# TITLE: UNDERSTANDING THE DETERMINANTS OF S-COMMERCE ADOPTION: FROM UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY (UTAUT) PERSPECTIVE

NUR ADLIA BINTI MUKHTAR

MASTER OF INFORMATION TECHNOLOGY UNIVERSITI UTARA MALAYSIA [2015]

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## Abstract

Social commerce has become a new trend of inquiry for researchers to investigate the behaviour of consumer in online shopping. Linkedln, Facebook and Twitter is a popular social networking that opened opportunities for new business models. The combination between Web 2.0 social media technologies and infrastructure had support online interactions and user to the acquisition of product and services. To understanding the user's social shopping intention, this study conducted an empirical study based on questionnaire that had develop to investigate what is the factors affect the user's intention of participation in social commerce. This research proposed unified theory of acceptance and use of technology (UTAUT) to study actual use of social commerce. This study will examine four direct effects on social commerce adoption such as Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), and Facilitating Condition (FC).

**Keywords**: social commerce, UTAUT, Performance Expectancy(PE), Effort Expectancy(EE), Social Influence (SI), Facilitating Condition(FC).

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## **Glossary of Terms**

Acquaintances	A person known to one, but usually not a close friend.
Analogous	Is a cognitive process of transferring information or meaning from a particular subject (the analogue or source) to another particular subject (the target), or a linguistic expression corresponding to such a process.
Collectivism	The principle of ownership of the means of production, by the state or the people
Convenient	Suitable or agreeable to the needs or purpose; well-suited with respect to facility or ease in use; favourable, easy, or comfortable for use
Convergence	Concurrence of opinions, results
Convergence (telecommunications)	The combination of multiple services through lines of telecommunication from a single provider
Decisive	Having the power or quality of deciding; putting an end to controversy; crucial or most important
Discourse	Communication of thought by words; talk; conversation
Dissemination (communications) Electronic Commerce (e-commerce)	Means to broadcast a message to the public without direct feedback from the audience. Business that is transacted by transferring data electronically, especially over the Internet.
Infamous	Having an extremely bad reputation
Notion	A general understanding; vague or imperfect conception or idea of something:
Obstacle	Something that obstructs or hinders progress.
Portrays	To make a likeness of by drawing, painting, carving, or the like.
Post-purchase	Final stage in the consumer decision process when the customer assesses whether he is satisfied or dissatisfied with a purchase

Retrospective	Take a look back at events that already have taken place
Self-disclosure	Is a process of communication through which one person reveals himself or herself to another. The information can be descriptive or evaluative and can include thoughts, feelings, aspirations, goals, failures, successes, fears, dreams as well as one's likes, dislikes, and favorites.
Social circle	Is a group of socially interconnected people. It may be viewed from the perspective of an individual who is the locus of a particular group of socially interconnected people and from the perspective of the group as a cohesive unit.
Social Commerce (s-commerce)	Online shopping activities take place using web 2.0 or social media applications
Social Media	Websites and other online means of communication that are used by large groups of people to share information and to develop social and professional
Social Network	An online community of people with a common interest who use a website or other technologies to communicate with each other and share information, resources
Trustworthiness	One of moral value, regarded as a virtue. For example, a trustworthy person is someone in whom one can place one's trust and rest assured that the trust shall not be betrayed

## List of Abbreviations

ADT	Innovation Diffusion Theory		
CMSEs	Content Management System		
EDI	Electronic Data Interchange		
MM	Motivational Model		
MPCU	Model of PC utilization		
RSS	Rich Site Summary		
SAM	Strategic Alignment Model		
SCAM	Social Commerce Adoption Model		
SCT	Social Cognitive Theory		
SOA	Service Oriented Architecture		
TAM	Technology Acceptance Model		
TPB	Theory of Planned Behaviour		
TRA	Theory of Reasoned Action		
UTAUT	Unified Theory of Acceptance and Use of		
	Technology		

# CHAPTER ONE INTRODUCTION

### 1.0 Introduction

Technology plays an important role in changing the strategy of administering business and it has affected several aspects in our lives. Marius (2012), explained, that there are six key ways in which technology is changing the way people do business such as productivity, collaboration, resourcing, interaction and participation, efficiency and optimization and cost management. The used of information communication technologies has changed the involvement of consumers in online shopping. For instance, using online communities consumers can get involved by giving feedback to business organizations.

Social media has become a medium for a community to connect with each other (Mandal, 2012). Social media has given a huge influence on the way business do sales or marketing. Using social media (e.g. Facebook) business can develop brand awareness and at the same time influence consumer's purchase decision. Not only that, using social media it can also provide a platform for consumers to exchange ideas and give suggestions about the marketed products or items.

S-commerce is a form of commerce helped settle (an argument) by social media involving coming together between the online and offline environment (Wang & Zhang, 2012). In the other meaning, social commerce involves the use of Internet-based media that allow people to participate in the marketing, comparison, curating, buying, and sharing of product and servicing in both online and offline marketplaces, and in communities (Zhou et.al, 2013). Based on De Bernardi (2011), social commerce is an expression now broadly (and not generally appropriately) used to signify diverse things. However the best definition would be the use of social media in the connection of e-commerce, which allows an upgraded purchasing or browsing experience to customers and offers better approaches to online retailers to engage in with their audience and merchandise their items both from their own particular website and specifically from social network. Furthermore, De Bernardi also ran over to the extremely sharp

definition by Paul Marsden which specifying: helping individuals connect where they purchase, and purchase where they connect. He think this sentence aggregates up well what social commerce is. In November 2005, Yahoo! has become the first browser which introduces the social commerce term. The social commerce provides collaborative shopping tools including shared pick list, user rating, and online product information. There a seven types of s-commerce which is social network-driven sales, peer-to-peer sales platforms, group buying, user shopping, participatory commerce, social shopping and peer recommendations (Indvik, 2013). (Chapter two further elaborate on this social commerce type).

Today, the communities are exposed to social networking like Facebook and Twitter. Moreover, this situation has upgraded a certain strategy planned by retailers to offer consumers a great shopping experience. Customers who have similar interests and passions towards the conversation of products and services that fulfill their satisfaction are recognized as a social commerce (Barile, 2013). Although s-commerce has become part of e-commerce, there are unique characteristics that differentiate these two terms (Yoo et al., 2011). For instance, s-commerce is said to deal with service products, focuses on selling infamous brands and actively uses social network services such as Twitter and Facebook. The use of s-commerce is also believed has created the new hopes for business to be promoted to potential consumers at a lower cost and greater advertising coverage (Yoo et al., 2011).

#### **1.1 Problem Statement**

Despite the popularity of s-commerce, past studies focuses on examining the factors that influence s-commerce adoption. Most of previous works are more directed to examine the advantages and role of s-commerce. Very few studies that examine what influence s-commerce adoption. From the literature review, the focus of the previous studies towards understanding the adoption behavior is limited merely to the technology (Wang & Zang, 2011).

According to Wang and Zhang, the understanding of s-commerce adoption is influence not only by technology factors but also by people and management related issues (2011). Based on previous model and theories, Technology acceptance model (TAM) has been used as the theoretical basis to understand s-commerce adoption (Aloitaibi & Wald, 2012). Although this theory is a well-established theory but it is limited within technological perspective – perceived ease of use and perceived usefulness.

Hence, to develop a better understanding of what determine s-commerce adoption this study adopts Unified Theory of Acceptance and Use of Technology (UTAUT) theoretical lens (Venkatesh et al., 2003). This theory is adopted because it is known as one of the most comprehensive IS adoption topics. This theory consists of Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Condition (FC), Behaviour Intention (BI) and Use Behaviour. To the best of knowledge this is the first attempt being conducted to examine s-commerce adoption using UTAUT.

This study refers to several past studies related to social commerce, including a review from Hajli Mahmood (2012). This paper presents social commerce constructs, to be specific; recommendations and referrals, forums and communities and rating and reviews. The bases of the model proposed in this research are IT appropriation and writing in the area, for example, PU and intention to buy or trust. These highlight the key part of ICT in the conduct of online clients. This can be an improvement for e-commerce adoption models and the outcomes signify that IS has a reference discipline for the conduct of online purchasers. This is an issue in marketing where insufficient consideration is paid to the significance of IT and IS. This study provides a useful reference to research related to social commerce.

### **1.2 Research Questions**

Based on the discussion, the following research questions are derived.

- 1) To what extend UTAUT determinant factors influences s-commerce adoption intention?
- 2) How UTAUT determinant factors do influences s-commerce adoption intention?
- 3) Which of UTAUT determinant factors have significant relationships on s-commerce adoption intention?

3

4) What impact does facilitating condition have on the actual use of social commerce?

## **1.3** Research Objectives

This study embarks on the following objectives:

1) To measure the predictive ability of the research model to examine user's UTAUT's adoption for s-commerce activities.

2) To investigate the extent of consumer, UTAUT and sales channel characteristics on user's adoption of UTAUT as s-commerce platform.

3) To identify users view to the proposed factors as important factors influencing users' decision to adopt UTAUT for social commerce purposes.

4) To examine what are characteristic of facilitating condition that give an effect actual use of social commerce

## **1.4 Research Hypotheses**

H1. S-commerce adoption intention has a significant positive influence on actual use of social commerce.

Findings revealed a moderate significant positive relationship between s-commerce adoption and actual use of s-commerce. This implies that if customers' adopt the s-commerce and have changes positively then their actual use of s-commerce is likely to improve to an extent. These findings are consistent with Technological Acceptance Model (TAM) which has been tested in many studies such as Davis et al, 1989; Mathieson, 1991; Adams et al.,1992 ; Davis, 1993; Segars and Grover,1993; Taylor and Todd, 1995), and it has been found that an individual's behavior to use a system largely explains their intentions (Kigongo, 2011). The model puts it that behavioral intention to use has a significant impact on a user's ability to actually use a system. Behavioral intention to use the system is modeled as a function of actual system use (Taylor and Todd 1995).

#### H2. Facilitating conditions has a significant positive influence on actual use of s-commerce

Facilitating conditions refers to perceptions of internal and external constraints on behavior. It tries to explain the behavior of individuals in a circumstance where they do not have an autonomy control over the behavior. When the situation is not under an individual control, human behavior cannot be predicted from intentions alone (Ajzen, 2002). The more resources and opportunities individuals believed they possess, the fewer obstacles they expect, and the stronger is their perceive control over their own behavior. It is likely that an individual with high behavioral control will also have a stronger ability to perform a particular behavior (Ajzen, 1991). For example, if customers are convinced that they are purchasing something unique, special, and limited, it will encourage them to make a purchase. Moreover, once they develop a trust towards the seller, they will buy the products immediately.

**H3.** Performance expectancy has a significant positive influence on s-commerce adoption intention

Performance expectancy will have a positive influence on user intention to use intermediary (Shi, W., & Cheng, D.) 2. In social commerce, consumer authority is important particularly in online business. Many people want a proof about the product quality. Usually, people who are satisfied over the product tend to give a good feedback and recommendation to persuade others. If there are many positive reviews contributed, then, consumers are willing to trust their own decision and never hesitate to make a purchase.

H4. Effort expectancy has a significant positive influence on s-commerce adoption intention

Effort expectancy in UTAUT refers to the ease of use associated with using the system. Perceived ease of use emphasises on person's belief that using a particular system does not demand extra effort. Davis (1989) asserts that an application perceived to be easier to use than another is more likely to be accepted by users. In social commerce, there is a social network-driven sale that driven by referrals from established social network, or take place on the networks themselves. For example through a "shop" tab on Facebook (Indvik, 2013).

H5. Social influence has a significant positive influence on s-commerce adoption intention

Social influence refers to individual perceiving from the view of acquaintances that are encouraging them to use the system. For this circumstance, the idea is the individual behaviours are influenced by their perception of how others see them using the system. The pressure from others may create an influence over the acceptance of the notion. Thus, it will form their behaviour towards the system based on their interaction with each other. Thus, it is evident that membership in a social circle has an influence on the adoption of the information system. In social commerce for instance, social shopping locales give talk session to clients so they can correspond with their companions or different clients for some counsel and assessment (Indvik, L., 2013).

### 1.5 Research Model

To validate the model of infomediary, these researches use the simplified UTAUT as main framework. Figure 1.0 illustrates the proposed research model for this study and it consist of four determinants of S-commerce adoption:



#### Figure 1.0 Proposed Research Model

The model predicts that s-commerce is positively influenced by performance expectancy (PE), effort expectancy (EE), and social influence (SI). Meanwhile actual use of s-commerce is positively determined by s-commerce adopt intention and facilitating condition (FC). The relationships of each variable are further explained in chapter two.

#### **1.6** Significance of research

The significance of this study focus on its attempt to understand the relationships between UTAUT factors and s-commerce adoption decision. A comprehensive understanding on the subject of social commerce being used as an intermediary between commerce and social activities relating to the business process is needed. An assessment of social commerce in business therefore is considered decisive in order to obtain in-depth information. Not to mention, it plays an essential role to be able to develop a plan to encourage business owner to use this new commerce technology to enhance sales revenue.

The significant element of social commerce is behavior numerous sorts of business exercises on online networking to exploit online social capital (Liang, T.P., and Turban, E, 2011). Presently, numerous clients of online networking like to impart item data to their companions or in the same time offer items or services online. To seek advice in purchasing decisions are one of reason consumers consult their social community (Liang, T.P., and Turban, E, 2011). The provided Web sites contain functions that easily to use by users in sharing their commercial information within their social networks. In Facebook, user can use "Like" button features to show satisfaction about the product or services. As per a social commerce study (Marsden, 2009), 83 percent of online customers are willing to impart shopping data to their companions, and 67 percent of online customers are liable to buy more taking into account the suggestions they get from their group.

Client accept that shopping data that got from companions is seen as more profitable, and it may impact web obtaining and assume a key part in social commerce (Trusov, M., Bucklin, R.E., and Pauwels, K, 2009). Thusly, it is imperative to comprehend the variables that influence the readiness of online networking clients to share and get commercial data. Such seeing likewise helps in comprehend why social commerce is famous, and it can help organizations create and enhance online networking showcasing method.

With that, it is evident that the findings of this study give better understanding on social commerce as UTAUT platform and as a guideline to the new entrepreneurs and use this new approach in business to compete at the online market place.

#### **1.7** Scope of the study

The scope of the study is to examine the relationship of UTAUT variables, namely performance expectancy, effort expectancy, and social influence to behavioral intention on social commerce adoption. This is followed by the relationship between actual use of social commerce and facility conditions as independent variable to social commerce as dependent variable. I'd engage in participant-observation over a six-week period in the last semester for four hours per week. For this study, UUM's student has become the respondent because they already have an experience in using social commerce. This is because, from randomized study, they like use social networking (e.g. Facebook, Twitter, Pinterest and more) every day. Apart from socializing on the site, they also prefer to buy online because it is easy and economical. The facilities there are in this social commerce, has encouraged many students to use them in everyday life. In accordance with this condition, 30 UUM's student were randomly selected in pilot test. According to Baker (1994), prominent that "a pilot study is regularly used to pretest or experiment with research instrument'. This pilot test was developed to test reliability of the questionnaire whether all the respondents in the pilot sample are able to follow the directions as indicated.

## CHAPTER TWO LITERATURE REVIEW

## 2.0 Introduction

Today's buyers lead occupied lives and shopping requires some investment. Purchasers discover scrutinizing and shopping on the Web much more helpful than visit the shopping complex. Bogaisky (2014), from various perspectives shopping online or through a cell phone offers a superior general affair albeit in-store trips can at present be entertaining. In numerous occasions, clients have entry to more data online than when conversing with an in-store deals partner. Consumer feel more confident in their buying decision based online review and price comparisons. Furthermore, free sending offers are an apparatus of the online commercial center and returns have even get to be less demanding than at any other time in recent memory some time recently. Today, social commerce has been extended to incorporate the scope of social media instruments and substance utilized as a part of the connection of e-commerce, particularly in the design and electronic industry.

### 2.1 Electronic Commerce (e-commerce)

Electronic commerce is an electronic technology to conduct commerce in sales, purchase, transfer or exchange of product, service and information. E-commerce is a general term for any sort of business, or commercial exchange that includes the exchange of data over the web. This

covers a scope of distinctive sorts of business, starts from purchaser based retail locales, for example, Amazon.com and MP3.com until business trades exchanging merchandise or administrations between companies. This technology use electronic communication to do business in creating and operate in new and efficient ways (Walcott, 2007). McKeown and Watson (1997) for example, defines e-commerce as the use of computer networks to improve the performance of the organization is to improve profitability, gain a wider market and faster delivery of products to consumers. Thus, e-commerce allows a trader to become more competitive in the market, thus creating a lot of advantages to it compared to other competitors.

E-commerce gives price and time savings to consumer. As people become extremely occupied, it is a better solution to go for online shopping and find the particular product rather than go to the supermarket or mall. Sometimes, online shopping is useful in terms of the cost. The price can be slightly competitive including the shipping cost. For business owner, they must have a web presence to attract potential customer to maintain their business. E-commerce gives leverage to the business in the way expanding deals and diminishing expense. It permits little business to have the worldwide client base and decreased cost through electronic deals enquires, value quotes and request taking. Moreover, it gives obtaining chances to purchasers and inevitably, a little business has the capacity distinguish new supplier and accomplice. E-commerce can build the velocity and precision of traded data, hence it decreases cost. Also, the business can be executed 24-hour and the item can be conveyed immediately. Next, the level of subtle elements of procurement data is chosen by client and the expense is discounted, open retirement and welfare bolster costs less when conveyed over the Internet. However, e-commerce also has the weakness circumstance where it is inapplicable for certain product such as expensive jewelry and perishable foods. Other than that, it faced a trouble when incorporating current databases and exchange handling frameworks into e-commerce arrangements particularly in legacy framework. Culture and legal obstacles are also give a negative effect to e-commerce when it includes a transmission of credit card information, a few clients are decline to change and e-commerce enactment is not all around created and is frequently vague. Also, in shipping there is an issue when item with a low esteem to-weight proportion that can't be effectively stuffed and sent are inadmissible for conventional e-commerce (Walcott, 2007).

#### 2.1.1 Type of E-Commerce

E-commerce can be classified into many categories which is Business to Business (B2B), Business to Customer (B2C), Business to Government (B2G), Consumer to Business (C2B), Customer to Customer (C2C) and others (Whinston et.al, 1997). Among of all the categories, Business-to-Customer is focuses on e-commerce as it relates to the title of this project. Amazon is the simplest example of e-commerce that gives opportunity to anyone who wants to sell their products easily.

#### 2.1.2 Critical Review in E-commerce

In the internet, the definition of e-commerce is stretched out to cover the commerce activities of products, services, and/or information. Turban et al (2000) expressed that there is nobody commonly agreed meaning of e-commerce because the fact that e-commerce business model are ceaselessly advancing and new e-commerce models are emerging. Besides, they adopted the following definition "the process of buying, selling, transforming, or exchanging products, services, and/or information via computer networks, including the internet". Moreover, they expressed that e-commerce can be characterized in alternate points of view, including business process, administration, learning, collective, and community.

Zwass, V. (1996), the editorial manager of the International Journal of Electronic Commerce (IJEC), expressed that e-commerce is "sharing business information, maintaining business relationships and conducting business transactions by means of telecommunication networks". He considered that the business activities of keeping up business connections, for example, client relationship management, should be in the scope of e-commerce in aligning contemporary business hones. For this exploration, the meaning of e-commerce expressed by Turban is proper and adopted. The study addresses in this study relating to e-commerce transactions are kept to explain meaning of e-commerce.

## 2.2 Social Media

Social networking assumes a vital part in the advancement of social commerce. This is because, without social media, financial activities are still in the old form. This shows that the significance of social media in impacting the path in this time shopping. Social media is a type of an electronic communication which clients make online group to share data, thoughts, individual messages, and other substance. Social media come in numerous structures and a few sites are for the general masses, (e.g. Facebook, Friendster, LinkedIn and Twitter). For instance, LinkedIn is a social media platform that focuses on professional network where it allows users to find other business associates, clients, and colleagues that they recognized. Users will "connect" with them through the site, and they then become part of user network. Once users are connected with a person, user will then have access to their list of connections (MindTools, 2014).

Social media is a tool that rapidly converted the public discourse in society and setting the trends and agendas in wide range of topics; from the environment and politics to the technology and the entertainment industry (Asur & Huberman, 2010).

Social media are the fastest growing benefit of technology today especially in business (Little, 2011). Different from previous years, new entryway is interested in offer everything about business with the world and no more limited connections with contact. Over decade, it easily sees how these sites are changing the way people do everything. Professional use these site to network, interact with customers, and bring team members together. In business, social media is able to aid various areas including gain a new business, increase customer loyalty, identify trends, promote a business, manage a reputation and improve collaboration (Grimshaw, 2009). Through social media, user can grow new individual connections furthermore build up profitable business connections. Social media can be used in the same way that eye to eye meeting, for example, Skype.

There is more ways social media changing the business and one of them is small act than large campaign (Gordhamer, 2009). Previously, if buyer had a terrible or great involvement with an organization, it could take days or weeks to tell the majority of their companions and relatives about it. Today, in a matter of minutes, client can let every one of their companions on Facebook or devotees on Twitter think about what happened. At the point when each client experience can be effortlessly and generally show, little issues turn out to be super imperative.

Another ways social media changing the business is change the way you promote your business from hard to reach to available anywhere User are no more to have an email address and customer administration number. Today, via of variety communication, people can interact each other and make a discussion, forum and feedback. Organizations like Dell, for instance, have completely grasped different channels of backing. Their group webpage records all the ways clients can interface with them through Twitter, Facebook, Flickr, YouTube, discussions, sites, email, and the sky is the limit from there. Dell needs individuals to have the capacity to interface with them through whatever channel is generally agreeable.

### 2.2.1 Social Media Functionality.

In general, social media functionality can be divided into seven levels. Figure 2.0 illustrate the seven functionality building blocks.



Figure 2.0 Social Media Functionality

The *identify* functional block define to the degree to which user uncover their characters in a social media setting. This can incorporate revealing data, for example, name, age, gender, profession, location, and furthermore other data that depicts clients in specific ways. For example, Kaplan and Haenlein (2010) clarify that the presentation of a client's character can regularly happen through the cognizant or oblivious 'self-disclosure' of subjective information, for example, though, feelings, likes, and dislikes. Subsequently, clients and social media destinations have diverse talk inclinations and points. As indicated by Kietzmann et al. (2011), numerous people who partake in online activities utilize their genuine names (e.g., Guy Kawasaki, a main blogger and overseeing chief of Garage Technology Ventures).

The *conversations* block of the framework define the degree to which clients speak with different clients in a social media setting. Numerous social media locales are composed fundamentally to encourage discussions among people and gatherings. These discussions happen for all sort of reasons. Individuals tweet, and site to meet new similarly invested individuals, to discover companion, to add to their self-regard, or to be on the forefront of new thoughts or drifting themes. Yet others view social media as a method for making their message heard and decidedly affecting helpful reasons, natural issues, monetary issues, or political level headed discussions (Beirut, 2009).

*Sharing* define to the degree to which clients exchange, disseminate, and get content. Much of the time, nonetheless, sociality is about the articles that intervene these ties between individuals (Engestro"m, 2005); the reasons why they meet online and partner with one another. Consider Groupon as one of the mainstream destinations, every day, it offered a 50% - 90% rebate coupon for nearby organizations through email, Twitter, telephone applications, and its own particular site. Then again, the coupon is just substantial once a minimum amount has consented to buy the exceptional offer. Social shopping administrations, for example, Groupon influence the social diagram, a mapping of clients' network, and offer the news through email over their whole informal community. Thusly, social media is comprised of individuals who are joined by a common article (e.g., a groupon, text, video, picture, sound, link, location).

The structure building block *presence* speaks to the degree to which clients can know whether different clients are open. It incorporates recognizing one's area, in the virtual world and/or in this present reality, and whether they are accessible. In the virtual world, this happens through

status lines, for example, "available" or "hidden" Given the expanding integration of individuals moving, the *presence* has turn into a scaffold between the genuine and the virtual. Case in point, on the off chance that somebody and his/her accomplice are both dynamic on Foursquare, and when they are checking-in at a specific area, family and companions have the capacity to get this data.

The *relationships* speaks about which clients can be identified with different clients. Relate implies two or more clients have some type of combination that leads them to converse, share object of sociality, accumulate, or basically posting one another as a companion or fan. Thus, how clients of social media stage are joined frequently decides the what-and-how of data traded. At times, these relationships are genuinely formal, regulated, and organized. LinkedIn, for occasion, permits clients to perceive how they are connected to others and what number of degrees of partition they are from the objective part. Keeping in mind the end goal to finish the profile, part profiles must be accepted by others. With an emphasis on relationship building, LinkedIn has a referral framework so that these clients can be presented, through a chain of friends-of-friends, and accordingly, getting knows the individual they expected to meet so they can be closer.

*Reputation* is the degree to which clients can distinguish the remaining of others, including themselves, in an online networking setting. As indicated by Kietzamann et.al (2011), notoriety can have diverse implications on online networking stages. By and large, notoriety is a matter of trust, however since data innovation is at a moderate level regarding deciding such exceedingly subjective criteria, social media sites depend on the mechanical Turks: devices that naturally total client created data to focus dependability. Case in point, Jeremiah Owyang and Guy Kawasaki have individually 70,000 and 292,000 adherents on Twitter demonstrates their notorieties for being a piece of social networking master and rise as an innovation nerd (2011).

The *groups* functional block speaks to the degree to which clients can shape groups and subgroups. The more mingle a system has turn into, the greater the gathering of companions, adherents, and contacts. Social media stages have perceived that numerous groups develop well past this number, and offer apparatuses that permit clients to oversee enrollment (Kietzmann et.al, 2011). Two noteworthy sorts of gatherings exist. Firstly, people can be sorted through their contacts and spot their mates, companions, supporters, or fans into diverse self-made gatherings (e.g., Twitter has records). Furthermore, aggregates online can be undifferentiated from clubs in the logged off world: open to anybody, shut (support needed), or mystery (by welcome just). Facebook and Flickr have bunches, for case, with overseers who deal with the gathering, favor candidates, and welcome others to join.

#### 2.2.2 Social Media in Business

According to Little (2010), social media gives practically moment access to data all through the world, in this manner giving business the capacity to share news about their item and administrations with individuals that were out of compass. Social media is effectively one of the quickest developing (free) advantages of innovation today. Organizations were constrained to associations with contacts inside of neighborhood or nation in the relatively recent past. But now, it's open to share the business with the world. Table 1.0, show a closer review of B2B and B2C.

	f	B	in	8+	You	P
Main Industry Impact	B2C	B2B/B2C	B2B	B2C	B2C	B2C
Social Media Site Focus	Sharing of news, content, stories	Sharing of news, content, stories	Sharing of company and industry news/discussions	Sharing of news, content, stories	Sharing of informative and entertaining videos	Sharing of interesting products / websites
Company Brand Presence	Facebook Business Pages	Profile Page / Enhanced Profile Page	Company Pages Products and Recommendation s Industry or Networking Groups	Google+ Page	Brand Channel and Custom Brand Channel	Boards
Viral Brand Exposure Opportunities	"Likes" or Comments on Content	Re-tweets of Follows	"Likes" or Comments on News, Group Discussions or Company Follows	Shares, Comments, +1's and Add to Circle Activity	Subscribe and Share Activity	Likes, Comments, Repins
Impact on Website Traffic	Direct links from content posted; eCommerce Store Apps	Direct links from content posted	Direct links from content posted	Direct links from content posted - Google+ Activity Influences Google Search Results	Direct links from content posted	Direct links from content posted
Advertising Opportunities	Facebook Ads Premium Ads Sponsored Stories	Promoted tweets Promoted Trends Promoted Accounts Enhanced Profile	LinkedIn Ads	n/a	Video Ads Reach Ads Display Ads	n/a

#### Table 1.0 Comparison-Business/Brand Marketing in Social Media Sites

Marketing opportunities by social media site will help user to decide the suitable site that may offer the biggest potential for their business. Other than that, social media also have an automated marketing tool that feeds updates to multiple sites from a single platform. With social media management tools like Sprout Social, for example, business ready to deal with their whole social media vicinity from a solitary, instinctive stage. Other popular social media management tool available such as HootSuite has the capacity help client dispatch the showcasing crusades, distinguish and winning the group of onlookers, and appropriate focused on messages over various online networking channels.

### 2.2.3 Critical Review in Social Media

User has difference experience in online shopping than offline shopping. With online shopping, user has social interactions between human without have human warmth and sociability (Geffen & Straub, 2003). Nowadays, customer still spend their time in store and interact with the salesperson whereas in online shop, it is a noteworthy test to make an online store which is socially rich (Kumar & Benbasat, 2002). Hassanein et.al (2006), analyse the possibility of integrating human warmth and sociability through the web interface to influence user's attitudes towards online shopping. According to Hassanein, social media has the power to move into websites social pictures and rich portrayals. A few studies have highlighted the positive relationship between social media and trust which can influence the expectation to purchase online (Hassanien et.al (2006); Gefen et.al (2003). The elements and utilization of web innovations can impact social recognition. These will increasing the level of trust and therefore the goal to purchase in shoppers. Actual interaction with different clients concerning the progression in e-business innovations like online discussion and groups, suggestion frameworks, chat rooms, and etc. purchasers impact in online business.

### **2.3** Social Commerce (s-commerce)

Social commerce is a type of trade intervened by social media including joining between the online and disconnected from the net situations (Wang and Zhang, 2012). With the advancement of ICTs and e-commerce and the emergence of Web2.0, customers are shifting their behavior from being passive consumers of information to active content creators and shares in cyberspace (Hajli, 2012). Based on Noh et. al (2013), s-commerce is a combination of social networking with online shopping that creates new online market places and communities based on social network sites (SNS).

From marketing consultant Heidi Cohen (2011) also has a same view saying that 20 more succinctly defines social commerce, its "social media meets shopping". Yet, a few surely understood social commerce sites originate before the mainstream ascent of informal communities by more than a large portion of 10 years. eBay, a shared offering stage established in 1995, is one of them. Today, social trade signifies an extensive variety of shopping, suggesting and offering practices.

According to Zhou et.al, social commerce has gotten a great deal of consideration for forming developing business channels on the Internet. Numerous e-retailers are exploiting social technologies and services to extend their business. Since social media have turn out to be promptly available, more shoppers utilization it as a wellspring of data about organizations, brands, items, and services (2013).

The open doors that relates with social commerce give huge enthusiasm for scientists. Social commerce is an interdisciplinary subject that concerns with plans of action and methods, shopper and association conduct, systematic procedures, long range informal communication advancements, framework outlines, research systems, business rehearses, and planned and review appraisal of business quality [Zhou et.al, 2013)]. Understanding the influence of these subject are vital as it can cause business to appreciate the potential effect of social media to help business achieved competitive advantages.

### 2.3.1 Types of Social Commerce

The type of social commerce was group into seven categories that illustrate in figure 2.3.



Figure 2.3 Seven Types of Social Commerce

According to (Indvik, 2013), S-commerce can be categorized into seven categories. The seven type of social commerce including;

**Social network-driven sales** that established by social network sites such as Facebook, Pinterest and Twitter through a "shop" tab on Facebook.

**Peer-to-peer sales platforms** type is existed in the websites that allow user to communicate and sell products to other users for example eBay, Etsy, and Amazon. It is also known as "community market" or bazaars.

**Group buying** type is focuses on user that can purchase items or administrations at a lower cost when there are sufficient number of users agree to make the purchase. This social commerce type can be found in Groupon and LivingSosial.

**Peer recommendation** is a site that allows user to view recommendation of products based on others' reviews and/or remunerated people for offering items and buys to companions through informal organizations. According to this social commerce type, Amazon, Yelp and JustBough are the good examples.

**User-curate shopping** like The Fancy, Lyst and Svpply are the examples of shopping-focused site where user make and offer arrangements of items and administrations for others to shop.

**Participatory commerce** type defines user can get included in the creation process through voting, funding and collaboratively designing products (e.g. Threadless, Kickstarter, CutOnYourBias).

**Social shopping** (e.g Zalora, SallyFashion, Lazada) are the example of sites that give visit sessions to clients so they can correspond with their companions or different clients for some guidance or exchanging opinion.

From all the seven types of social commerce that explained, social shopping are give more effect to consumer. Vong (2012) said, customers grasp the Internet for an assortment of reasons (convenience, price, selection). Furthermore, throughout the most recent couple of years, one of the significant advancements in the e-commerce arena is social media shopping. Social media shopping alludes to the utilization of virtual social network, peer reviews and other online social apparatuses in the obtaining procedure. Today's consumer is intensely affected by the decisions of his or her peers, which is further reflected in the way brands are utilizing social media to catch consideration. Social networking like Facebook has been an essential stage for the advancement of items as well as in online exchanges. Exercises like sharing and discuss the item and administrations that shopper like are turn into one if the motivation behind why Facebook can impacts the acquiring choices of their virtual companions. As per Sociable Labs report, 62 percent of online customers have read item related remarks from their Facebook companions, 75 percent of them have tapped on the item connection to visit the retailer's website, and 53 percent of the individuals who clicked go much further and purchase the item. Twitter is another social networking instrument in which brands are utilizing to connect with clients and energize buys. As per a study by Social Media Quickstarter, 64 percent of Twitter clients studied asserted to take after brands to get selective item advancements and rebates (Vong, 2012).

#### 2.3.2 Characteristics of Social Commerce

In general, there are six characteristics of s-commerce that can help businesses utilized the used of social media effectively. The characteristics are: reciprocity, community, social proof, authority, liking and scarcity (Solis,B., 2012).

The first characteristic is reciprocity or other meaning "pay it forward". Reciprocity is situation of paying cycle where we expect to be paid or rewarded for our goods, services, or actions. Besides, it has become a nature as human to repay the favors for maintaining a balance of social fairness. Case in point, an organization gives a person something for nothing and that individual needs to do something consequently. They will make a purchase again or contributed a good recommendation for the company. Moreover, by investing in the value, productivity, and efficiency of consumer decision making, businesses can not only earn reciprocity and goodwill, but also earn priceless social capital as a result (Solis, B., 2012).

Second characteristic in social commerce is community. Community platforms join individuals with one another and to a business in a directed and create environment (Marsden, P., 2009). In on-line, people meet an individual or some group that share similar interest or belief and they will form a community. Individuals are more dedicated to a group where they can feel acceptance and trust. They will be captivated to follow the same trend that was introduced by group member whether is new idea or product (Anderson et.al, 2011).

Third characteristic is social proof. In order to gain a positive feedback, a company must accept social feedback of their products the evidence that other individuals are purchasing and enjoy the same thing such as eBay and Amazon. Besides allowing public feedbacks, they are also generated actual recent transactions. This will gain trust among the seller and buyer. Around 55% of purchasers swing to social networking when they are searching for information (Giamanco and Grenoir, 2012).

Fourth characteristic in social commerce is an authority. There are more people want a proof about the condition and quality of a particular product. Usually, people who are satisfied over the product will give a positive feedbacks and a good recommendation to persuade other consumers. If there are multiple reviews about it, possibly, other consumers are willing to trust the decision and never hesitate to purchase the particular item.

The fifth characteristic is, liking. As we know, people trusts are based on the recommendation of others. So, in this context, liking is a way to builds bonds and trust. On the Facebook for example, if there are many 'likes' on that specific item, then the shopper will feel more certain and are convinced to make a purchase.

Lastly, scarcity also is one of the characteristic in social commerce. As a piece of supply and demand, a more noteworthy quality is appointed to items that viewed as either being sought after or seen as being on a lack. Therefore, if a person commented that he or she has purchasing something unique, special, or limited, others will tend to purchase the similar product. If the seller is a reliable, consumers will buy the product immediately. This can be seen by instance of Zara and Apple that made an interest for their items by persuading people in general that there is a plausibility of passing up a major opportunity for having the capacity to buy their items (The Strait Times, 2014).

## 2.3.3 Evolution of Social Commerce

Table 2.3 summarizes the social commerce evolution along the four dimensions of people, Management, technology and information.

Dimension	People	Management	Technology	Information
2005	People like to give and take advice from other shoppers	Short-tail niche- product strategy caters to small Businesses	Blog and e- commerce sites	user generated content (information source: users)
2006	Shoppers generate shopping ideas through socializing	Social experience strategy (e.g., providing collaborative spaces); alliance strategy aligns e-tailers and social networking sites	Startup social shopping sites; social networking functions and e- commerce sites	Content sites combing research and purchase in a platform
2007	Social shoppers are both cognitive (utility driven) and	Converging online and offline social networks;	Search engine function and social	Information type (text, audio, and video)

	emotional (fun driven)	crowd assumption (team buying) strategy	networking function; blogs, social networking sites, video do-it-yourself media (i.e., YouTube)	
2008	Social network users are not receptive to marketing	Social networks are good for branding, not for transactions (skeptical perspective); concrete content strategy	EC sites and social networking functions; social shopping sites	Crowdsourced content (information sources: user communities)
2009	Users are empowered by social networks of their own choices; traditional EC is male oriented, social shopping is female oriented (gender perspective)	Co-creating and multichannel strategies	Twitter; mobile phones	Co-creating content (information sources: users+marketers)
2010	Social commerce is good for fighting with deflation (economic perspective); social saving is more pervasive in Asia and social fun is more pervasive in western countries (cultural perspective)	Cultural perspectives on social commerce emerged; Chinesestyle Tuangou converges online and offline retailers	iPhone; F- commerce; Group-buying application in Facebook;	Global crowdsourcing
2011	Social commerce bases on interest graph	Online auction site and social networking site (eBay+Facebook); Social business; Groupon copycats pervade in China	Facebook; Google +	Demands for niche, local content increases

 Table 2.3.3 Social Commerce Evolution along the People, Management, Technology, and Information. (Wang & Zhang, 2012)
S-commerce began to get significant consideration from the business community, as people are making more prominent utilization of client created substance to settle on educated purchasing choices. Specifically, s-commerce has seen dangerous development in some nation, in light of the fact that purchasers put awesome accentuation on gaining and utilizing coupons and sharing data on merchandise and administrations, with the later representing a manifestation of collectivism (Noh et.al, 2013). Firms keen on s-commerce must consider how their social methods may affect their business (Stephen & Toubia, 2010). With consumers and firms concentrating on get numerous kind parts of social media, the standpoint for s-commerce depends not just on purchasers' acknowledgement of this new type of commerce but also on its perceived usefulness and ease of use (Noh et.al, 2013).

#### 2.3.4 Social Commerce Concept

Figure 2.3.4 demonstrate that social business expands commerce and e-commerce (supported by Web 1.0) by using online networking to make and offer client produced substance. According to Baghdadi (2013), social media are upheld by Web 2.0, a stage that amplifies Web 2.0 by utilizing procedures, for example, Adobe Flash, Ajax, or RSS. Social media applications are composed by utilizing the standards of social media configuration, specifically the three building squares which is Identity (or individual), Conversation (or interaction), and Community.



Figure 2.3.4 Concepts involved in social commerce

The most empowering innovations for social trade are Web 2.0, social media, Cloud Computing and SOA. Social commerce has augments commerce and e-commerce (supported by Web 1.0) by using social media to make and offer client produced substance as demonstrated in Figure 2.3.4. Social media are bolstered by Web 2.0, a stage that amplifies Web 1.0 by utilizing procedures, for example, Adobe Flash, Ajax, or RSS. Social media applications are planned by standards of social media outline, comprised by three building squares: Identity (or individual), Conversation (or association), and Community.

#### 2.3.5 Difference between Social Commerce and E- Commerce

Social commerce is not the same as e-commerce in numerous angles, including business model, value creation, customer communication and connection, system interaction, design, and platforms ads summarized in Table 2.3.5.

Aspect	E-Commerce	S-commerce
Business Model	<ul> <li>Traditional</li> <li>R&amp;D</li> <li>Product/Services/Business Process-oriented</li> </ul>	<ul> <li>Need new business models or build on the existing ones more technology-enabled (Web 2.0, Cloud Computing and SOA)</li> <li>Co-design</li> </ul>

		Social and customer- oriented
Value Creation	• The design of business processes, products or services is limited to the enterprise	<ul> <li>Participatory and collaborative</li> <li>Create revenue by using scarcity of attention.</li> <li>Seeking new business values</li> </ul>
Value Chain	Limited actors	• Large actor, where motivation of participating is rewarded
Customer connection	<ul> <li>Customer interact individually with e-commerce web sites and independently from other customers.</li> <li>No communication from customer to business /from customer to customer</li> </ul>	<ul> <li>Involves on-line communities that support social connection to enhance conversation between customers.</li> <li>Collaboration and participation</li> </ul>
System-interaction	<ul> <li>One way browsing, where information from customers is rarely sent back to business or other customers.</li> <li>One way creation of content</li> <li>Push information to relatively passive audience</li> </ul>	<ul> <li>Develops more social and interactive approaches that let customers express themselves and share their information with other customers as well with business</li> <li>Community creation of content.</li> </ul>
Design	<ul> <li>Presentation</li> <li>Discovery mechanism</li> <li>Navigation</li> </ul>	• Web 2.0 is based on user- centered design, through interactive interface that enables identify, interactions and communities
Platform	• Web 1.0 (B2C), EDI or Web services (for B2B)	<ul> <li>Web 2.0, Cloud Computing, SOA</li> <li>Collaboration + Participation + Openness</li> </ul>
Legal Issues	• Emphasized within agreed upon policies	• Need to be emphasized

Table 2.3.5 Differences between S-Commerce and E-Commerce (Baghdadi, 2013).

One aspect that differentiates e-commerce and social commerce is the business model. E-commerce business model is more traditional compared to social commerce. E-Commerce business model can be generally categorised into types; Business – to – Business (B2B), Business – to – Consumer (B2C), Consumer – to – Consumer (C2C), Consumer – to – Business (C2B), Business – to – Government (B2G), Government – to – Business (G2B) and Government

- to - Citizen (G2C). Electronic commerce is focuses on products, services, and a business process oriented. Meanwhile, social commerce is either developed based on a new business model or built according to the existing and more technology-enabled (Web 2.0, Cloud Computing and SOA). S-commerce which concentrates on a social and client situated suggests the implying that it helps cusumers to find stock they didn't know they needed to purchase, and help loved ones settle on better purchasing choices (Smith, 2013).

#### 2.3.6 Social Commerce in Marketing

According to Barnes & Lescaut, social commerce is a term used to describe marketing strategies that incorporate social media to facilitate online purchasing and selling of products and services. (Yahoo! had first used the term in 2005 in conjunction of the new online shopping store launching). Inspired by the proliferation of electronic commerce, social commerce strategies are not merely designed around click-to-buy action. Otherwise, these strategies provide a virtual way for companies to attract, engage and interact with consumers in buying decision process. Interaction and purchasing activities between user and companies are encourage social commerce by advent mobile technology (2013).

Five top companies or brands such as Nike, Apple, Target, Starbucks and Forever21 gained the number of LIKE on Facebook. Amongst the five, Nike takes the leads.





When figuring the interaction with companies or brand online in Figure 2.3.6, Facebook is the most popular platform among user, followed by Twitter and Pinterest. Based on Barnes & Lescault research in 2013, they have found that 78% of respondent voted on Facebook can support the brand they like and get the updates from the particular brands. However, other respondents claimed it was because they can get coupon or discount on their next purchase.

## 2.4 Previous Research Studies

This section will discuss previous study about social commerce. Furthermore, it show the framework that give more understanding about social commerce.

## 2.4.1 A research framework with an integrated view of social commerce

There are a few framework that can be utilized or extended to outline and comprehend social commerce research. Table 2.4.1 show the list of research framework of social commerce.

Author / Year	Framework	Construct	
		<ul> <li>Research theme</li> <li>Social media</li> </ul>	
Liang & Turban	A Research Framework	<ul> <li>Commercial activities</li> </ul>	
2011	for Social Commerce	<ul> <li>Underlying theories</li> </ul>	
		– Outcomes	
		<ul> <li>Research method</li> </ul>	
Henderson &	Strategic Alignment	<ul> <li>Economic Performance</li> </ul>	
Venkatraman 1993	Model (SAM)	- Role of People	
		– People	
Wang & Zhang	Four Component Model	– Information	
2012	of Social Commerce	– Technology	
		– Business	
		– Trust	
Uoili	Social Commerce	<ul> <li>Forum &amp; Communities</li> </ul>	
2012	Adoption Model	<ul> <li>Rating &amp; reviews</li> </ul>	
	(SCAM)	<ul> <li>Recommendations &amp; referrals</li> </ul>	

		<ul><li>Perceived usefulness</li><li>Intention to buy</li></ul>
Amir Afrasiabi Rad Morad Benyoucef (2011)	A Model for Understanding Social Commerce	<ul> <li>Need recognition</li> <li>Product Brokening</li> <li>Merchant Brokening</li> <li>Purchase design</li> <li>Purchase</li> <li>Evaluation</li> </ul>
Yadav,De Valck,	Social Commerce: A	<ul> <li>Need recognition</li> </ul>
Hennig-Thurau,	Contingency	<ul> <li>Pre-purchase activities</li> </ul>
Hoffman, & Spann,	Framework for	<ul> <li>Purchase decision</li> </ul>
(2013)	Assessing	<ul> <li>Post-purchase activities</li> </ul>
	Marketing Potential	L

Table 2.4.1 List of Research Framework of Social Commerce

The first presented framework in social commerce is the six key elements by Liang and Turban (2011). These frameworks include research theme, social media commercial activities, research method, outcomes, and underlying theories. Two essential components of social commerce are recognized which are online media and commercial activities. For research theme, they have listed user behavior, social processes, firm performance, network analysis, website design, adoption strategy, business models, enterprise strategies, and security and privacy policy. This research delivers more understanding and remarkable knowledge landscape of social commerce.

Other structure is the Strategic Alignment Model (SAM) by Henderson and Venkatraman (1993). It is a social commerce wonder that can be created keeping in mind the end goal to demonstrate the potential exploration issues from an association's viewpoint. SAM qualities are including the challenges in acknowledging quality from information technology investments to the less of arrangement between the business and IT techniques of associations. One of the principal presumptions of key arrangement has incorporates the way that financial execution is specifically identified with the capacity of administration. Subsequently, it is imperative to build up a vital position and outline of a proper authoritative framework. SAM executes a proposal that individuals assume a major part in the vital arrangement as being among the optional measurements used to portray the structure, for example, IT skills.

Wang and Zhang (2012) utilize the four segment model to investigate different parts of social commerce development since 2005. Considering the multi-disciplinary nature of social

commerce, the model accentuation on individuals and information, notwithstanding innovation and business. Individuals turn into a main impetus for socialization, business, innovative headway, and data creation and utilization. People can be the individual consumer and seller within the social commerce, whether in a small or large group, and become part of identifiable user communities who gains benefits from the technologies. Social commerce are client produced substance and a kind of data that empowered by Web 2.0 advancements (Wang and Zhang 2012). Information introduces in numerous structures and it advances through distinctive stages in its lifecycle: creation, capture, storage and organization, transformation, sharing and dissemination, and use, evaluation and refinement (Lee and Choi 2003). Utilizations of information are relying upon how communications happen with the other three segments. The four-part show additionally consider the interdependencies among the four measurements: each of them will keep on growing and impact the other three. However, the model is not the prime variable to the achievement of social commerce because of the way that there are disappointments recorded.

Social Commerce Adoption Model (SCAM) by Hajli (2012) focuses on the six construct which is trust, perceived usefulness, intention to buy, recommendation and referrals, forum and communities and rating and reviews. Three of them-recommendation and referrals, forum and communities and rating and reviews (Fisher, 2010) are s-commerce component. For *trust*, it is significant because it lessens "transaction cost" in business interactions (Mutz, 2005). It reduces the propensity to screen other parties' cooperation, furthermore for endorsing frameworks are dependable (Mutz, 2005). Besides, it is believed that establishing trust will promote economic growth. For perceived usefulness, Davis (1989) characterizes it as individuals have a tendency to utilize or not utilize an application to the expand they trust it will help them perform their occupation better. Perceived usefulness and perceived of use are two variables of Technology Acceptance Model (TAM), which is one of the effective hypotheses that can foresee a individual's aim to utilize innovation (Hajli, 2012). Many authors believe that perceived usefulness influence user's intentions to use e-commerce (Gaffen and Straub, 2000).

In 2011, Afrasiabi & Benyoucef introduced a model for understanding social commerce. From the model, there are six stages in understanding customers purchase decision making process. The principal stage is recognizing the requirements for a particular item or service. At this stage, the pretended by organizations in making brand and product awareness starts much sooner than

clients get to be mindful of a need. For a reasonable comprehension of the whole social shopping procedure, need acknowledgment must be connected with numerous issues that must be tended to. The issues have to match with customer needs and wants. Next, *product brokerage* is a stage where customers figure out what to purchase after either the needs or wants has been recognized. This is accomplished through a far reaching inquiry on items, trailed by a basic assessment of competitor products information. The inquiry methodology is ordinarily led separately through "Internal" or "External" search or both. For outside pursuit, it utilizes marketers dominated sources, comparison shopping, public sources, including companions and relatives who can influence the choice through verbal. According Guttmann, social networks have the capability of enhancing the item dealer process by giving an ingenious situation of people with distinctive encounters and strengths who spread the verbal and possibly bring down the expense of quest for diverse items (1998).

Yadav et.al (2013) use a four component to analyze a contingency framework for assessing marketing potential in social commerce. The part accentuated firms' vicinity and activity in CMSEs, results identified with clients' choice making that appear from the association's vicinity and activity in CMSEs and variables that direct the relationship between our essential forerunner develop and results. Four facilitative roles of CME at different stages of consumer decision making include need recognition, pre-purchase activities, purchase decision, and post-purchase activities as proposed. First stage is need recognition which consumer becomes aware of problem or need and social network goes about as wellspring of motivation and referral for buyer's pending buy. The next stage is pre-purchase activities where consumer searches for information and evaluate alternative. Also, social network goes about as a source of information and endorsement for planned purchase and reducing functional, financial and social risk. The third stage is purchase decision where buyer chooses what, where and when to buy (or not to purchase by any means). Social network acts as source of information about where and when to purchase and informal community serves to organize gathering buys. The last stage is the postpurchase activities where client decides fulfillment and may suggest or discuss buy. Social network goes about as a sounding board for consumption experiences and signaling identity, bonding and sharing experience, helping others.

## 2.5 Unified Theory of Acceptance and Use of Technology (UTAUT)

## 2.5.1 UTAUT Model

These days, particularly in user acceptance and the use of information technology, model UTAUT (Venkatesh et al., 2003) advances on the premise of coordinating the predominant develop in eight models that range from human behaviour, to computer science. These models, encompass Theory of Reasoned Action(TRA), Technology Acceptance Model (TAM) and (TAM2), Motivational Model(MM), Theory of Planned Behaviour (TPB), Model of PC Utilization (MPCU), Innovation Diffusion Theory(ADT), and Social Cognitive Theory (SCT). From the studies, the Technology Acceptance Model (TAM) has a deep explanation in explaining IT/IS adoption behaviour. TAM was utilization to find the effect of external variables on internal beliefs, attitudes, and intentions. Based on TAM beliefs, the primary determinants of information technologies adoption are the usefulness and ease of use in organizations. These two determinants act as the basis for attitudes toward using a particular system, and then generate the actual usage behaviour. Although, examining IT/IS adoption in business organizations is the function of original TAM model. The model also predicts general individual acceptance, especially in a higher education. UTAUT is developed by Venkatesh, Morris, Davis, and Davis (2003) to combine previous TAM related studies (see Figure 2.5.1). However, the Effort Expectancy in UTAUT model can be significant in determining user acceptance of IT, concerning the ease of use may become unimportant over extended and excess usage. Using a new technology can perceived ease of use only in the early stages of that can be expected to be more important and it can give positive feedback on perceived usefulness of the technology (Marchewka, Liu & Kostiwa, 2007).



#### Figure 2.5.1 UTAUT model

Since UTAUT was initially developed by Venkatesh et al. (2003), few observational studies have been completed in diverse settings to test UTAUT. The greater part of the studies have connected UTAUT in different contexts and countries. To the best of our insight, just four studies (Neufeld et al., 2007; Wang and Yang, 2005; Zhou et al., 2010; Chen,2011) have attempted to expand UTAUT. Such studies extending extant theories and models are important to further build the illustrative force of these hypotheses and models. Based on original model of UTAUT by Venkatesh et.al (2003), this studies only focus on four construct which is Performance Expectancy, Effort Expectancy, Social Influence and Facilitation Condition. All this construct were have been studied to know the characteristics that affect social commerce. According to the literature review they were believe to be significant in understanding and explaining intention to buy in s-commerce.

#### 2.5.2 UTAUT Construct Description

**Performance Expectancy** (**PE**) is the level that less associated where an individual believes by using the system, it will help people to enhance their job performance. The develops in alternate models that identified with performance expectancy are: perceived usefulness (TAM, and combined TAM-TPB), outcome expectancy (SCT), extrinsic motivation (MM), job-fit (MPCU), and relative advantage (DOI). This construct is the forecast of intention and remained significant at all focuses in both voluntary and mandatory settings. Gender and age are become moderator in hypothesizing the behavioral intention influence construct.

**Effort Expectancy** (**EE**) is the level that connected with the framework utilized. The construct in alternate models with the same idea are: perceived ease of use (TAM), and complexity (DOI and MPCU). It was critical for both voluntary and mandatory settings in an individual model in this construct.

**Social Influence** (**SI**) is the level on which an individual believes he or she ought to utilize the new system. As constructs come in existing models: subjective norms (TRA, TAM2, TPB/DTPB, and combined TAM-TPB), image (DOI) and social factors (MPCU). The impact of attributed to compliance and appears are important for mandatory context in the early stage which is individual experience and rewards that are applicable; in contrary, technology has given an influential factor to the social. In view of the writing, the power of social influences on behavioral intentions is based on gender, age, voluntariness and experience.

**Facilitating Conditions (FC)** is the level on which an individual accepts that an organizational and technical infrastructure is exists to bolster the utilization of the system. Three constructs develops in light of the current models are perceived the behavioral control (TPB/DTPB and combined TAM-TPB), facilitating conditions (MPCU), and compatibility (DOI). The distinction between models shown includes the fact that this construct and the relationship between intentions in every model are comparative in both voluntary and primary settings in the first training period. However, during the second period, the influence has disappeared.

# CHAPTER THREE RESEARCH METHODOLOGY

## 3.0 Introduction

For the most part, research is characterized as an orderly and experimental quest for relevant data on a certain subject. Based on Kothari (2004), it includes the procedure of characterizing and reclassifying the research issue, formulate the hypotheses, data collecting, arranging and assessing data, develop findings and reaching conclusions, lastly conclusions was be tested to figure out if they relates to the detailed hypothesis. Figure 3.1 shows the research design for this study.



#### Figure 3.0 Research Design (Fraenkel & Wallen, 2003)

#### 3.1 Research Design

For this study, the research procedures began by distinguishing the exploration subject. The research topic is identified based on researcher reading of secondary materials (e.g., journals, online magazine).

After the selection of the research topic, literature review is conducted in order to develop a better understanding on this topic. Previous works on s-commerce adoption were examined and analyzed. Extensive reviews on IS adoption, e-commerce and s-commerce adoption literature were conducted.

The research process is then continued by formulating the research problems, research questions and research objectives. For this study, UTAUT is adopted as the underlying theoretical lens to examine s-commerce adoption topic. Based on that, four research hypotheses were formulated. The research model for this study hypothesized that s-commerce adoption intention has direct relationships with performance expectancy, effort expectancy, social influence and facilitating condition.

For this study, the exploration instrument is created utilizing estimation scales assembled from past studies. When conducting a quantitative research it is important to ensure that valid and reliable research instrument is used when collecting data. Thus to verify the validity and reliability of the research instrument, pilot test was conducted. According to Baker (1994), prominent that "a pilot study is regularly used to pretest or experiment with research instrument. Baker found that a sample size of 10-20% of the sample size for the actual study is reasonable number of respondent to consider enlisting in a pilot. In spite of the fact that a pilot study does not ensure accomplishment in the fundamental study, it greatly improve the probability. Based on the sample for this study, 30 respondent from 250 sample is selected.

This study used online survey as a medium to create a survey. Facilities provided by the online survey helped me in spread survey with a systematic way of e-mail and social media (e.g Facebook). Since this study was conducted in UUM, I have collaborate with directors of UUM Academic Affairs, to get 250 emails of students form various courses.

#### **3.2 Data Collection Technique**

Once the validity and reliability of the research instrument is established, the real data collection process was conducted. This study was adopted web survey as its data collection technique. The respondent was selected using a random sampling technique.

This study adopted a component based structural equation modelling (i.e. PLS-SEM) approach to assess the validity and reliability of the research model. In SmartPLS, with the intuitive graphical user interface it can create pretty path models in short period and easily get the outputs with graphics for many useful analyses. In addition, it can easily export, import and archive projects to Excel or HTML when using SmartPLS. In this study, Smart PLS M3 is used to examine the reliability and validity of the researcher outer (measurement) model. After the analysis of the collected data, the process of preparing documents was conducted.

#### 3.2.1 Web Survey

A survey collection had become easier to conduct with emergence of ICT technology. A web survey is the best collection tool because it can manage the data collection efficiently. Moreover, web survey can incorporate with another social networking such as Facebook, Yahoo!, Google, Pinterest and others. According to Fricker and Schonlau (2002), besides mailing a survey, a respondent can now be given a hyperlink to a Web site containing the survey in their social media (eg.Facebook). Because of this advantage, web survey was adopted as the best data collection tool for this study. Table 3.1 shows the advantage of web survey.

Advantage	Explanation		
Global reach	Since, this study looks at consistent social commerce,		
	utilizing a pen and pencil sort of overview appears to be		

	wrong. Consequently, the upside of a Web review that			
	allows worldwide achieve makes it simpler and less			
	expensive to acquire data from respondents that are			
	scattered geologically.			
Attractive format	A Web study offers a wide mixture of elaborate			
	configurations in introducing a survey. Its capacity to speak			
	to inquiries in numerous structures (e.g., single and multiple			
	responses, dichotomous questions, multiple-choice			
	questions, and even open-ended questions) makes it more			
	attractive. Similarly, its ability to filter and control the logic			
	flow is helpful to maintain a strategic distance from			
	disarrays.			
Fewer unanswered	A Web study can be composed in such a path, to the point			
questions	that respondents can't go to ensuing inquiries without			
	answering the present one. Thus, it can help reduce the			
	number of incomplete responses.			
Ease of data entry and	The reactions are put away naturally in a database and can			
analysis	be effectively removed for information investigation.			
	Adapted from: Brymen and Ball (2007)			

Adapted from: Bryman and Bell (2007)

Table 3.2 Reasons for Adopting Web-based Survey

There are also have an advantages when using web survey. According to Brymen and Bell (2007), at the point when managing a Web survey, researchers need to offer consideration regarding issues, for example, multiple replies, confidential issues and unclear answering. Not having the capacity to control these issues may influence the information gathering procedure. Case in point, utilizing a Web survey there is a hazard that a few respondents purposefully may finish the poll exceed than once (multiple replies) or respondents may not be willing to partake if the issues with the security of data transmissions and how their answers will be dealt with secretly are not being unmistakably clarified before they participate in the Web survey.

Accordingly, this study crushes these issues by: i) IP location following; handle the entrance of respondent by permitting just client with a remarkable IP location to finish the review and ii) collect one response per email address; so there isn't an option to allow multiple responses per computer.

This study chooses SurveyMonkey as the overview creating package. Despite the fact that most of the making package accessible offer similar components (e.g., rationale stream, skip work), this survey package is chosen because it's easy to manage and prmits different channels conveyance; and permits the researchers to dissect the demographic information progressively organize. Besides, the survey can be edit anytime to look how user want them to look, preview survey before send it and create email and web links. Moreover, it can automatic collation of the result in an easy view CSV sheet.

#### 3.2.2 Sampling

The objective of testing is to get a delegate number of members from a bigger populace of interest. By understanding the sample's characteristics it allows a researcher to sum it up to speak to the populace (Sekaran, 2003). For sampling frame, UUM's undergrad and postgraduate are chosen as respondent because this is on the grounds that the principle goal of this study to comprehend the determinants of adoption intention social commerce. This study adopts a random sampling technique, whereby the picked respondent can give the obliged data are chosen. Each arrangement of n people has an equivalent opportunity to be the sample really chosen when a simple random sample (SRS) of size n comprises of n people from the populace picked (Moore and McCabe, 2006).

#### **3.3** Data Analysis: Structural Equation Modelling (SEM)

According to Chin (1998) and Gefen et.al (2000), with SEM, researchers can access the general of a model as test the structural model together. SEM also have the linkages between a variable and its respective measures, when evaluating the hypothesised structural linkages within variables. Based on Gefen (2000), Direct and indirect relationships between one or more independent latent variables (LVs) and one or more dependent LVs can inspect by SEM. This is

because SEM is a group of multivariate statistical. SEM additionally an adaptable demonstrating devices because it can leading various multivariate statistical analyses, with regression analysis, path analysis, factor analysis, canonical correlation analysis, and growth curve modelling (Gefen et al., 2000; Urbach & Ahlemann, 2010).

Based on Chin (1998), researchers found flexibility to interplay between theory and data when SEM applied correctly. It can offers better preferences over the original of generation of analysis techniques such as factor analysis, principal component analysis, or multiple regression. Moreover, Chin (1998) states that SEM helps researchers to: 1) model connections among various indicators and basis variables; 2) construct observable LVs; 3) model lapses in estimation for watched variables; and 4) measurably test from the earlier theoretical and estimation assumptions against experimental information.

In general, there are two guideline approaches inside SEM: a segment based approach, for example, partial least square (PLS-SEM) and a co-variance-based approach (CB-SEM) (Fornell & Bookstein, 1982; Marcoulides, Chin & Saunders, 2009; Wetzels, Odekerken-Schroder & van Oppen, 2009). These two approaches are distinctive regarding basic factual suppositions and the way of fit measurement they create (Gefen et al., 2000). According to Sosik & Piovoso (2009), to boost the co-change between the predictor latent variable and the dependent latent variable, is PLS-SEM's fundamental target. Based on Chin (1998), PLS utilizes least square estimation for single and multi-segment models and for canonical correlation. The PLS methodology dodges a significant number of the restrictive presumptions basic ML procedures and guarantees against improper arrangement and indeterminacy factor (Fornell & Bookstein, 1982).

#### **3.3.1** Partial Least Square (PLS)

PLS was begun by an econometrician named Herman Wold in the '60s and '70s (Chin, 1998b). PLS is a group of substituting minimum squares calculations, which amplify vital part and sanctioned relationship examination (Henseler et al., 2009). Two sets of linear equations known as the measurement model and structural model used to characterizes its way models (Henseler et al., 2009). The measurement model indicates the connections in the middle of observed and latent variables (LV). While the outer model indicates the connections between a LV and its show variables. This inner and outer model also known as structural and measurement model. Based on Henseler et.al (2009) the PLS algorithm is basically an arrangement of relapses as far as weight vectors. The following step involves the basic PLS algorithm.

Step 1: LV score's Iterative estimation comprising of a four-step iterative methodology that is repeated until merging is obtained:

- i. LV scores outer approximation
- ii.. Inner weights estimation
- iii.. LV scores inner approximation
- iv. Outer weights estimation

Step 2: Outer weights/loading and path coefficients estimation

Step 3: Location parameters estimation

# 3.4 Utilization Partial Least Square for Evaluating Measurement and Structural Models

There are two-stage process utilized while evaluating research model: 1) measurement model assessment and 2) structural model assessment. Overall, model validation use to determine whether both measurement and structural model fulfil the quality criteria for empirical work (Urbach & Ahlemann, 2010). The guidelines utilized as a part of this study to survey both estimation and the structural model in this study discussed in the following subsections.

### 3.4.1 Measurement Model

Based on past studies, indicator reliability, internal consistency, discriminant validity and convergent validity can be tested to establish the validation of reflective measurement model (Straub,Boudreau & Gefen, 2004;Lewis, Templeton & Byrd, 2005).

#### 3.4.1.1 Internal Consistency

Earlier, Cronbach's alpha (CA) is used to measure item's internal consistency. Based on Cronbach (1971), when the item in the construct that have the same range and meaning means that it has a high CA values. CA is utilized to give an evaluation to the reliability based on indicator inter-correlations. In PLS, composite reliability (CR) utilized to measure internal consistency (Chin, 1998) because of the fact that CR considers that indicators have distinctive loading despite the fact that both CA and CR measure the same thing (internal consistency). Werts, Linn & Joreskog (1974) states, CA give an extreme underestimation of the internal consistency reliability where it doesn't accept comparable among the measures and accepting all indicators are similarly weighted.

Despite the fact that which specific reliability coefficients utilized, when the value is no less than 0.7 in the early stage, an internal consistency reliability is considered satisfactory furthermore, it more propel phases of research if the values over 0.8 or 0.9. However, value underneath 0.6 show an absence of reliability (Nunnally & Bernstein, 1994).

#### 3.4.1.2 Indicator Reliability

According to Urbach & Ahlemann (2010), the researcher is assessing the degree to which a variable or an arrangement of variables is reliable with what it intends to measure when assessing indicators' reliability. Characteristics reliability construct is independent of and can computed independently from other constructs. Based on Chin (1998), indicator loadings no less than 0.05 should be significant and the loading should exceed than 0.7. LV is said to be able to clarify no less than 50 50 percent of its indicators variance when the loading value at 0.707. Bootstrapping is resampling method that used to test significance of the indicator loadings. According to Hensler et al. (2009), one should to be watchful when choosing to dispose of an indicator mulling over PLS characteristic of consistency on the loose. The indicator can be eliminate when its reliability is low.

#### 3.4.1.3 Convergent Validity

According to Urbach & Ahlemann (2010), the extent to which individual items reflect a develop focalizing in comparison to things measuring distinctive construct by involve convergent validity. The value of average variance extracted (AVE) can evaluating convergent validity by using PLS. Sufficient convergent validity is accomplished when the AVE value of a construct is at least 0.5 (Fornell and Larcker, 1981).

#### 3.4.1.4 Discriminant Validity

Discriminant validity is utilized to separate measures of a construct from each other. Based on Urbach & Ahlemann (2010), discriminant validity test whether the item don't unexpectedly measure something else and its contrast with convergent validity. In PLS, cross loading and Fornell-Larcker's criterion (Fornell & Larcker, 1981) were utilized to measures two discriminant validity (Chin, 1998).

Based on Chin (1998), relating each LV's component scores with all of the other items can obtaining cross-loading. It can be gathered that the construct develops' indicators are not interchangeable if every indicator's stacking is higher for its assigned develop contrasted with some other constructs.

In Fornell-Larcker's, the important criterion is it need LV to impart more variance to its relegated indicators than with other LV. In this way, the AVE of each LV ought to be over than the LV's most elevated squares connection with some other LV. Table 3.4 listed the summary of validity guidelines to assess a reflective measurement model

	Validity Type	Criterion	Guidelines	
i	Internal	CR	CR > 0.7 stand for exploratory study	
	Consistency		CR > 0.8 stand for advance research	
			CR < 0.6 stand for lack of reliability	
ii	Indicator	Indicator loadings	Item's loading $> 0.7$ whereas	
	Reliability		significant no less than 0.05 level	
iii	Convergent	AVE	AVE > 0.50	
	Validity			

iv	Discriminant Validity	Cross loading	Item's loading of each indicator is highest for its designated construct
	, anony	Fornell and Larcker	AVE's square root of a construct must be more high than the correlations between the construct and other constructs in the mode

Table 3.4 Summaries of Validity Guidelines for Assessing Reflective Measurement Model

Therefore, in this study, the measurement model's validity is satisfactory when:

- 1. CR is exceed than 0.8.
- 2. Item's loading is over than 0.7 and significant no less than 0.05 level.
- 3. Construct's AVE value is over than 0.50.
- 4. Item's loading of each indicator is greater for its assigned construct.
- 5. The square root of the AVE of a construct must exceed than the correlations between the construct and other constructs in the mode.

### 3.4.2 Structural Model

To assess methodically even if the hypotheses communicated by the structural model are supported by the data, researcher can validating the structural model (Urbach & Ahlemann, 2010). After the measurement model approved effectively, the structural model can be examined. Utilizing PLS, a structural model can be assessed utilizing coefficient of determination (R2), and path coefficients.

While evaluate the PLS structural model, it is important criterion to assessing LV's coefficient of determination (R2). R2 measures the relationship of an LV's describe variance to its total variance. A value of R2 is considered substantial when the values is around 0.67. While, values around 0.333 are normal and values are considered weak is 0.19 and lower (Chin, 1998).

The quality of the relationship between two LVs can know by examining the path coefficient value. The researcher must check the path coefficients, algebraic sign, magnitude and

significance to examine the relationship between two LVs. According to Huber et al. (2007), the path coefficients must more than 0.100 to record for a certain impact within the model. Path coefficient also can be can be significant at any rate at the 0.05 level. The validating guidelines for structural model is shown at Table 3.4.2.

	Validity Type	Criterion	Guideline	
1		Coefficient of determination $(R^2)$	0.67—substantial 0.333—moderate 0.190 - weak	
2	Model validity	Path coefficients	Path coefficient must be no less than 0.100 and at significance (at least 0.05)	

Table 3.4.2 Summaries of Validity Guidelines for Assessing Reflective Structural Model

Hence, in this study the structural model is assessed utilizing the following test:

- 1. Determination coefficient should be over than 0.19.
- Path coefficient between LVs must be no less than 0.1, take after the right algebraic sign (on account of this study—positive) and significant (no less than 0.05)

## 3.5 Instrument Development

Pilot survey technique was utilized for this study to examine the validity and reliability of the research instrument. The accompanying subsections clarify how each of the strategy is utilized as a part of relation to this study.

### 3.5.1 Pilot Survey

According to Everitt (2003), pilot survey is an investigation to test the feasibility of method and procedure. Pilot survey used on a large scale and to search possible effect and association that

important in a subsequent larger study. The fundamental point of the pilot study is to identify any issue connected with the Web survey design and measures from the viewpoint of a comparative target test.

The pilot survey follows the procedures of the method of the real information collection stage. For this study, only 30 student selected randomly during the sampling process. This pilot survey was conducted on June 2014, involving undergraduate and postgraduate student from UUM.

Students who have been selected will receive an invitation through an email. Within the invitation thread, the researchers give the motivation behind why this pilot review is directed. The researchers clarified the significance of acquiring criticism from the respondents. A hyperlink is embedded inside of invitation thread linking respondent to the Web overview page. Result demonstrated that there are no significant issues in comprehension the Web review guidelines and things. Table 3.5.1 gives demographic data of the participants.

A reply of 30 respondent in the pilot study make the total sample size 30 where 63% female and 37% male. 87% of respondent were aged 20 to 24 years old; 6.7% was less than 31 years old and other 6.7% is above than 30 years old. The majority of them is undergraduate student with 86.67% and the remaining were postgraduate. 40% of the respondent has used social commerce more than three years. 40% of the respondent spend more than three hour exploring social commerce, 36.67% spend less than one hour and 23.33% spend one to three hour.

Social commerce like Facebook become the highest rating by 40% of respondent's selection. While 23.9% use Youtube and 11.9% for twitter. And the other type of social commerce (LinkedIn, Groupon, MySpace, Google+, and Yahoo!) are not selected by respondent. Other social commerce that not stated gets a relatively high percentage of 22.4%. Most of respondent choose to use social commerce because of they can save their time and it fun. Both get same percentage 23.2%. While, 19.6% for cost saving and other factor get 1.79%. For convenient and choicer also get the same percentage of 16.1%. Many of respondents (32%) find an online shopping from social network that they have used. Second, respondent fine the social shopping by search engine (21.4%) and friend recommended (14.3%). Link inside shopping site and blog recommended get the same percentage of 12.5% and brand office website link get percentage of

7.14%. From the analysis, 21.7% of respondent like to buy clothes and second is music (13.3%). While, jewellery and watches is 10.8% and 9.64% for book and games. Electronic and beauty or personal care have the same percentage with 12%. Besides, computer and offices get 3.62% more than Film & TV. Meanwhile, other categories of goods and DIY & Tools is not an option by respondents during shopping online.

Demographic	Frequency (n=30)	Percentage (%)
Gender		
Male	11	37%
Female	19	63%
Age		
20-24	26	87%
25 - 30	2	6.7%
31 – 35	2	6.7%
36 - 40	0	0%
Above 40	0	0%
Student Category		
Undergraduate	26	86.67%
Postgraduate	4	13.3%
Experience using s-commerce		
Less than 1 year	7	23.3%
Between 1 to 2 years	5	16.67%
Between 2 to 3 years	6	20%
More than 3 years	12	40%
Term use of social commerce		
Less than 1 hour	11	36.67%
1 to 3 hour	7	23.33%
More than 3 hour	12	40%
Type of social commerce that have used		
Twitter	8	11.9%
LinkedIn	0	0%
Groupon	0	0%
MySpace	0	0%
Google+	0	0%
Yahoo!	0	0%
Youtube	16	23.9%
Facebook	28	41.8%
Other	15	22.4%
What motivated respondent to choose shopping		
online		
Convenient	9	16.1%

Cost Saving	11	19.6%
Time Saving	13	23.2%
More choice	9	16.1%
It's fun	13	23.2%
Other	1	1.79%
How did respondent find online shopping		
Search Engine	12	21.4%
Shopping site links	7	12.5%
Recommended by blog	7	12.5%
Recommended by friend	8	14.3%
Brand office website link	4	7.14%
Social Networking	18	32.1%
Other	0	0%
What is the categories respondent shop or use the		
most		
Book	8	9.64%
Music	11	13.3%
Games	8	9.64%
Film & TV	3	3.61%
Electronic	10	12%
Computer and offices	6	7.23%
Clothes	18	21.7%
DIY & Tools and car	0	0%
Beauty & Personal care	10	12%
Jewellery & Watches	9	10.8%
Other	0	0%

Table 3.5.1 Respondents' Demographic Result for Pilot Survey

Smart PLS 2.0M3 (Ringle, Wende & Will, 2005) is then used to assess both the measurement and structural model. The nature of the estimation model is assessed utilizing the rules discussed as a part of area 3.5. The measurement model is assessed utilizing a bootstrapping method where it produces 100 examples of the 30 cases utilized. Table 3.5 demonstrates the assessment of the evaluation directed on the research model.

	Assessment	Criterion	Result	Comment
1	Internal	CR	CR value for all	Exceeded 0.8, thus
	consistency		constructs show the	demonstrating internal
			range from 0.853 to	consistency
			0.898	
2	Indicator	Indicator	All items loading	All items loaded exceed

-				
	reliability	loadings	more than 0.7, ranging from 0.717 to 0.908	than 0.7, hence, demonstrating indicator reliability.
			All items has significant level at the 0.001	The item that loaded below than 0.7, was sustained, as dropping item doesn't change the CR value significantly.
3	Convergent validity	AVE	All construct has AVE value which range from 0.593 to 0.815	Each construct has an AVE value exceed than 0.5, thus demonstrating convergent validity
4	Discriminant validity	Cross loading Fornell and Larcker criterion	All item has high loading for its respective constructs	No items cross-loaded; and The AVE's square root
			must greater than the correlations between the	is exceed than the inter- correlations;
			constructs (see Table 3.1)	discriminant validity

Table 3.5.2 Assessment Conducted on the Research Measureme	t Mode	1 Summaries
--	--------	-------------

	AU	EE	FC	IU	PE	SI
ACTUAL_USE						
(AU)	0.903					
EFFORT_EXP						
(EE)	0.490	0.814				
FACILITATING_CON						
(FC)	0.525	0.585	0.770			
INTENTION_USE						
( <b>IU</b> )	0.753	0.596	0.630	0.819		
PERFORM_EXP						
( <b>PE</b> )	0.538	0.696	0.580	0.580	0.812	
SOCIAL_INF						
(SI)	0.532	0.428	0.527	0.594	0.493	0.807

Table 3.5 Correlations and Discriminant Validity Value

• Note: Square root of the AVE on the diagonal (shaded box)

The outcomes showed satisfactory reliability and validity of the measures. Through the estimation measurements, results are sufficient to move to the actual data collection stage.

A set of item closely related as a group depend on internal consistency. To measure internal consistency, Cronbach's Alpha has been used as it considered to be a measure of scale reliability. Table 3.6 shows the Cronbach Alpha value for the pilot study. Based on the result, CA value is higher than 0.7 which means, it is acceptable values of alpha. According to Tavakol & Dennick (2011), the acceptable values of alpha is ranging from 0.70 to 0.95.

	Cronbachs Alpha
ACTUAL_USE	0.772
EFFORT_EXP	0.829
FACILITATING_CON	0.771
INTENTION_USE	0.835
PERFORM_EXP	0.828
SOCIAL_INF	0.821

Table 3.6 Cronbach Alpha value for pilot study

### 3.5.2 Questionnaire Format and Administration

Three segment in the Web survey had utilized as a part of this study (see Appendix A). For the first section, it give an introduction that related with the reason for the research and definitions identified with social commerce. In the second area, respondent are requested that fill in some demographic data for statistical purposes.

In the third section, respondent are requested to answer the questions alluding to the social commerce in which they have use some time recently. The survey question used a five-point Likert scale, ranging from 1 ("strongly disagree") to 5 (strongly agree). In total 22 questions are related to the factors influencing intention of social commerce adoption. In Web Survey, to utilizing the control function, all question must be answered by respondent because incomplete responses are not allowed to be submitted. Figure 3.2 shows the flow of the web survey



Figure 3.1 Web Survey flow

## 3.6 Descriptive Statistic of Respondents

This statistic give understanding the respondent's demographic profiles who participated in the Web survey. Analysis shows 88% of the rate had been responding (230responses/250survey). Among of these respondents, 61% were female and 39% were male. The majority of the respondent (64.35%) is undergraduate student and 35.65% is postgraduate student. The analyse also shows (84.35%) of the respondent were below 40 years old. 32.61% age between 20 to 24

years old, 31.74% age between 25 to 30 years old and 11.30% age between 31 to 35 years old. Table 3.6 shows the demographic information (gender, type of respondent and age).

Demographic	Frequency (n=230)	Percentage (%)
Gender		
Male	90	39%
Female	140	61%
Age		
20-24	75	32.61%
25 - 30	73	31.74%
31 – 35	26	11.30%
36 - 40	20	8.70%
Above 40	36	15.65%
Student		
Undergraduate	148	64.35%
Postgraduate	82	35.65%

Table 3.6 Respondents' Demographic Information

Meanwhile, for social commerce experience part, 42.17% of the respondents have an experience more than three years. While, 30% of the respondents have experience at least one year and 16.09% are between one to two years. The rest is between two to three years' experience in social commerce. Figure 3.3 shows a graph of the number of respondents according to the experience use of social commerce.



#### Figure 3.6.1 Experience use of social commerce

The analysis also shows 40.87% respondent spend for less than one hour exploring social commerce. 36.09% respondent spend one to three hour exploring social commerce and the rest spend more than three hour. Figure 3.4 shows a graph of the number of respondents spending time exploring social commerce.



Figure 3.6.2 Term use of social commerce

Social network site catalyst for the existence of social commerce. So, many social network site used by consumers and entrepreneurs to introduce and sell products. Based on the analysis, Facebook recorded the highest percentage of 28% usage among respondents. Second highest is Google+ with 25% and 12.73% for Youtube. Meanwhile, Yahoo! And Twitter get the same result with 8.7%. 2.28% for Groupon, 2.09% for LinkedIn and 1.71% for MySpace. The other social network site gets 10.07% of the total. Figure 3.5 shows a percentage graph of social network site that use by respondent.



Figure 3.6.3 Social network sites

More organizations are putting forth their items or services over the Internet, as the quantity of Internet clients is becoming quickly and online advancements are enhancing (Bagdoniene & Zemblyte, 2009). The Internet offers an extensive variety of advantages for shoppers. In fact, Internet users continues to grow because of the many benefits that can be gained from shopping online. The consumers' motivation to shop online may influenced by convenience, cost saving, time saving, choice, and fun factor. Based on analysis, respondent interested to use shopping online because of more choice (31.06%). Second reason is, time saving (20.99%) and cost saving (16.83%). 15.38% is because convenient and the rest is other reason (0.62%).



Figure 3.6.4 Motivational factor to choose shopping online

## **3.7** Respondent and Settings

For this study, UUM's undergraduate and postgraduate student was selected as respondents to know their experience in social commerce platform. A pilot test was led to validate the instrument. All the questionnaires and ambiguity question had detected from feedback. Then, the changes been made to make the questionnaire more validate. The revised questionnaires were distributed to 250 undergraduate and postgraduate students in University Utara Malaysia (UUM). There were 230 returned responses, for an overall response rate of 88.8%. Five from these respondent are incomplete surveys that had to be eliminated before the data analysis. The respondent's experience and demographic data also collected. Table 3.6 shows the result.

Sample Characteristic	Results	
Canden	Male	39.13%
Gender	Female	60.87%
	20-24	32.61%
	25-30	31.74%
Age	Male Female20 - 24 25-30 31 - 35 36 - 40 Above 40Social Commerce?Less than 1 year Between 1 to 2 years Between 2 to 3 years More than 3 yearsDend in exploring socialLess than 1 hour 1 to 3 hour More than 3 hourTwitter LinkedIn Groupon MySpace Google+ Yahoo! YouTube Facebook Other (please specify)Dess shonping online?Convenient Cost saving	11.30%
	36-40	8.70%
	MaleFemale20 - 2425-3031 - 3536 - 40Above 40Less than 1 yearBetween 1 to 2 yearsBetween 2 to 3 yearsMore than 3 yearsLess than 1 hour1 to 3 hourMore than 3 hourTwitterLinkedInGrouponMySpaceGoogle+Yahoo!YouTubeFacebookOther (please specify)ConvenientCost savingTime savingMore choice	15.65%
	Less than 1 year	30.87%
How long have you used Social Commerce?	Between 1 to 2 years	16.09%
How long have you used Social Commerce?	Between 2 to 3 years	10.87%
	MaleFemale20 - 2425-3031 - 3536 - 40Above 40Less than 1 yearBetween 1 to 2 yearsBetween 2 to 3 yearsMore than 3 yearsalLess than 1 hour1 to 3 hourMore than 3 hourTwitterLinkedInGrouponMySpaceGoogle+Yahoo!YouTubeFacebookOther (please specify)ConvenientCost savingTime savingMore choice	42.17%
	Less than 1 hour	40.87%
How much time did you spend in exploring social	1 to 3 hour	36.09%
commerce?	More than 3 hour	23.04%
	Twitter	8.74%
	LinkedIn	2.09%
	Groupon	2.28%
	MySpace	1.71%
Social network sites you have used	Google+	25.28%
	Yahoo!	8.74%
	YouTube	12.73%
	Facebook	28.23%
	Other (please specify)	10.07%
	Convenient	15.38%
What motivated you to aboase shonning enline?	Cost saving	16.83%
what motivated you to choose snopping online?	Time saving	20.99%
	More choice	31.60%

	It's fun	14.55%
	Other (please specify)	0.62%
	Search engine	20.25%
	Shopping site links	10.56%
	Recommended by blog	9.69%
How do you find online shopping sites?	Recommended by friend	19.61%
	Brand office website link	11.85%
	Social Networking	27.80%
	Other (please specify)	0.21%
	Books Music	9.23%
	Music	6.74%
	Games	6.39%
	Film & TV	4.08%
	Electronic	8.70%
	Computer and offices	7.99%
What's the categories you shop or use the most?	Clothes	24.15%
	DIY & Tools and Car	2.13%
	Beauty & Personal care	12.43%
	Jewellery & Watches	6.3%
	Bill payment	6.21%
	Money transfer	5.51%
	Other (please specify)	0.71%

Table 3.6.1 Respondents' Demographic Information

## 3.7.1 Instrument of Descriptive Statistics

In this subsection, the statistical software SPSS version 16.0 is used to examine, standard deviation, mean, variance, minimum value and maximum value of each indicator. Table 3.7 outlines the descriptive statistic for all indicators.

Construct	Indicator	Ν	Minimum	Maximum	Mean	Standard Deviation
Performance	PE1	230	1	5	4.09	0.642
Expectancy	PE2	230	1	5	4.12	0.680
	PE3	230	1	5	3.97	0.753
	PE4	230	1	5	3.92	0.710

Effort Expectancy	EE1	230	1	5	3.93	0.661
	EE2	230	1	5	3.96	0.672
	EE3	230	1	5	3.93	0.736
	EE4	230	1	5	4.08	0.797
Social Influence	SI1	230	1	5	3.67	0.813
	SI2	230	1	5	3.61	0.817
	SI3	230	1	5	3.80	0.738
	SI4	230	1	5	3.65	0.826
Facilitation Condition	FC1	230	1	5	3.80	0.730
	FC 2	230	1	5	3.84	0.727
	FC3	230	1	5	3.83	0.729
	FC4	230	1	5	3.89	0.684
Social Commerce	SC1	230	1	5	3.96	0.710
Adoption	SC2	230	1	5	3.73	0.769
	SC3	230	1	5	3.67	0.772
	SC4	230	1	5	3.65	0.821
Actual Use	AU1	230	1	5	3.71	0.840
	AU2	230	1	5	3.90	0.699

Table 3.7 Descriptive Statistic for All Indicators

# CHAPTER FOUR DATA ANALYSIS AND FINDINGS

## 4.0 Overview of Chapter Four

This chapter shows the empirical findings of this study. An investigation were directed utilizing the statistical technique discussed as a part of Chapter 3. This chapter takes after the generally acknowledged reporting style of PLS investigation as proposed by past studies (Chin, 2010). First of all, the validity and reliability measurement model is surveyed. After succeeding of

evaluating the nature of the measurement model, then the structural model is approved. This section closes with a synopsis of this chapter.

### 4.1 Measurement Model Assessment

The research model for this study is examine utilizing partial least squares (PLS) strategy. Smart PLS 2.0 M3 (Ringle, Wende & Will, 2004) software is utilized to survey the estimation and structural model for this study. This measurable system surveys the psychometric properties of the estimation model and evaluations the parameters of the structural model. As examined in Chapter 4, the validity and reliability of the measurement model for this study is assessed utilizing the accompanying investigations: internal consistency reliability, indicator reliability, convergent validity and discriminant validity. The accompanying subsections show the analysis for each of the investigation used to assess the legitimacy of the measurement model for this study.

#### 4.1.1 Internal Consistency Reliability

An estimation model has adequate internal consistency reliability when the composite reliability (CR) of every developed construct the edge estimation of 0.7. Table 4.1 demonstrate that the CR value of every construct for this study ranges from 0.854 to 0.898 and this is over the prescribed limit estimation of 0.7. Consequently, the outcomes demonstrate that the things used to represent to the build have satisfactory internal consistency reliability.

Constructs	Item	Mean	Std.Dev	Loadings	<b>T</b> -statistics
Effort Expectancy	EE1	3.93	0.661	0.846	29.976
CR = 0.887	EE2	3.96	0.672	0.829	23.396
	EE3	3.93	0.736	0.857	41.018
	EE4	4.08	0.797	0.717	14.519
Performance Expectancy	PE1	4.09	0.642	0.804	22.527
CR = 0.885	PE2	4.12	0.680	0.839	27.472
----------------------------------	-----	------	-------	-------	--------
	PE3	3.97	0.753	0.781	17.978
	PE4	3.92	0.710	0.821	27.287
Social Influence	SI1	3.67	0.813	0.843	31.447
CR = 0.882	SI2	3.61	0.817	0.825	26.537
	SI3	3.80	0.738	0.752	18.274
	SI4	3.65	0.826	0.804	26.623
Facilitating Condition	FC1	3.80	0.730	0.791	14.903
CR = 0.854	FC2	3.84	0.727	0.808	22.533
	FC3	3.83	0.729	0.742	12.835
	FC4	3.89	0.684	0.737	13.674
Intention Use of Social Commerce	SC1	3.96	0.710	0.737	15.565
Adoption	SC2	3.73	0.769	0.856	33.982
CR= 0.890	SC3	3.67	0.772	0.856	32.920
	SC4	3.65	0.821	0.802	32.918
Actual Use	AU1	3.71	0.840	0.907	62.896
CR = 0.898	AU2	3.90	0.699	0.898	40.473

Table 4.1 CR, Mean, Standard deviation, Loadings and T-statistic value of each construct

## 4.1.2 Convergent Validity

In this study, by examining its average variance (AVE) value, it can assess the convergent validity. Convergent validity is sufficient when each construct has (AVE) value of no less than 0.5 or more. Table 4.2 demonstrates that all constructs have AVE extending from 0.593 to 0.815, which exceeded the suggested limit estimation of 0.5. This outcome demonstrates that the measurement model has shown a sufficient convergent validity.

Constructs	Average Extracted Variance		
	(AVE)		

Effort Expectancy	0.663
Facilitating Condition	0.593
Intention Use of Social Commerce	0.670
Performance Expectancy	0.659
Social Influence	0.651
Actual Use	0.815

Table 4.2 AVE value

## 4.1.3 Discriminant Validity

In this study, the discriminant legitimacy is surveyed by utilizing two measures: 1) Fornell and Larcker's (1981) basis, and 2) cross stacking. A measurement model has discriminant validity when 1) the square root of the AVE exceeds the correlations between the measure and all the other measures, and 2) the indicators' loadings are higher against their respective construct contrasted with different construct. (As discussed in Chapter 3).

Thus, to determine the discriminant validity, SmartPLS algorithm function is used to generate the AVE value of each construct. The square roots of AVE are calculated manually and the outcome every single square roots of AVE surpassed the off-diagonal components in their corresponding row and column. The intercorrelation value between construct represented by bolded values (Table 4.3). Hence, the outcome affirmed that the Fornell and Larker's criterion is met.

	AU	EE	FC	IU	PE	SI
AU	0.903					
EE	0.490	0.814				
FC	0.525	0.585	0.770			
IU	0.753	0.596	0.630	0.819		
PE	0.538	0.696	0.580	0.580	0.812	
SI	0.532	0.428	0.527	0.594	0.493	0.807

Table 4.3 Inter-correlation matrix

\* Square root of the AVE on the diagonal (bold)

The second evaluation of discriminant validity is to analyse the indicators' loadings regarding all construct correlations. The yield of cross loading is delivered by the SmartPLS algorithm function. Table 4.4 demonstrates the yield of cross loading in the middle of construct and indicators. Furthermore, table 4.4 additionally demonstrates that all measurement items loaded higher against their respective intended latent variable contrasted with the other variables. The table additionally showed that the loading of every block is exceed than some other block in the same rows and columns. The loading unmistakably isolates each latent variable as conjectured in the conceptual model. In this way, the cross loading yield affirmed that the second appraisals of the measurement model's discriminant validity are fulfilled. This study accordingly presumes that the measurement model has built up its discriminant validity.

	ACTUAL USE	EFFORT	FACILITATING	PERFORMANNCE	INTENTION	SOCIAL
		EXPECTANCY	CONDITION	EXPECTANCY	USE	INFLUENCE
AU1	0.907	0.411	0.434	0.469	0.699	0.525
AU2	0.898	0.476	0.515	0.503	0.660	0.434
EE1	0.421	0.846	0.456	0.578	0.494	0.345
EE2	0.429	0.829	0.460	0.561	0.450	0.306
EE3	0.413	0.857	0.509	0.537	0.547	0.388
EE4	0.332	0.717	0.479	0.601	0.439	0.351
FC1	0.392	0.365	0.791	0.386	0.450	0.455
FC2	0.414	0.472	0.808	0.425	0.473	0.366
FC3	0.415	0.528	0.742	0.556	0.553	0.391
FC4	0.394	0.430	0.737	0.414	0.461	0.414
PE1	0.434	0.536	0.502	0.804	0.481	0.439
PE2	0.447	0.606	0.493	0.839	0.497	0.392
PE3	0.402	0.548	0.409	0.781	0.371	0.359
PE4	0.458	0.569	0.469	0.821	0.511	0.405
SC1	0.506	0.508	0.559	0.544	0.737	0.389
SC2	0.584	0.556	0.535	0.490	0.856	0.573
SC3	0.591	0.460	0.489	0.415	0.856	0.476
SC4	0.759	0.435	0.489	0.458	0.820	0.492
SI1	0.417	0.316	0.469	0.404	0.493	0.843
SI2	0.421	0.303	0.460	0.400	0.472	0.825
SI3	0.471	0.411	0.352	0.412	0.487	0.752
SI4	0.407	0.351	0.420	0.373	0.461	0.804

Table 4.4 the cross loading output using SmartPLS

## 4.2 Structural Model

For structural model, this section discuss the test to access the validity of the structural model for this study. The validity of the structural model is assessed using the coefficient of determination  $(R^2)$  and path coefficients as discussed in Chapter 3.

# **4.2.1** Coefficient of Determination (**R**<sup>2</sup>)

The R2 value indicates the amount of variance in dependent variables that is explained by the independent variables. Thus, predictive ability of the structural model increased by a larger R2 values. In this study, R2 values is obtained by using SmartPLS algorithm function and the t-statistic values generated by SmartPLS bootstrapping function. The bootstrapping generated 230 cases and the result of the structural model is presented in Figure 4.1.



Figure 4.1 Results of Structural Model

Referring to Figure 4.1, intention to use social commerce and facilitating condition is able to explain 57.1% of the variance actual use of social commerce. Meanwhile, 51.1% of the variance in intention use is show by performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitation condition (FC).

# 4.2.2 Path Coefficient

Inside of the structural model, every path connecting two latent variables represented a hypothesis. In view of the analysis led on the structural model, it allows the researcher to affirm or disconfirm every speculation and also comprehend the quality of the relationship in the middle of dependent and independent variables.

Utilizing the SmartPLS algorithm output, the relationship in the middle of independent and dependent variables were analysed. Be that as it may, in SmartPLS to test the significant level, t-statistics for all paths are created utilizing the SmartPLS bootstrapping function. Based on the t-statistics yield, the critical level of every relationship is resolved. Table 4.5 listing the path coefficients, observed t-statistics, and significance level for all hypothesized path. Utilizing the outcomes from the path assessment, the acceptance or rejection of the proposed speculations is resolved. The testing of the proposed speculations is talked about in the following section.

Dependent Construct	Independent Constructs	Path Coefficient (β)	Observed T – statistics	Significanc e Level
Actual Use of Social Commerce (R <sup>2</sup> = 0.571)	<ul><li>← Intention Use</li><li>← FC</li></ul>	0.700 0.084	13.240 1.436	0.001 N.S
Intention Use (R <sup>2</sup> =0.511)	$ \begin{array}{l} \leftarrow \text{PE} \\ \leftarrow \text{EE} \\ \leftarrow \text{SI} \end{array} $	0.179 0.312 0.371	1.851 3.962 5.006	N.S 0.001 0.001

Table 4.5 Hypothesized Paths for Path coefficients, Observed T- Statistics, Significant Level

## 4.2.3 Hypotheses Testing

To approve the proposed hypotheses and the structural model, the path coefficient between two latent variables is evaluated. In view of past studies, the path coefficient value should be no less than 0.1 to record for a certain effect inside of the model (Hair, Ringle & Sarstedt, 2011; Wetzels, Odekerken-Schroder & van Oppen, 2009). Evaluation of the way coefficient (allude Table 4.6) demonstrates that every proposed hypotheses are supported, with the exception of theory H2 and H3. From the analysis, supported hypotheses are noteworthy in any event at the level of 0.05, have expected sign bearings (i.e., positive) and comprise of a way coefficient esteem ( $\beta$ ) running from 0.312 to 0.700.

	Hypotheses Statement	Result
H1	Intention use of s-commerce adoption has a significant	Supported
	positive influence on actual use of social commerce.	
H2	Facilitating conditions has a significant positive influence on	Not Supported
	actual use of social commerce.	
H3	Performance expectancy has a significant positive influence	Not Supported
	on intention use of s-commerce adoption	
H4	Effort expectancy has a significant positive influence on s-	Supported
	intention use of commerce adoption	
H5	Social influence has a significant positive influence on	Supported
	intention use of s-commerce adoption	

#### Table 4.6 Summary of Hypotheses Testing

Based on the analysis, its shows there are three significant hypotheses. H1 shows that actual use is influenced directly by intention use ( $\beta$ =0.700, t=13.240, p<0.001) and as a result, hypothesis H1 supported. Meanwhile, H4 is supported where intention use influenced by effort expectancy ( $\beta$ =0.312, t=3.962, p<0.001). Intention use is influenced by social influence ( $\beta$ =0.371, t=5.006, p<0.001) and as a result H5 is supported.

Further, actual use also influenced by facilitating condition ( $\beta$ =0.084, t=1.436, not significant) and hypothesis H2 are not supported. While, intention use influenced by performance expectancy ( $\beta$ =0.179, t=1.851, not supported) and as a result, hypothesis H3 is not supported

# CHAPTER FIVE DISCUSSION OF RESULTS

#### 5.0 Overview of Chapter Five

This chapter gives a summary of the hypothesis in relation with the findings got from the data analysis introduced in Chapter Four. The discussion of the hypotheses are presented based on the three research questions delineated in Chapter One. This part likewise examine the findings of this study in the light of existing writing. This chapter reports the consistency of the research findings with past studies. This chapter closes with a synopsis of the section.

## 5.1 Discussion of the Survey Findings

In this section, the findings of the Web survey are exhibited as per the basic research questions. The outcomes are analysed and compared and related past studies.

In this study, intention to use social commerce emerged as the strongest predictor to positively influenced actual use of social commerce ( $\beta$ =0.700, t=13.240, p<0.001). Based on Theory of Reasoned Action (TRA), it suggested that the intention to use an IS the best predictor of actual behaviour. A number of studies in the IS literature have confirmed this assumption (Davis, 1989; Venkatesh, 2003; Taylor and Todd, 1995). Hence, the finding of this research supports the first hypothesis where consumer's intention to use social commerce has positive influence on actual use of social commerce.

In addition to that, the finding of this study demonstrated that consumer's intention to use social commerce is significantly influenced by performance expectancy ( $\beta$ =0.312, t=3.962, p<0.001) and social influence  $\beta$ =0.371, t=5.006, p<0.001). Effort expectancy in UTAUT refers to the ease of use associated with using the system. Perceived ease of use emphasizes a person's belief that

using a particular system does not demand extra effort. Based on Davis (1989), he asserted that an application perceived to be easier to use than another is more likely to be accepted by users. Consistency from Venkatesh (2003), the component is relevant for considering the actual use of social commerce. Hence, it shows that s-commerce is an e-commerce platform that is easy to use. It does not required special skills or additional training to operate the system.

Meanwhile, Social Influence (SI), refers to how one perceives that persons who are important to someone encourage the use of the system. Based on UTAUT, individual behaviours are influenced by their perception on how others view them when using the system. So, it is shows that positive social environment within the online consumer's community can influence consumer's decision to adoption an information system (i.e., s-commerce). The effect of social influence on intention use social commerce has been shown to be significant in several previous acceptance studies ( $\beta$ =0.371, t=5.006, p<0.001). Hence, it demonstrated that in the context of this study, social influence do support consumer's decision to adopt s-commerce. The online interactions among users will create user's behaviour to adopt s-commerce platform. Thus, the result of this study supports the proposed hypothesis where, social influence has a significant positive influence on use of s-commerce adoption.

However, in this study performance expectancy did not receive enough statistical support. Based on the research findings, performance expectancy does not influenced consumer's decision to adopt s-commerce ( $\beta$ =0.179, t=1.851, not supported). According to UTAUT, performance expectancy refers to the concept of which system helps the user to get a better performance in using the information system. Based on the result study, it shows that performance expectancy is not significant factors to have an effect on intention. This result implies that respondent is not concerned with the view or interface of information systems but, more satisfaction in purchasing. For example, users do not need additional skills to use social network. This is because the system design is easily understood by user. According to Hashim et.al (2015), within s-commerce, consumers not only participate in commerce transactions but also share their experiences and thoughts (i.e. satisfaction, dissatisfaction) with other consumers on certain products or services. Positive experience gained from using the platform can leads to consumer consumption behaviour (To, 2007). Satisfaction is predicted primarily according to consumer confirmation of expectations based on their experiences and secondarily by the perceived usefulness from the initial use of an information system [Chang et al. 2005].

The results also showed Facilitation Condition did not have a significant direct to actual use of social commerce ( $\beta$ =0.084, t=1.436, not significant). Sometimes in UTAUT model, there are relationship that are hypothesised to not exist. Thus, researchers investigated and the findings are in some cases in clash with the expectations of the UTAUT model. In view of Venkatesh et.al (2003), the UTAUT model do exclude an impact of facilitating conditions on behavioural intention since it is required to be non-significant one both performance expectancy and effort expectancy are included. A few studies affirm this (Al-Qahtani et al. 2007; Im et al. 2011; Nassoura, 2012; Wang & Shih 2009), yet Jairak et al. (2009) report a constructive outcome of facilitating conditions.

## 5.2 Research Contribution

Generally, these studies provide theoretical and practical contributions. Here is an explanation of the contribution:

## 5.3 Theoretical Contributions

In the main, this paper has made contributions to research by further clarifying the qualities of social commerce and the determinants of this continuous intention in online shopping. The theoretical contributions are introduced as beneath:

First, the introduction of Web 2.0 in 2005, have created new business model along with the digital economy. Capabilities of Web 2.0 or social commerce, have create new channels such as blogs, social networks, social media and communities and had increase possibilities of communication among customers. This development has changed the business model such as B2B and C2C become better (Hajli, 2012).

Second, as the main contribution of the study, the result shows that effort expectancy has a significant impact on intention use of social commerce. Effort Expectancy, which consists of the perceived ease of use factor derived from TAM, is an important factor in the acceptance of IS. Derived from TAM, effort expectancy is consists of the perceived ease of use factor which important factor in the acceptance of IS. Based on Davis (1989), perceived ease of use refers to "the degree to which a person believes that using a particular system would be free of effort". In TAM, the comparing variable of perceived ease of use to internal constraints, for example, the match between the individual's capabilities and the abilities needed by the system. Along these lines, effort expectancy shows that an application perceived to be simpler to use than another is more inclined to arouse positive intentions among the user (Pahnila et.al, 2011).

Third, the result shows the effect of social influence on intention use of social commerce is significant. Consistent with previous UTAUT research (Venkatesh et.al, 2003), this study believe that users create their behaviour based in interaction with each other. To be more precise, Venkatesh et al. (2003) found that social influences are more likely to be salient to older people who in the early stages of experience, particularly women.

## 5.4 Practical Contributions

This study has also given contribution from the aspect of practical which imperative direction to business online entrepreneur or retailers. Overall, the findings of this study can help entrepreneurs who do business online to understand 1: what is the main factor when users do online shopping, 2) how to encourage users to shop in s-commerce websites like Facebook, 3) Which of social commerce's platform that mostly use by user to do online shopping. It is important to have a clear understanding of what and how these determinants influenced social commerce intention to help business entrepreneurs as a reference.

#### 5.5 Limitation

This research paper contains a few limitations that hindered the ability to sum up the after effect of the project. The sampling frame for this study was made up of university students in UUM. Therefore, the findings of this study were unable to be generalised to all online shoppers in Malaysia. Thus, using students as a surrogate may cause bias in the results (Pahnila, 2011). Remus (1986) suggests that it is more acceptable to use a student population in studies relating to general issues, but not when examining specific issues, because the experience, expertise, or education level of students may bring into question the external validity and generalization of the results. Hajli (2011) said that, it could be that students prioritize different issues relating to, for example, effort expectancy, and perceived expectancy. Consequently, it is exceptionally prescribed that future research might develop the geographical area so as to get a more far reaching view on social commerce. There may be numerous different issues influencing social commerce adoption, for example, social presence, and user experience, the perceived ease of use, social shopping, social marketing and social advertising. These construct can be added to research model and may be essential to social commerce. Furthermore, data collection activities related to social commerce is just using Facebook. There are other social media that can be used to collect data such as Instagram, Tweeter, and Pinterest, Google +, LinkedIn and others.

## 5.6 Conclusion

This study identifies and evaluate the determinant factors that influence actual use of social commerce within online shopping. To achieve the objective, a Web survey is embraced to assemble field information from UUM's postgraduate and undergraduate student.

The study conduct a literature review and regard the theories used in related topic. From the reviews, three research question are derived; five research hypotheses generated, and a research model created.

The research model is significant in that it explains 42% in intention within actual use of social commerce, 19% of user felt that effort expectancy is important while using social commerce and 23% of users are effected by social influence when using social commerce. While, only 5% of user believe in the importance of facilitation condition and 11% in performance expectancy. Furthermore, three out of five path in the research model are found to be significant.

Based on the research finding, social commerce adoption intention is influenced by their level of effort expectancy, performance expectancy and social influence. While, actual use of social commerce is influenced by facilitation condition. From the result, it shows that level of effort expectancy and social influence have mediated significantly levels of intention. Whereas, performance expectancy not give significant impact on social commerce adoption intention and facilitation condition also were found not have significant result on actual use of social commerce.

This study has significant theoretical and practical implications. From a theoretical perspective, this study gives a theoretical framework to look at the determinants of social commerce aim inside web shopping. The theoretical sharing lies in amplifying the present data frameworks persistent utilization model theoretical framework. Two constructs (i.e., effort expectancy and social influence) are exhibited to intercede the relationship between actual use of social commerce and social commerce intention significantly.

From a practical perspective, this study give a critical direction to business on the web. In general the findings of this study can help business entrepreneurs who do business online to understand 1: what is the main factor when users do online shopping, 2) how to encourage users to shop in s-commerce websites like Facebook, 3) Which of social commerce's platform that mostly use by user to do online shopping. It is important to have a clear understanding of what and how these determinants influenced social commerce intention to help business entrepreneurs as a reference. This is because, they must have a knowledge about customers' idea or opinion regarding product or services. In addition, it also give the opportunities for the buyers to share their thoughts and recommendations in co-making the product in which they are interested.

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