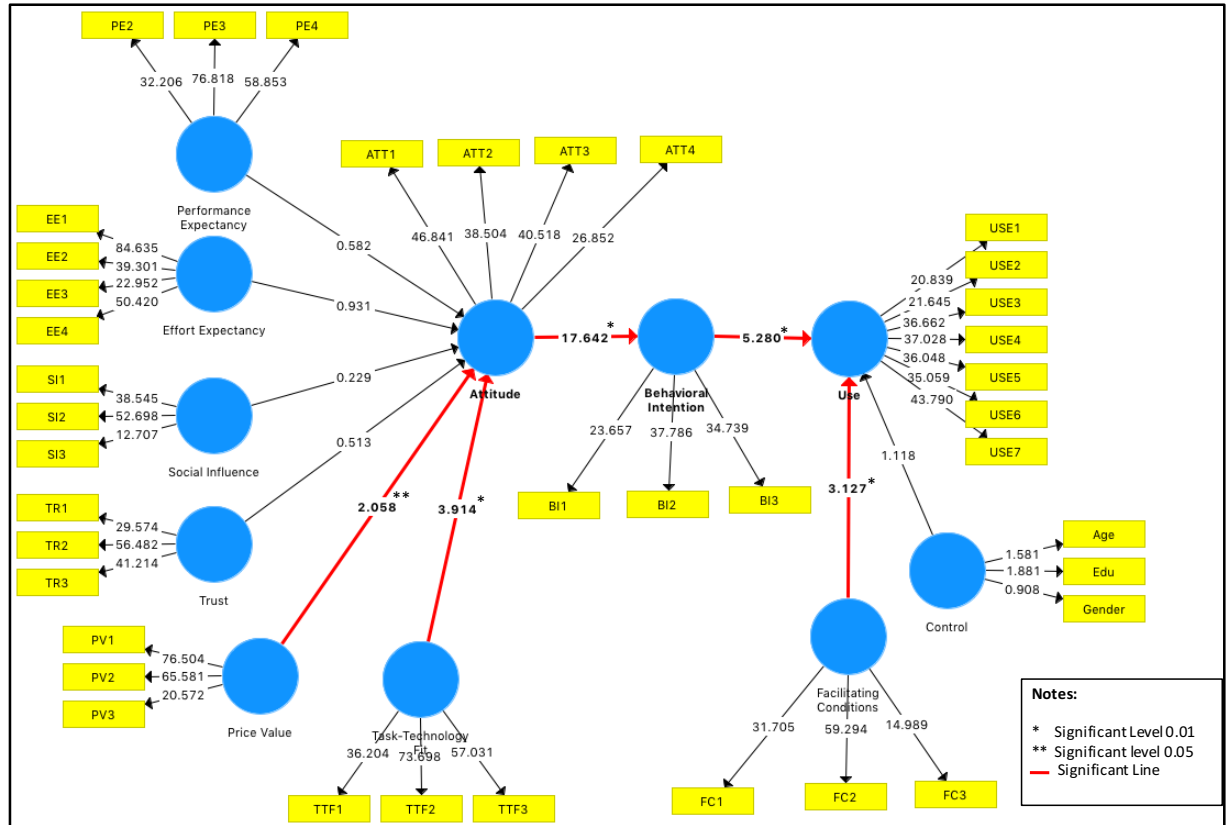
[illegible]

APPENDIX F: PLS RESULTS FULL AFTER BOOTSTRAPPING



APPENDIX G: PLS RESULTS WITH CONTROL VARIABLE

Bootstrapping Results



APPENDIX H: PARTICIPANT INFORM & QUESTIONNAIRE

SURVEY ON THE ADOPTION OF SOCIAL MEDIA FOR C2C M-COMMERCE AMONG MICRO ENTERPRISES IN INDONESIA RETAIL INDUSTRY

Dear Sir/Madam

You are invited to participate in this survey which is a part of my research study under the supervision of Dr. Savanid (Nui) Vatanasakdakul (Department of Accounting and Corporate Governance, Ph. (+61-2) 9850 4855, Email: savanid.vatanasakdakul@mq.edu.au) and Dr. Michael Quilter (Department of Accounting and Corporate Governance, Ph. (+61-2) 9850 8456, Email: michael.quilter@mq.edu.au). The purpose of this questionnaire survey is to investigate types of social media used for customer to customer (C2C) mobile-commerce in micro enterprises, the purpose of social media tools in business, and the factors that influence the adoption of social media in micro enterprises.

The questionnaire is anonymous (no individual or company's name and contact number is required). It will take approximately 15-20 minutes to complete the questionnaire. The questionnaire presents in two sections. Section one collects a general profile of the participant. Section two comprises the factors related to the adoption of social media in micro enterprises.

Any information you provided is confidential. No individual identity will be identified in any publication of the results. Data will be held solely by the researcher and used for research purposes only. The results of this survey will be incorporated into my thesis, which will be available at Macquarie University Library for public access. A summary of the results can be made available to you on request. If you have any inquiries about the survey, please feel free to contact me.

It would be greatly appreciated if you could please complete the questionnaire. Completion of the questionnaire denotes your consent to participate. Your response is very important for the research which will contribute in helping the micro enterprises to conduct the business more effective and efficient. Participation in this study is entirely voluntary and if you do not wish to participate, you may simply not fill the questionnaire without having to give a reason and without consequence. Thank you.

Yuniarti Hidayah Suyoso Putra
Department of Accounting and Corporate Governance
Macquarie University, NSW, Australia
Email: yuniarti-hidayah.suyoso-put@students.mq.edu.au
Ph. +61 421713912

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics & Integrity (telephone (02) 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

Section 1: General Profile

Please answer the following questions by ticking (✓) the suitable box or fill the blanks

1. I am a ☐ Male ☐ Female
2. My age is :
☐ Under 20 years ☐ 40 - 49
☐ 20 – 29 ☐ 50 - 59
☐ 30 – 39 ☐ 60 or over
3. My highest education is:
☐ Basic Education (SD/SMP) ☐ Bachelor Degree
☐ High School (SMA) ☐ Master Degree
☐ Vocation / Diploma ☐ Doctorate / PhD
4. My Position in the company/business is:
☐ Owner ☐ Manager ☐ Employee
5. The total number of employee in the company/business is.....
6. Year of company/business establishment was
7. The average annual total income from the company/business is Rp.....
8. The main featured product in my business is:
☐ Clothing & footwear (including bag, scarf)
☐ Food & Beverages
☐ Electronics (e.g. laptop, computers, Phone & accessories)
☐ Handicraft
☐ Pharmaceutical, Cosmetics & toiletries
☐ Books, Magazines & Stationeries
☐ Furniture
☐ Others (please specify)
9. The first year that social media application was used for the company/business was.....

10. The purpose and the types of social media in relation to the company/business that I usually use are (please tick (✓) that represent your business process):

Using Purpose	Facebook	WhatsApp	Twitter	Line	Google+	YouTube	LinkedIn	Instagram	Skype	Pinterest	Off Line
1. Product promotion											
2. Product Inquiry											
3. Sales order process											
4. Payment process											
5. Product Delivery confirmation											
6. After Sales services (e.g. complaint or satisfaction)											

Please specify if you use other social media.....

For what purpose?

11. The payment scheme used by the company/business is: (you can tick (✓) more than one)

- ☐ Cash on Delivery (COD)
- ☐ Bank Transfer
- ☐ Credit Card
- ☐ Others (please specify)

12. The most influencing person to create online shop using social media is:

- ☐ My Family
- ☐ My Friend
- ☐ My Competitor
- ☐ Myself

13. I usually access social media for my online business using:

- ☐ Smartphone
- ☐ Laptop
- ☐ Tablet, for example: notepad, iPad

14. The average time is spent for online business through social media in a day is

- ☐ Less than 1 hour
- ☐ 1 to 2 hours
- ☐ More than 2 hours
- ☐ 24 hours

15. In average, the company/business usually receivesLikes
16. To date, there are followers/..... viewers
17. I usually update the information regarding my online shop products is.....posts per month

Section 2

Please indicate your answer on the following scale by ticking (✓) one of the most suitable box

1. Performance Expectancy of Social Media							
Performance Expectancy	Strongly Disagree 1	Disagree 2	Somewhat disagree 3	Neutral 4	Somewhat agree 5	Agree 6	Strongly agree 7
Social media is useful in my job							
Using social media helps me to accomplish tasks more quickly							
Using social media increases the effective use of my time in handling my tasks							
Using social media increases my work efficiency							

2. Ease of use social media							
Effort Expectancy	Strongly Disagree 1	Disagree 2	Somewhat disagree 3	Neutral 4	Somewhat agree 5	Agree 6	Strongly agree 7
Learning how to use social media is easy for me							
My interaction with social media is clear and understandable							
I find social media easy to use							
It is easy for me to become skillful at using social media.							

3. Social Influence to use social media							
Social Influence	Strongly Disagree 1	Disagree 2	Somewhat disagree 3	Neutral 4	Somewhat agree 5	Agree 6	Strongly agree 7
My family influence me to use social media for my business							
My friend and colleagues influence me to use social media for my business							
Most of my competitors use social media for business							

4. Trust Issues in social media							
Trust	Strongly Disagree 1	Disagree 2	Somewhat disagree 3	Neutral 4	Somewhat agree 5	Agree 6	Strongly agree 7
I trust social media that I used, because it provides good services							
I believe social media that I used is trustworthy							
I feel safe to share information through social media because it has a good reputation							

5. Cost related to social media							
Price Value	Strongly Disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
	1	2	3	4	5	6	7
Cost to set up social media is reasonable							
At the current price, I can experience of social media facilities reasonably							
Using social media can save operational expense (for example travelling expense, phone expense)							

6. Facilitating conditions							
Facilitating conditions	Strongly Disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
	1	2	3	4	5	6	7
I have the resources necessary to use social media							
Social media is compatible with other technologies I use							
The quality of internet connection is good enough to operate the business							

7. Task-Technology Fit							
Task-Technology Fit	Strongly Disagree 1	Disagree 2	Somewhat disagree 3	Neutral 4	Somewhat agree 5	Agree 6	Strongly agree 7
Social media are compatible with all aspects of my work							
Social media fits well with the way I like to work.							
Social media fits into my work style							

8. Overall, I would find:							
Attitude	Strongly Disagree 1	Disagree 2	Somewhat disagree 3	Neutral 4	Somewhat agree 5	Agree 6	Strongly agree 7
Using social media is a good idea							
Social media makes work more interesting							
Working with social media is fun							
The effect of using social media makes me feel satisfied							

9. Intention to use social media							
Behavior intention	Strongly Disagree 1	Disagree 2	Somewhat disagree 3	Neutral 4	Somewhat agree 5	Agree 6	Strongly agree 7
I intend to continue using social media in the future							
I will always try to use social media in my daily life							
I plan to use social media frequently							

10. Overall impact of using social media:							
Social media use	Strongly Disagree 1	Disagree 2	Somewhat disagree 3	Neutral 4	Somewhat agree 5	Agree 6	Strongly agree 7
Using social media improves my customer service							
Using social media increase my sales							
Using social media increase the number of visitors /likes/ comments/ followers/ brand mentions							
Using social media, I can build relationships with customers or business contacts							
Using social media, I can improve promotion of company's products							
Using social media, I can reduce operational cost							
Using social media, I use time more efficiently in business process							

---Thank you for your participation---

APPENDIX I: DATA CODING

THE ADOPTION OF SOCIAL MEDIA FOR C2C M-COMMERCE AMONG MICRO ENTERPRISES IN INDONESIA RETAIL INDUSTRY

NO	DESCRIPTION	CODING INSTRUCTION
Section 1: Personal Profile		
Non Response or Missing Value = -999		
1	Gender	Gender [1 = Male; 2 = Female]
2	Age	Age [1 = Under 20 years; 2 = 20 – 29; 3 = 30 – 39; 4 = 40 – 49; 5 = 50 – 59; 6 = 60 or over]
3	Highest Education	Edu [1 = Basic Education (SD/SMP); 2 = High School (SMA); 3 = Vocation / Diploma; 4 = Bachelor Degree; 5 = Master Degree; 6 = Doctorate / PhD]
4	Position in the company/business	Position [1 = Owner; 2 = Manager; 3 = Employee]
5	The total number of employee in the company/business	Employee
6	Year of company/business was established	YearEst
7	The average annual total income from the company/business in IDR	Income
8	The main featured product in the business	MainProduct [1 = Clothing & footwear (including bag, scarf); 2 = Food & Beverages; 3 = Electronics (e.g. laptop, computers, Phone & accessories); 4 = Handicraft; 5 = Pharmaceutical, Cosmetics & toiletries; 6 = Books, Magazines & Stationeries; 7 = Furniture; 8 = Others (please specify) ...]
9	The first year that social media application was used for the company/business	YearSosMed
10	The purpose and the types of social media in relation to the company/business that I usually use [Multiple Responses Answers]	

NO	DESCRIPTION	CODING INSTRUCTION
10a	Product promotion	Promotion [PROMFacebook: 0 = No, 1 = Yes; PROMWhatsApp: 0 = No, 1 = Yes; PROMTwitter: 0 = No, 1 = Yes; PROMLine: 0 = No, 1 = Yes; PROMGoogleplus: 0 = No, 1 = Yes; PROMYouTube: 0 = No, 1 = Yes; PROMLinkedIn: 0 = No, 1 = Yes; PROMInstagram: 0 = No, 1 = Yes; PROMSkype: 0 = No, 1 = Yes; PROMPinterest: 0 = No, 1 = Yes; PROMOffline: 0 = No, 1 = Yes]
10b	Product Inquiry	Inquiry [INQFacebook: 0 = No, 1 = Yes; INQWhatsApp: 0 = No, 1 = Yes; INQTwitter: 0 = No, 1 = Yes; INQLine: 0 = No, 1 = Yes; INQGoogleplus: 0 = No, 1 = Yes; INQYouTube: 0 = No, 1 = Yes; INQLinkedIn: 0 = No, 1 = Yes; INQInstagram: 0 = No, 1 = Yes; INQSkype: 0 = No, 1 = Yes; INQPinterest: 0 = No, 1 = Yes; INQOffline: 0 = No, 1 = Yes]
10c	Sales order process	SalesOrder [SOFacebook: 0 = No, 1 = Yes; SOWhatsApp: 0 = No, 1 = Yes; SOTwitter: 0 = No, 1 = Yes; SOLine: 0 = No, 1 = Yes; SOGoogleplus: 0 = No, 1 = Yes; SOYouTube: 0 = No, 1 = Yes; SOLinkedIn: 0 = No, 1 = Yes; SOInstagram: 0 = No, 1 = Yes; SOSkype: 0 = No, 1 = Yes; SOPinterest: 0 = No, 1 = Yes; SOOffline: 0 = No, 1 = Yes]

NO	DESCRIPTION	CODING INSTRUCTION
10d	Payment process	PaymentProcess [PAYFacebook: 0 = No, 1 = Yes; PAYWhatsApp: 0 = No, 1 = Yes; PAYTwitter: 0 = No, 1 = Yes; PAYLine: 0 = No, 1 = Yes; PAYGoogleplus: 0 = No, 1 = Yes; PAYYouTube: 0 = No, 1 = Yes; PAYLinkedIn: 0 = No, 1 = Yes; PAYInstagram: 0 = No, 1 = Yes; PAYSkype: 0 = No, 1 = Yes; PAYPinterest: 0 = No, 1 = Yes; PAYOffline: 0 = No, 1 = Yes]
10f	Product Delivery confirmation	Delivery [DELFacebook: 0 = No, 1 = Yes; DELWhatsApp: 0 = No, 1 = Yes; DELTwitter: 0 = No, 1 = Yes; DELLine: 0 = No, 1 = Yes; DELGoogle+: 0 = No, 1 = Yes; DELYouTube: 0 = No, 1 = Yes; DELLinkedIn: 0 = No, 1 = Yes; DELInstagram: 0 = No, 1 = Yes; DELSkype: 0 = No, 1 = Yes; DELPinterest: 0 = No, 1 = Yes; DELOffline: 0 = No, 1 = Yes]
10g	After Sales services (e.g. complaint or satisfaction)	AfterSales [AFTFacebook: 0 = No, 1 = Yes; AFTWhatsApp: 0 = No, 1 = Yes; AFTTwitter: 0 = No, 1 = Yes; AFTLine: 0 = No, 1 = Yes; AFTGoogle+: 0 = No, 1 = Yes; AFTYouTube: 0 = No, 1 = Yes; AFTLinkedIn: 0 = No, 1 = Yes; AFTInstagram: 0 = No, 1 = Yes; AFTSkype: 0 = No, 1 = Yes; AFTPinterest: 0 = No, 1 = Yes; AFTOffline: 0 = No, 1 = Yes]
10h	Please specify if you use other social media	OtherSM
10i	For what purpose?	OtherPurposeSM

NO	DESCRIPTION	CODING INSTRUCTION
11	The payment scheme used by the company/business [Multiple Response Answers]	PayScheme [Cash on Delivery (COD): 0 = No, 1 = Yes; BankTransfer: 0 = No, 1 = Yes; CreditCard: 0 = No, 1 = Yes; Others: 0 = No, 1 = Yes; Please specify]
12	The most influencing person to create online shop using social media	Influence [1 = My Family; 2 = My Friend; 3 = My Competitor; 4 = Myself]
13	Access social media for company online business [Multiple Response Answers]	Access [Smartphone: 0 = No, 1 = Yes; Laptop: 0 = No, 1 = Yes; Tablet, for example: notepad, iPad (Tablet): 0 = No, 1 = Yes]
14	The average time is spent for online business through social media in a day	Time [1 = Less than 1 hour; 2 = 1 to 2 hours; 3 = More than 2 hours; 4 = 24 hours]
15	In average, the company/business usually receives how many Likes	Likes
16	To date, there are how many followers/..... viewers	Followers
17	Update the information regarding online shop products per month	Update
Section 2:		
Performance Expectancy		PE [1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Neutral; 5 = Somewhat Agree; 6 = Agree; 7 = Strongly Agree]
18	Social media is useful in my job	PE1
19	Using social media helps me to accomplish tasks more quickly	PE2
20	Using social media increases the effective use of my time in handling my tasks	PE3
21	Using social media increases my work efficiency	PE4

NO	DESCRIPTION	CODING INSTRUCTION
Effort Expectancy		EE [1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Neutral; 5 = Somewhat Agree; 6 = Agree; 7 = Strongly Agree]
22	Learning how to use social media is easy for me	EE1
23	My interaction with social media is clear and understandable.	EE2
24	I find social media easy to use	EE3
25	It is easy for me to become skillful at using social media.	EE4
Social Influence		SI [1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Neutral; 5 = Somewhat Agree; 6 = Agree; 7 = Strongly Agree]
26	My family influence me to use social media for my business	SI1
27	My friend and colleagues influence me to use social media for my business	SI2
28	Most of my competitors use social media for business	SI3
Trust		TR [1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Neutral; 5 = Somewhat Agree; 6 = Agree; 7 = Strongly Agree]
29	I trust social media that I used, because it provides good services	TR1
30	I believe social media that I used is trustworthy	TR2
31	I feel safe to share information through social media because it has a good reputation	TR3

NO	DESCRIPTION	CODING INSTRUCTION
Price Value		PV [1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Neutral; 5 = Somewhat Agree; 6 = Agree; 7 = Strongly Agree]
32	Cost to set up social media is reasonable	PV1
33	At the current price, I can experience of social media facilities reasonably	PV2
34	Using social media can save operational expense (for example travelling expense, phone expense)	PV3
Facilitating Conditions		FC [1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Neutral; 5 = Somewhat Agree; 6 = Agree; 7 = Strongly Agree]
35	I have the resources necessary to use social media	FC1
36	Social media is compatible with other technologies I use	FC2
37	The quality of internet connection is good enough to operate the business	FC3
Task-Technology Fit		TTF [1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Neutral; 5 = Somewhat Agree; 6 = Agree; 7 = Strongly Agree]
38	Social media are compatible with all aspects of my work	TTF1
39	Social media fits well with the way I like to work.	TTF2
40	Social media fits into my work style	TTF3

NO	DESCRIPTION	CODING INSTRUCTION
Attitude		ATT [1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Neutral; 5 = Somewhat Agree; 6 = Agree; 7 = Strongly Agree]
41	Using social media is a good idea	ATT1
42	Social media makes work more interesting	ATT2
43	Working with social media is fun	ATT3
44	The effect of using social media makes me feel satisfied	ATT4
Behavior Intention		BI [1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Neutral; 5 = Somewhat Agree; 6 = Agree; 7 = Strongly Agree]
45	I intend to continue using social media in the future	BI1
46	I will always try to use social media in my daily life	BI2
47	I plan to use social media frequently	BI3
Social Media Use		USE [1 = Strongly Disagree; 2 = Disagree; 3 = Somewhat Disagree; 4 = Neutral; 5 = Somewhat Agree; 6 = Agree; 7 = Strongly Agree]
48	Using social media improves my customer service	USE1
49	Using social media increase my sales	USE2
50	Using social media increase the number of visitors /likes/comments/ followers/brand mentions	USE3
51	Using social media, I can build relationships with customers or business contacts	USE4

NO	DESCRIPTION	CODING INSTRUCTION
52	Using social media, I can improve promotion of company's products	USE5
53	Using social media, I can reduce operational cost	USE6
54	Using social media, I use time more efficiently in business process	USE7

APPENDIX J: ETHICS APPROVAL



MACQUARIE
University

YUNIARTI HIDAYAH SUYOSO PUTRA <yuniarti-hidayah.suyoso-putra@students.mq.edu.au>

Ethics approval - 5201600470

FBE Ethics <fbe-ethics@mq.edu.au>

Mon, Jul 4, 2016 at 11:15 AM

To: Savanid Vatanasakdakul <savanid.vatanasakdakul@mq.edu.au>

Cc: Michael Quilter <michael.quilter@mq.edu.au>, "yuniarti-hidayah.suyoso-putra@students.mq.edu.au" <yuniarti-hidayah.suyoso-putra@students.mq.edu.au>, Nikola Balnave <nikki.balnave@mq.edu.au>

Dear Dr Vatanasakdakul,

RE: 'Adoption of Social Media for C2C M-Commerce among Micro Enterprises in Indonesia Retail

Industry' (Ref: 5201600470)

The above application was reviewed by the Faculty of Business & Economics Human Research Ethics Sub Committee. Approval of the above application is granted, effective "4/07/2016". This email constitutes ethical approval only.

This research meets the requirements of the National Statement on Ethical Conduct in Human Research (2007). The National Statement is available at the following web site:

http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/e72.pdf.

The following personnel are authorised to conduct this research:

Dr Savanid Vatanasakdakul

Dr Michael Quilter

Ms Yuniarti Hidayah Suyoso Putra

NB. STUDENTS: IT IS YOUR RESPONSIBILITY TO KEEP A COPY OF THIS APPROVAL EMAIL TO SUBMIT WITH YOUR THESIS.

Please note the following standard requirements of approval:

1. The approval of this project is conditional upon your continuing compliance with the National Statement on Ethical Conduct in Human Research (2007).
2. Approval will be for a period of five (5) years subject to the provision of annual reports.

Progress Report 1 Due: 4th July 2017

Progress Report 2 Due: 4th July 2018

Progress Report 3 Due: 4th July 2019
Progress Report 4 Due: 4th July 2020
Final Report Due: 4th July 2021

NB. If you complete the work earlier than you had planned you must submit a Final Report as soon as the work is completed. If the project has been discontinued or not commenced for any reason, you are also required to submit a Final Report for the project.

Progress reports and Final Reports are available at the following website:
http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms

3. If the project has run for more than five (5) years you cannot renew approval for the project. You will need to complete and submit a Final Report and submit a new application for the project. (The five year limit on renewal of approvals allows the Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).

4. All amendments to the project must be reviewed and approved by the Committee before implementation. Please complete and submit a Request for Amendment Form available at the following website:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms

5. Please notify the Committee immediately in the event of any adverse effects on participants or of any unforeseen events that affect the continued ethical acceptability of the project.

6. At all times you are responsible for the ethical conduct of your research in accordance with the guidelines established by the University. This information is available at the following websites:

<http://www.mq.edu.au/policy/>
http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/policy

If you will be applying for or have applied for internal or external funding for the above project it is your responsibility to provide the Macquarie University's Research Grants Management Assistant with a copy of this email as soon as possible. Internal and External funding agencies will not be informed that you have approval for your project and funds will not be released until the Research Grants Management Assistant has received a copy of this email.

If you need to provide a hard copy letter of approval to an external organisation as evidence that you have approval, please do not hesitate to contact the FBE Ethics Committee Secretariat, via fbe-ethics@mq.edu.au or

9850 4826.

Please retain a copy of this email as this is your official notification of ethics approval.

Yours sincerely,

Dr. Nikola Balnave
Chair, Faculty of Business and Economics Ethics Sub-Committee

FBE Ethics Secretariat

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