Beyond Liking And Sharing:
An Examination Of Consumers' Intentions To
Use Facebook For Search And Evaluation

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Use Facebook For Search And Evaluation

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DECLARATION

I hereby declare that:

(1) This MKMA25106 Research Project is the end result of my own work and due acknowledgement has been given in the references to all sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualifications of this or any other university, or other institutes of learning.

(3) The word count of this research project is 19,968.

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ABSTRACT

BEYOND LIKING AND SHARING: AN EXAMINATION OF CONSUMERS' INTENTIONS TO USE FACEBOOK FOR SEARCH AND EVALUATION

Lim Wun Pei

The proliferation of information technology and the Internet has radically changed the way organisations and individuals communicate and interact with each other, not just in business transactions but also in their daily personal interactions. From the introduction of the early web browsers in the mid 1990's to the revolution enabled by Web 2.0 technologies, the growth of social media and online social networking has been nothing short of phenomenal, with the world's most popular site, Facebook, registering its 1 billionth user in September 2012. The Internet has long been recognised and used as an effective and efficient marketing communication and distribution channel. From the way and speed at which social media and social networking sites have been embraced by the online population, social channels' potential is undeniable.

This study sought to identify how the social platform may be effectively used, by examining the propensity of consumers to use social networking sites for two of the stages in the consumer decision making process, i.e. information search and evaluation of alternatives, for which the Internet has been the most efficient and effective vehicle through search engines like Google, Yahoo, Bing and many more.

This study utilised an adaptation of the robust Technology Acceptance Model and focused on the influence of subjective norm or social influence on perceived usefulness (PU); the influence of accessibility to Facebook on perceived ease of

use (PEOU); and the influence of PU and PEOU on intentions to use Facebook for search and evaluation which was hypothesised to be moderated by Facebook usage intensity. A survey sampled from the Facebook population in Malaysia elicited 406 responses. Results from statistical procedures supported the hypotheses proposed, that is there is significant influence of the variables examined on the consumers' intentions to use Facebook for search and evaluation. However, moderation from Facebook usage intensity between PU and PEOU to intentions to use Facebook for search and evaluation was not supported.

CHAPTER 1

INTRODUCTION

1.0   INTRODUCTION

This chapter describes the outline and scope of the study on the influence of social technologies on users' behaviour intentions to use social technologies which may ultimately influence their purchase intentions. This chapter will discuss the background of the area of study, the research objectives and also the expected contribution of this study to existing academic literature.

1.1   BACKGROUND OF THE STUDY

1.1.1   The Internet

With the proliferation of information and communication technology (ICT) in our daily lives, organisations can no longer ignore the way technology has changed how business is being conducted, and more importantly how their customers have embraced technology and demand the same and more from their suppliers. The technological advances coupled with declining costs and increasing availability of communications infrastructure and especially the internet has made ICT such an intricate and indispensible part of modern living.

Internet usage has grown by leaps and bounds since the mid 1990's when the early web browsers first opened up a whole new world to ordinary users. This phenomenon was further fuelled in recent years with the pervasive growth of mobile technology and corresponding infrastructure.   Prior to this, the internet was the exclusive domain of the scientific and research community.

Data compiled by the International Telecommunication Union (ITU), an agency of the United Nations, indicated that worldwide internet usage has tripled over the last decade (ITU, 2013). Figure 1 below shows that developed countries charted the highest growth rate at 76.8 per 100 inhabitants, while the overall world growth rate was at 38.8 per 100 inhabitants. The developing countries are also hot at the heels, charting a rate of 30.7 per 100 inhabitants.

In line with the global trends, Malaysia's internet usage as indicated by the broadband penetration rate has also grown 10 fold from merely 1.8% in 2005 to 21.6% in 2012 as shown in Table 1.

Figure 1 – Internet users per 100 inhabitants, 2001-2013
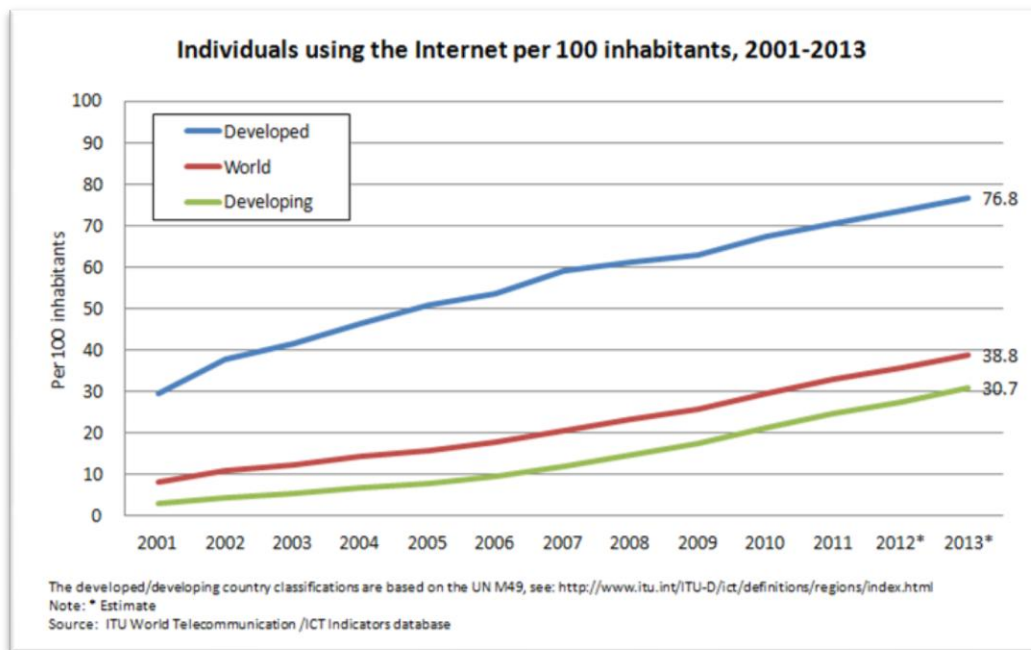
Note. From ITU (2013). *ICT data & statistics*. Retrieved April 15, 2012, from International Telecommunications Union : http://www.itu.int/en/ITU-D/Statistics

The term broadband refers to any form of high-speed Internet access that carries several types of data, i.e. voice, data and video, over a variety of networks including cable or wireless networks like 3G, 4G, WiMax, WiFi, satellite, etc. (Mitchell, 2013). In addition, mobile technologies delivered through smart phones and tablets are providing internet on-the-go, allowing people to be constantly connected. Broadband and mobile access is providing the

impetus to spur the delivery of the internet and the ensuring technologies and services to more and more people.

Table 1: Malaysia Broadband (Internet) Penetration Rate

Year	Population (million)	Broadband Penetration Per 100 Inhabitants (%)
2005	26.38	1.8
2006	26.91	2.8
2007	27.45	4.1
2008	28.02	6.1
2009	28.61	9.2
2010	28.40	16.6
2011	28.70	19.4
2012	29.00	21.7

Note. Adapted from MCMC (2012). *Communications & multimedia: Pocket book of statistics Q4.* Retrieved June 2013, from MCMC: http://www.skmm.gov.my/Resources/Statistics.aspx; &
MCMC. (2010). *Communications & multimedia: Some facts & figures Q4.* Retrieved June 2, 2013, from MCMC: http://www.skmm.gov.my/Resources/Statistics.aspx

Figure 2: Global mobile subscriptions, total per 100 inhabitants, 2001-2013
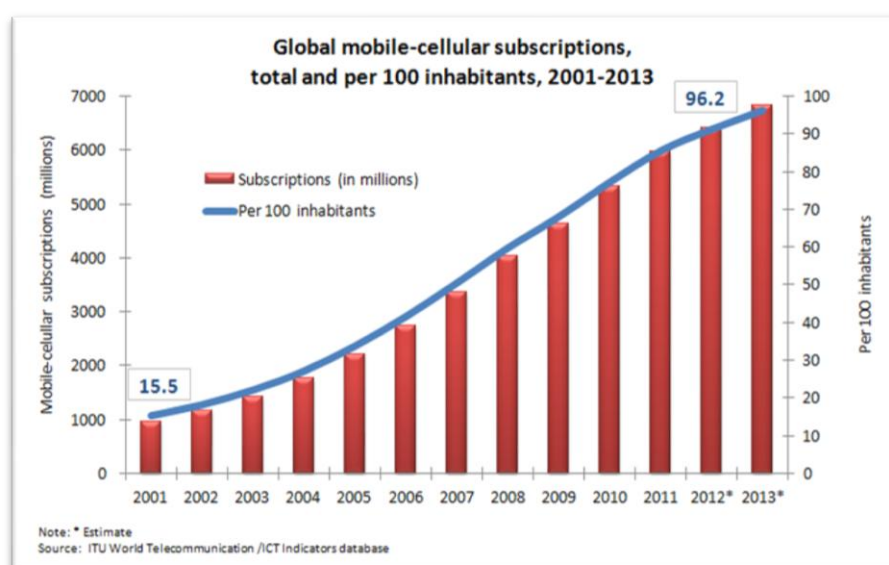
Note. From ITU (2013). *ICT data & statistics.* Retrieved April 15, 2012, from International Telecommunications Union : http://www.itu.int/en/ITU-D/Statistics

Figure 2 above shows that the global mobile subscriptions have also increased by more than 5 times from 15.5 subscriptions per 100 inhabitants in 2001 to an estimated 96.2 per 100 inhabitants in 2013.

1.1.2 Social media and social networking sites

The continued rise in the availability and uptake of ICT hardware and infrastructure has certainly been a major driving force that fuelled the development of the software technologies that has enabled people to connect and communicate more easily.

Social media and social networking sites are largely responsible for the explosion of content on the Internet, allowing anyone who has an internet connection to create and share ideas and information freely and easily. What is the difference between the two, if any?

Social media is generally understood among practitioners to be the tools and communication channels used to transmit or share information with a broad audience (Hartshorn, 2010; Stokes, 2011). Hartshorn differentiated social networking as the act of engaging, creating connections, having conversations, sharing and building relationships with groups of people or communities. The academics described social media as a strategy and outlet for broadcasting and social networking a utility for connecting with others (Cohen & Toleman, 2006). Both fall under Web 2.0, the web technology that essentially reshaped how we all use the Internet today. According to Kaplan and Haelein (2010), the term Web 2.0 was first used in 2004 to describe the way that the World Wide Web was used as a platform where content was continuously being created, published and modified by all users in a participatory and collaborative manner. Kaplan and Haelein (2010, p.61) summised that social media was "a group of internet-based applications built on ideological and tecnological foundations of Web 2.0 that allow the creation and exchange of User Generated Content" .

For the purpose of this study, the distinction between the terms social media and social networking is not of great importance as our focus which is Facebook, essentially straddles both categories. An individual user may use Facebook to connect and stay in touch with their network of friends (social networking); and may also use it as a medium (social media) to reach propects and customers, for example to promote or sell their products or services.

1.1.3 Growth and reach

Many organizations have already realised that having a presence on the internet was essential if they are to remain relevant to their customers. Many have already embarked on the journey, creating and maintaining at least a corporate web site. Marketers have also long recognised that digital channels are not only more cost effective but are increasingly more effective than traditional media channels used to promote or build their brands.

The Hong Kong based Asia Pacific Digital Marketing Association (ADMA) in its latest release of its 2012 Yearbook, a compilation of the Asia Pacific's statistics of web and mobile usage, continued to report an upward trend. The region has reached 1.066 billion online users, almost 46% of the world total with 623 million accessing the internet through mobile devices, in line with the accessibility to better infrastructure like 3G, 4G and other high speed broadband networks and also cheaper smart phones.

Social media continues to gain importance among internet users, with most of the countries in the report charting 85% and above of the online population engaging in social networking. The exceptions were China at 53% and Japan at 58%. Malaysia was among the top social networking nations at 94% of the online population (ADMA, 2012). ADMA also reported that 60% of social networkers agreed that social networks are a good place to learn about brands. The opportunity for marketers to build brand awareness, create brand preference, make sales, provide service and build customer relationships is certainly promising.

The overall reach of social networking sites (number of users over the total online population) for the Asia Pacific region is at 72.2% with Facebook at the top at 25.7%, followed by China's QQ.com, Pengyou, Sina Weibo and others. In Malaysia, the reach of social networking sites was at 94.2%, with Facebook and Twitter topping at 87.3% and 15.3% respectively. ADMA (2012) quoted Nielsen's findings that almost 60% of online Malaysians reported that they have connected or interacted with brands, products or organisations through social media, with 77% having discussed or posted brands or products reviews and 94% having read others' comments.

All these data suggests that social networking and social media are not just some nice to have fad that will be yesterday's news, but rather an important means for individuals and

corporations, not just for communication but to stay connected and engaged with friends, customers, prospects and more importantly advocates.

A twist on Abraham Lincoln's famous quote aptly describes SM: A social media of the people, by the people, for the people shall not perish from this Earth. Social media is people driven. The speed with which this phenomenon has gathered strength should cast off any lingering doubts that this is just another passing fad. Figure 3 shows the time it took for each technology to gain 50 million users. It took the telephone 75 years, the radio 38 and the television 13, the World Wide Web 4 and Facebook 3.5 years. Facebook reached its billion user mark in September 2012 (Fowler, 2012), just 8.5 years since it was founded in February 2004. The rate of growth is now even faster with Facebook games Draw Something and Angry Birds gaining their 50 million users in a matter of days - 50 and 35 days respectively!

Figure 3: Reaching 50 million users
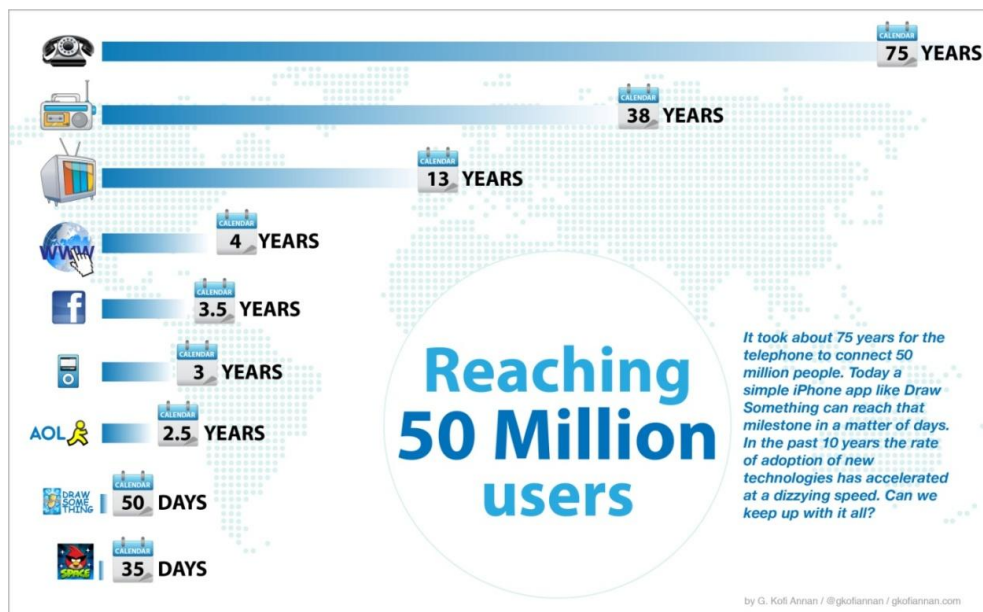
Note. From Annan, G. (2012). *Reaching 50 million users*. Retrieved Dec 23, 2013, from Visual.ly: http://visual.ly/reaching-50-million-users

It is no longer a question of whether a business should do social media, but rather how well they do it. Social media is no longer just a fad, it has become a fundamental shift in the way people communicate (Qualman, 2013).

Social media is a unique extension of word-of mouth communication, but different in magnitude – being able to reach thousands over a short period of time. It limits the control a company has over the content and dissemination of information (Mangold & Faulds, 2009). The speed with which social media enables communication to spread allows word-of-mouth to become "world-of-mouth" in a matter of hours instead of days or weeks.

Social media should be embraced and integrated as part of an integrated marketing communication in the promotion mix. Besides that, it is also becoming increasingly important in fostering and maintaining customer interactions and relationships. Some recent successes documented are Obama's successful presidency campaign was mainly driven by social media (Qualman, 2013); Old Spice sales increased by 27% year on year, reaching up to 107% in the final month of their social media marketing campaign and is the number 1 body wash brand for men in the USA (Fisher, 2011).

Libert (2010), in his book Social Nation, mentioned that globalization had resulted in products and services becoming commoditized over time. The only enduring source of "value" for businesses was their communities of people. More and more organizations are recognizing that they can no longer ignore social media if they are to compete and prosper and indeed to survive. Qualman (2013) highlighted that in 10 years, over 40% of the Fortune 500 companies will no longer be here.

A longitudinal study from 2007 by Dr. Nora Ganim Barnes and her associates of the University of Massachusetts Dartmouth on social media adoption by America's most successful organizations showed that the largest companies (Fortune 500) and the fastest growing companies (Inc 500) are all continuing to show up-trends in investment and usage of various social media tools like blogging, podcasting, online video, social networking and wikis (Barnes & Mattson, 2007; Barnes & Andonian, 2010, 2012; Barnes, Lescault & Andonian, 2013; Barnes & Lescault, 2012, 2013a; Barnes, Lescault & Wright, 2013). In their report on the 2013 Fortune 500 companies, Barnes, Lescault & Wright. (2013) also highlighted that the companies are not only increasing their uptake of existing tools but are also showing interest in experimenting with new tools like Google+, Instagram, Foursquare and Pinterest.

The Inc500 companies were the most enthusiastic, with the Fortune 500 companies being a bit slower, but fast coming on board. 92% of the Inc 500 companies used social media to market their brands (Barnes & Lescault, 2013a).

1.2   PROBLEM STATEMENT

Businesses today have access to many channels of reaching its market audiences. Past research on the use of information technology (IT) in its various forms has provided sufficient evidence supporting the value of technology adoption in businesses especially in the specific areas of operations like sales, accounting and production. Recent work focussing on the internet, the World Wide Web, social media and social networking has indicated that there are benefits in the use of these new media compared to traditional media in marketing communication, cost savings or even higher customer conversions (Fisher, 2011).

Literature on IT adoption in developing countries, particularly in the Malaysian context, has mainly been on the use of IT as a platform for product and service delivery. Since the Malaysian Government initiated the Multimedia Super Corridor (MSC) program 17 years ago in 1996 to transform Malaysia into a knowledge economy (NITC, 2012), much effort and investments especially in the ICT infrastructure has not only helped changed the landscape of competition for many businesses but also the way individuals interact and communicate in their daily lives.

The extent to which these efforts have actually benefitted the business community either directly or indirectly is still an on going question. Much of the research done even by the Malaysian Communications and Multimedia Commission (MCMC), a government agency charged with overseeing the national ICT initiatives had focused mainly on infrastructure development and penetration. There is however, a lack of literature addressing the outcome of all these initiatives and efforts in relation to specific applications, media or human capital; or their effects on the hard values like revenues, profits and return on investments. The Internet has also seen rapid development of the use of social technologies (social media and social networking sites) spurred on by the Web 2.0 and mobile technologies.

In recent years the interest among academics on social technologies has also increased especially in relation to social and education settings (Boyd & Hargittai, 2010; Ellison, Steinfield & Lampe, 2007; Hewitt & Forte, 2006), with more recent interest on consumer behaviour (Ayeh, Au & Law, 2013; Lee, Xiong & Hu, 2012; See, Khalil & Ameen, 2012). The professional and commercial community's focus is mainly on quantifying the brand exposure and awareness. This study seeks to add to academic literature in examining how social technologies may influence the consumers' buying process. The questions that this work seeks to answer are:

i) Will consumers use social technologies for search and evaluation in the consumer buying process?

ii) What factors influence the use of social technologies in the buying process?

1.3   RESEARCH OBJECTIVES

The buzz in the cyber community had undoubtedly been on social media. The enthusiasm and success obtained from individual users and organisations are indisputable.

ADMA (2012) reported that 90% of online Malaysians visit social media sites and as many as 60% are connected or have interacted with brands, products or companies through social media. More and more businesses from individuals selling their homemade cookies to large corporations like McDonald's, Nestle and others are jumping in on the bandwagon, recognising that this channel holds wide potential. There are over 15 million business, companies and organisations with Facebook pages, with 2 million new pages in just 3 months from December 2012 to March 2013 (Kotsier, 2013). This is not surprising as businesses will naturally go to where the people are.

The research objectives for this study are therefore:

iii) To examine consumers intentions to use social technologies for search and evaluation in the consumer buying process.

iv) To examine the factors that influence the use of social technologies in the buying process which may eventually impact their buying decisions of a brand, product or service.

For the purpose of this study, the focus will be on the world's most popular social networking site Facebook.com, currently with over 1 billion registered users.

1.4   SIGNIFICANCE OF STUDY

It is hoped that this study will offer a better insight to businesses looking to leverage social media, in particular Facebook, as part of their marketing mix by providing an indication of where and how they may best focus their efforts for maximum returns. Social media, unlike traditional communication media, is user-generated. Marketers no longer have control over what is being discussed and communicated among consumers and prospects, so they need to understand the community and tailor their social interactions accordingly.

Researchers' interest in social media and online social networking has also increase, with many recent studies mainly in the areas of its use in communication, learning and privacy issues. There was hardly any study found by the researcher that utilised the Technology Acceptance Model to examine consumer behavioural intentions as proposed by the five stage buying process.

1.5   ORGANISATION OF STUDY

This study is organised into five chapters. Chapter 1 describes the outline and scope of the study and discusses the background of the area of study, the research objectives and the expected contribution of the study. Chapter 2 discusses the existing literature on technology use and adoption, focusing on recent developments especially of social technologies, its influences and benefits in operations, business value and performance and the theoretical framework to be used in this study. Chapter 3 describes the proposed research methodology to be used along with the detail variables that will be used for this study. Chapter 4 discusses the empirical techniques used in the analysis of the data collected and interpretation of the results. Lastly, Chapter 5 summarises the findings with discussions on the implications of the study, the limitations of the study and offer suggestions for future investigations.

CHAPTER 2

LITERATURE REVIEW

2.0   INTRODUCTION

This chapter reviews literature on existing research done on technology use and adoption, focusing on recent developments on social technologies, its influences and benefits in business operations as well as the values and returns that may be obtained. This chapter will also discuss the theoretical foundation from past research that serves as the guidelines to the development of the research framework and hypotheses in this study.

2.1   ONLINE SOCIAL NETWORKS

Boyd and Ellison (2008) defined online social network sites as web-based services that allow individuals to create a public or semi-public profile in a system, view and interact with other users of that systen that share connections with them.

The types of such connections vary between different sites from general interest sites like Facebook, Google+ or MySpace to those that cater to specific interests like movies (e.g. Flixster), sports (e.g. Athlinks), investing/finance (e.g. eToro) , travel (e.g. TravBuddy.com), community (e.g. WeeWorld – for teenagers, CafeMom) or country/language (e.g. Qzone – China), with others catering to professional groups like Academia.edu (academic and research), LinkedIn (business and professional).

A brief history

The concept of online social networking is not new. In 1997, one of the first social network sites, SixDegrees.com was launched and lasted only until year 2000 (Gross & Acquisti, 2005). According to Boyd and Ellison (2008), since the launch of SixDegree.com, many other sites

like Friendster, Flickr, MySpace, etc., followed throughout the late 1990's and early 2000's. Of the many social networking sites that had come and some gone; and likely with more in the coming days, Facebook has been the clear leader since its inception in February 2004 charting phenomenal growth in users – 100 million just 6 months later in August 2008 (Zuckerberg, 2008); 500 million by July 2010 (Zuckerberg, 2010) and recently topped the 1 billionth mark on 14 September 2012 (Fowler, 2012).

2.1.1 Facebook

Facebook has been rated the most popular social networking site ahead of Twitter, LinkedIn, Pimterest and MySpace (eBizMBA, 2013). In Malaysia, Facebook also came up on top with 10.304 million unique visitors, about 87.3% of total online users with Twitter a distant second with 1.807 million visitors (ADMA, 2012). Facebook's popularity extends beyond its technology platform. As a newly inducted Fortune 500 company in 2013, it has already garnered the highest number of Facebook fans and Twitter followers ahead of other popular brands (Barnes et al., 2013). For the marketers, Facebook's immense database (of more than 1 billion users) can be "a crystal ball for future consumer intentions" (Casteleyn, Mottart & Rutten, 2009).

Table 2 below shows some of Facebook's statistics taken from its own Facebook profile page (Facebook, 2013). With strong double digit growth, there is a strong indication that Facebook's journey still has a long way to go. The next platform that will help sustain Facebook's popularity will likely be the mobile devices as indicated by a strong 54% increase. Businesses are also getting in on the action with twice the number of local businesses creating their own profile pages in addition to more spent on Facebook advertising.

Facebook's ability to sustain its continued growth is that people can do almost all, if not everything that they want without having to go to different sites. By opening up its platform to the developer community, Facebook has been able to leverage the wealth of creativity and speed up its growth in popularity. Its opennes help confirm its pole position among the social players and makes it a logical starting point for our study into social media.

Table 2: Facebook statistics – March 2012 / 2013

	%	2013	2012
Monthly active users	+23	1.11 billion	901 million
Mobile monthly active users	+54	751 million	488 million
Daily active users	+26	665 million	526 million
Local business pages	+100	16 million	8 million
Ad revenues (USD)-Qtr 1	+43	1.25 billion	872 million

Note. Adapted from Facebook. (2013, May 18). *Facebook growth in the past year*. Retrieved June 17, 2013, from Facebook.com:
https://www.facebook.com/media/set/?set=a.10151908376636729.1073741825.20531316728&type=1

Growing interest among researchers

The success of social media and social networking sites has attracted the attention of the industry professionals, media and also researchers with much statistics being compiled and studies done on a variety of themes. As surmised from Table 3 below, academic research done on social media and social networking sites had focused mainly in communication, learning and issues related to its use. More recent work by Ayeh et al. (2013), Lee et al. (2012) and See et al. (2012) have started looking into the influences on consumer and purchasing behaviour.

Social media as a communication channel is still evolving with the technology providers are still actively enhancing the applications, features and infrastructure to enable ever more usability and accessibility. With growing interest of this as a communication and marketing tool, it is likely that the body of research on this subject will continue to grow.

Table 3: Academic research done on social media and

social networking sites

Research area	Source
Identity, self presentation and privacy concerns	(Gross & Acquisti, 2005) (Aquisti & Gross, 2006) (Young & Quan-Haase, 2009) (Boyd & Hargittai, 2010)
Student-instructor relationships, student perceptions of instructor presence and self disclosure	(Hewitt & Forte, 2006) (Mazer, Murphy & Simonds, 2007) (Mazer, Murphy & Simonds, 2009)
Trust, intimacy, public self representation	(Boyd, 2003) (Donath & Boyd, 2004)
Development and maintenance of community relationships and social capital	(Ellison et al., 2007) (Kane, Fichman, Gallaugher & Glaser, 2009)
Influence of user generated content on consumer behaviour and purchasing intentions	(Lee et al., 2012) (See et al., 2012) (Ayeh et al., 2013)
Influence of network externalities and motivation on use of social networking sites; users' motives for adoption	(Lin & Lu, 2011) (Pai & Arnott, 2013)
Impact of social networking sites on political change	(Attia, Aziz, Friedman & Elhusseiny, 2011)

2.1.2 Who are the users?

Table 4 summarises Asia Pacific's Facebook users. The figure for China is low because Facebook has been blocked in China since 2009 (Bass, 2009). Also the usage is generally low where English is not widely used and the local social networking sites are more popular, such as in Japan, South Korea and Vietnam.

Table 4: Asia Pacific's Facebook users 2012

Country	Number of internet users (million)	Number of Facebook users (million)	Facebook penetration rate (%)
Australia	19.554	10.721	54.8
China	513.100	0.447	0.1
Hong Kong	4.894	3.752	76.7
India	121.000	45.048	37.2
Indonesia	55.000	43.524	79.1
Japan	101.228	7.684	7.6
South Korea	40.329	6.376	15.8
Malaysia	17.723	12.366	70.2
New Zealand	3.625	2.102	58.0
Philippines	29.700	27.724	93.3
Singapore	3.658	2.603	71.1
Taiwan	16.147	11.878	73.6
Thailand	18.310	14.236	77.7
Vietnam	30.516	3.173	10.4

Note. Adapted from ADMA (2012). *Asia Pacific Digital Marketing Yearbook.* Hong Kong: Asia Pacific Marketing Association.

According to ADMA (2012), of the 17.7 million individuals in Malaysia with access to the internet, 12.4 million of them or over 70% are Facebook users. Three quarters of the social networkers were in some form of employment (full-time, part-time, freelance or self-employed) which may be an indication that their online activities may perhaps be a natural extension of their physical social network either for work or play. Also, the younger age group (less than 34 years) makes up the majority of Facebook users at 80%, with the remaining 20% from ages between 35 right up to above 65 years of age (Socialbakers, 2013). Malaysian Facebook users are one of the most enthusiastic users, having the highest number of social media friends at an average of 233 according to We Are Social (as cited in ADMA, 2012). Such user demographics points to great potential for marketers to use the social platforms as part of their comminication mix.

2.1.3   What people do on social networking sites

One of the reasons why social networking sites are so popular is because of the ease with which interactions and content is being created and shared actively and publicly among the users. Web 2.0 may be the technological foundation and User Generated Content (UGC) may be deemed the sum of all the ways in which people make use of social media. (Kaplan & Haelein, 2010).

The Organisation for Economic Co-operation and Development (OECD, 2007) specified that UGC should have several attributes. Firstly, the content should be accessible publicly over the Internet. Secondly, the content should be created and not copied or forwarded by the person or organisation posting the content. Finally, the content should not be professionally created advertisements.

Extracts of ADMA 2012 Yearbook gives a summary of the variety of reasons why individual internet users in Asia Pacific and Malaysia (Table 5) use online social networks. The statistics provided an insight into the online social networking behaviour of individual users but there is clear potential for business and brand interaction within some of the activities highlighted in the table. Malaysian users' online social networking behaviour also appeared to be in line with the users of the Asia Pacific region.

Table 5: Why Internet Users Social Network

Motivation	% of Asia Pacific Users	% of Malaysia Users
Research for work	1.62	1.73
Networking for work	2.28	2.79
Education	0.99	1.46
Stay in touch with friends	17.01	25.4
Update my friends with my life	4.49	8.25
Meet new people	5.76	3.06
Promote something	0.45	2.26
Entertainment	3.02	2.40
Research/find products to buy	0.70	0.53
Share my opinion	1.72	1.73
Share content	3.04	5.19
Find music	0.57	0.93
Stay up to date on news/events	2.12	1.60

Motivation	% of Asia Pacific Users	% of Malaysia Users
Research how to do things	0.71	0.93
Organise my life	0.80	0.27
Express myself	2.63	1.86
Take on a different personality	0.36	0.13
Fill up spare time	2.58	5.32
I feel like I have to	0.60	2.13
To talk about brands/products	0.31	0.66

Note. Adapted from ADMA (2012). *Asia Pacific Digital Marketing Yearbook.* Hong Kong: Asia Pacific Marketing Association.

Much like the individual users, businesses can also benefit from the network of friends or fans in social networking sites and the value to be obtained is likely to be more tangible – brand image, customers, revenues or profits. Social media allows businesses to engage and build relationships with customers and prospects on a more personal level as the content is deemed to be more trustworthy than traditional marketing media like advertisements.

Although many agreed that there is definitely business value to be obtained by being a social business, measuring this value is neither simple nor straight forward task and many are still struggling with trying to quantify this. In spite of the difficulties in managing and measuring the business value and benefits, the number of business, companies and organisations with Facebook pages grew to over 15 million in 2013 (Kotsier, 2013).

America's largest Fortune 500 and fastest growing Inc 500 companies has long recognised that they really must get into the social scene (Barnes & Mattson, 2007; Barnes & Andonian, 2010, 2012; Barnes, Lescault & Andonian, 2013; Barnes & Lescault, 2012, 2013a; Barnes Lescault & Wright, 2013). The tools they use may have changed since Dr Barnes and her team started documenting them in 2007, but all indications are that the world's top companies are realising the returns on their investments in social media.

The rules of the game has changed. Marketing communication used to be the marketers one-way communication tool to inform and influence consumers. In the social landscape, the company is on equal terms with other social networking sites users. Consumers are turning away from traditional sources of information. They are looking to social media for information searches and even purchasing decisions. They trust recommendations from their

online friends more than corporate sponsored communication. Mangold & Faulds (2009) suggested that businesses must integrate social media into their promotion mix of their traditional Integrated Marketing Communication (IMC).

THEORETICAL FRAMEWORK

2.1.4   The consumer decision process

Consciously or sub-consciously, consumers go through a set of psychological processes before they make the final choice to purchase a particular product or service. Marketing scholars have developed a stage model that consumers typically go through, although some stages may be skipped or reversed (Kotler & Keller, 2012).

Figure 4 below shows the five stage model of consumer buying process which depicts the full range of considerations that faces a consumer.

Figure 4: Five-stage model of the consumer buying process

| **Stage 1** |
| Problem/need recognition |

↓

| **Stage 2** |
| Information search |

↓

| **Stage 3** |
| Evaluation of alternatives |

↓

| **Stage 4** |
| Purchase decision |

↓

| **Stage 5** |
| Post-purchase behavior |
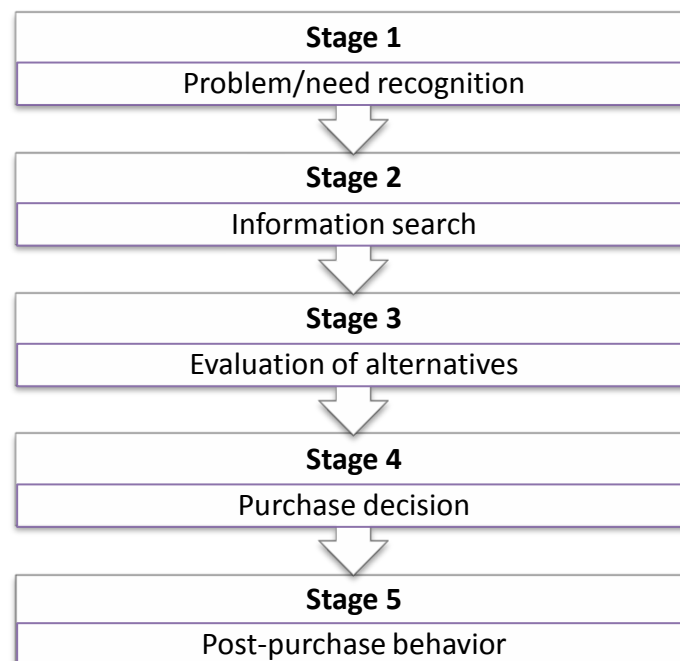
Note. Adapted from Kotler, P., & Keller, K. L. (2012). *Marketing Management* (Vol. 14). Harlow, Essex, England: Pearson Education.

Stage 1: Problem recognition

The process typically starts when the consumer recognises a problem or a need for a product triggered internal stimuli like hunger or thirst; or external stimuli, for example an advertisement on television. Traditionally marketers spend a lot of effort and expense in trying to understand and stimulate consumers into realising that they 'need' a product (Kotler & Keller, 2012).

Stage 2: Information search

Consumers then search for information about the product or service, often seeking out more than one store or brand. The Internet and especially with the availability of the Web 2.0 and mobile technologies, this process has become easier than ever before, allowing consumers to seek out more sources of information.

According to Kotler & Keller (2012) major information sources usually fall into four types:

- *Personal:* comprising of family, friends, acquaintances
- *Commercial:* like advertising, sales persons, dealers, displays, websites and others
- *Public:* like mass media, consumer–rating organisations, consumer-generated review web-sites,
- *Experiential:* like own handling or using of the product or service

Although online search engines like Google, Bing or Yahoo are still the main tools used for information search, social media and social networking sites have an increasingly important role to play in this process as they become ever more popular amongst online and mobile users. One of the advantages is that social networking sites allow users to freely express their comments and opinions on products, people, organisations and other parties. This makes it convenient for users not only to locate technical or commercial descriptions of the products from the profile pages of the brands and products, but also the consumer reviews without having to search for consumer reviews at different sites. In addition, such virtual communities can be a significant source of knowledge (Kim, Song & Jones, 2011).

SNS like Facebook are also constantly improving their tools and services, coming out with features that make it easier and more intuitive for users. Facebook's Graph Search released in

July 2013, allows users to search through their social network to find information and connections with a common link using phrases like "restaurants my friends like" or "places in Kuala Lumpur my friends visited" (Goel, 2013).

Stage 3: Evaluation of alternatives

With so much information and choices out there, how do consumers sieve through all the alternatives? Consumers will be expected to give more attention to the attributes or characteristics of the products that they think will deliver the benefits they are looking for. This expectation and preferences may be shaped through the consumers' beliefs - thoughts a person hold about something - and attitudes - the favourable or unfavourable evaluations, feelings and action tendencies towards something (Kotler & Keller, 2012).

People's family, community and the larger society in which they grew up in help to shape their beliefs and continue to exert their influence. Industry research has shown that consumers trust online reviews more than they do descriptions from manufacturers and that family and friends exert an influence on their decision to use or not use a product or service (Bazaarvoice). Also, up to 92% of the consumers surveyed consulted online reviews when considering purchasing a new product and 46% of those had been influenced to purchase a product due to those reviews (Channel Advisor, 2010).

This influence has been well researched by academics in a variety of fields using the Theory of Reasoned Action (TRA) proposed by Fishbein & Ajzen (1975) which was later extended by Ajzen to the Theory of Planned Behaviour with the addition of a construct for perceived behavioural control.

Stage 4: Purchase decision

Having formed their preferences during the evaluation stage, consumers will execute their purchase intention. This stage may involve several decisions - brand, dealer or outlet, quantity, timing and payment method. At this stage, another person's attitude can still exert influence on the preferred alternative, as do unanticipated situational factors, for example some other purchase became more urgent (Kotler & Keller, 2012).

Stage 5: Post purchase behaviour

Marketers know that the job does not end with the customer making purchase. Successful companies recognise that the purchase is just the beginning of either a long and valuable relationship. The consumer's experience with using the product after purchase may elicit either feelings of satisfaction or dissonance. Either one may elicit some post purchase actions by the consumers in the form of comments and reviews to their family and friends.

2.1.5 Word-of-mouth

Word-of-mouth (WOM) is seen by consumers to be more credible, able to reach people faster than traditional marketing communication and it breaks through the clutter of all the data available (Silverman, 1997). With more and more people adopting Web 2.0 tools like online forums, blogs, consumer review sites and social network sites, online word-of-mouth may be the most effective marketing communication or conversely the biggest nightmare for marketers. Word-of-mouth could be effectively used to influence consumers' decision during their process of evaluation of alternatives.

There is evidence that this online or electronic word-of-mouth (eWOM) may have a significant influence on consumer decision-making (Cheung, Luo, Sia & Chen, 2009; Sen & Lerman, 2007; Smith, Menon & Sivakumar, 2005). Marketers naturally want these to be positive rather than negative.

To summarise the discussion, as online social networks become ever more ubiquitous, the corresponding growth in user reviews and word-of-mouth may also exert more influence on the behaviours and attitudes of other users in the network throughout the five stage consumer decision process. This study's main focus is on the consumer's intention to use social networking sites (Facebook) during the stages of information search and evaluation of alternatives. It is anticipated that one of the main draws for a user to turn to their social network during these two stages is because of the trust and relationship that the user already share, coupled with the improving technology and tools that allow users to move seamlessly between pages and applications.

Moreover, as online accessibility becomes more prevalent especially through the availability of cheaper mobile devices and faster networks, the popularity of social networking sites will be as ubiquitous as the mobile devices they run on. Smart phone shipments increased almost 45% to 712.6 million units in 2012 from 494.6 million units in 2011 (MobiThinking, 2013) – it is likely the mobile platform will be key to propelling the growth of social networks. Even Mark Zuckerberg said in his interview with Bloomberg Business Week that "the big thing is obviously going to be mobile" (Stone & Vance, 2012).

2.1.6   Technology Acceptance Model

The forerunner of the Technology Acceptance Model, the Theory of Reasoned Action (TRA) is a widely studied model from the social psychology field. The TRA was first proposed by Fishbein and Ajzen in 1975, which was later extended by Ajzen to the Theory of Planned Behaviour (TPB) with the addition of a construct for perceived behavioural control. The reasoned action approach suggests that certain *background factors* i.e. – *individual factors* (such as personality, moods, emotions, values, stereotypes, general attitude, perceived risks and past behaviour), *social factors* (such as gender, age, education, income, religion, ethnicity or culture) and *information factors* (such as knowledge, media and intervention) – help to shape people's beliefs. These beliefs are classified into three types: (i) *behavioural beliefs* that determine people's *attitude toward the behaviour* that is the positive or negative evaluation of performing the behaviour in question; (ii) *normative beliefs* that produce *perceived norm (or subjective norm)* i.e. the perceived social pressure to engage or not engage in the behaviour; and (iii) *control beliefs* that results in a sense of high or low self-efficacy or *perceived behavioural control* which predict behavioural intentions (Fishbein & Ajzen, 2010).

The Technology Acceptance Model (TAM) is an extension of the Fishbein and Ajzen's TRA. The model had been tailored by Davis to information technology systems context to provide a basis to explain the impact of external variables on internal beliefs, attitudes and intentions towards adoption of information technology systems. TAM suggests that technology usage is influenced by two main variables, the user's perception of the system's ease of use (perceived ease of use - PEOU), which also influence his/her perception of its usefulness (perceived

usefulness - PU) and that these beliefs jointly determines the user's intention or attitude towards using the system and finally the actual usage of the system as shown Figure 5 below (Davis, Bagozzi & Warshaw, 1989).

Figure 5: Technology Acceptance Model (TAM)
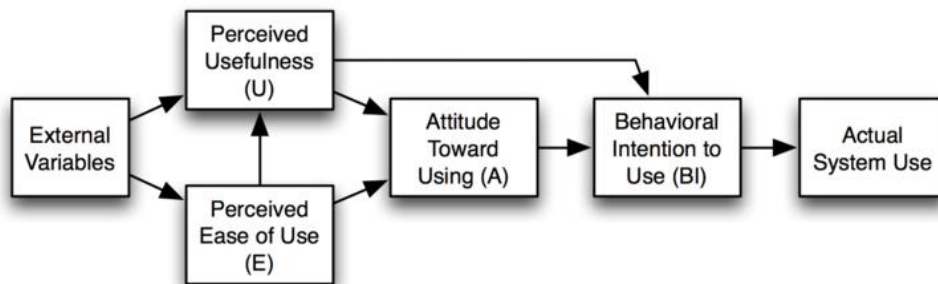
Note. From Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science , 35* (8), 982-1003.

Venkatesh and Davis (2000) identified some limitations in explaining the reasons why a person would perceive a given system useful and proposed an extended model known as TAM2 which incorporated additional constructs as antecedents to perceived usefulness as shown in Figure 6 below.

Figure 6: Technology Acceptance Model 2 (TAM2)
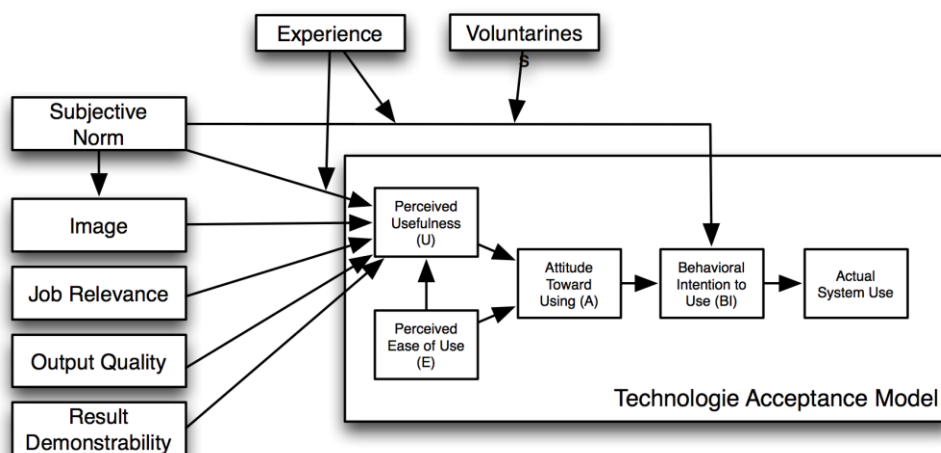
Note. From Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the Technology Acceptance Model: Four longitudinal Field Studies. *Management Science , 46* (2), 186-204.

Venkatesh and Bala (2008) combined TAM2 with determinants of perceived ease of use from Venkatesh (2000) to develop an integrated model TAM3 as shown in Figure 7 below.

Figure 7: Technology Acceptance Model 3 (TAM3)
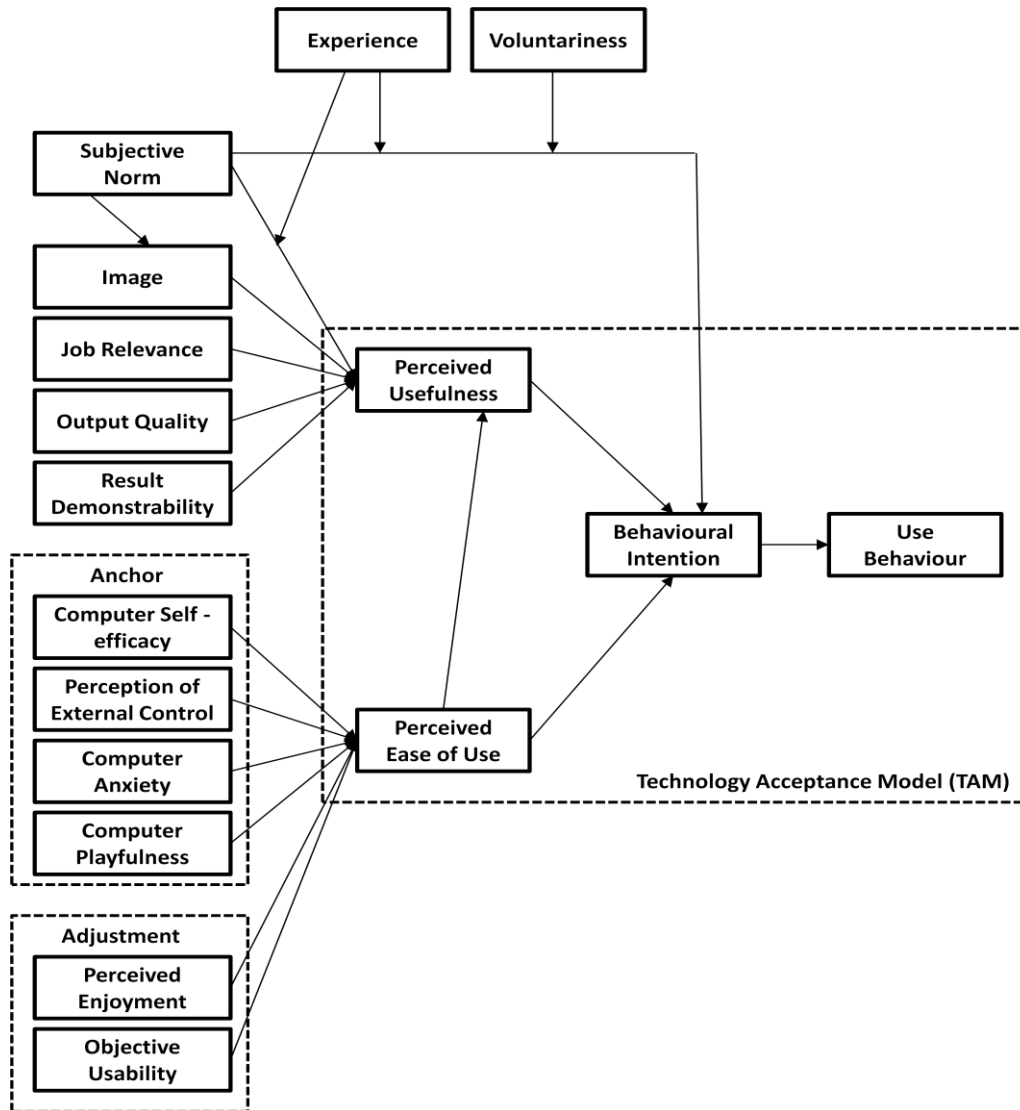
Note. From Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on intervention. *Decision Sciences , 39* (2), 273-315.

Finally, the Unified Theory of Acceptance and Use of Technology (UTAUT) is a unified model formulated by Venkatesh, Morris, Davis & Davis (2003) from elements from eight models frequently used in information systems and intention and usage research – Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behaviour (TPB), Combined TAM and TPB, Model of PC Utilization,

Innovation Diffusion Theory and Social Cognitive Theory. The UTAUT presents four core determinants of intention and usage with four moderators of key relationships as shown in Figure 8 below.

Figure 8: Unified Theory of Acceptance and Use of Technology (UTAUT)
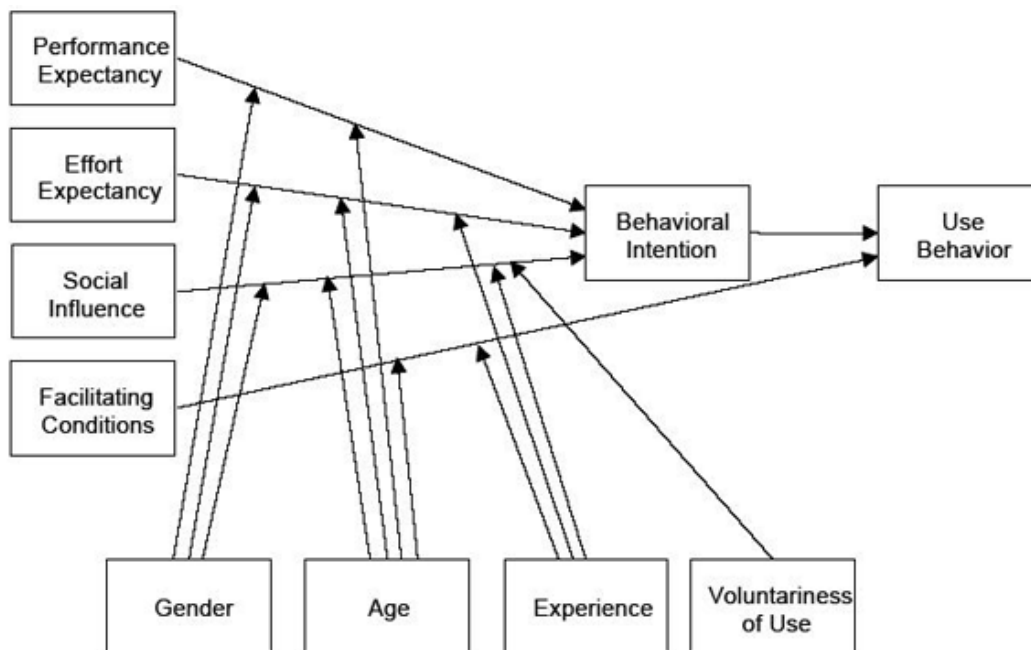
Note. From Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of information technology: Toward a unified view. *MIS Quarterly , 27* (3), 425-478.

The TAM is one of the most influential and widely used theoretical models in studies of individuals' acceptance and use of information systems (Lee, Kozar & Larsen, 2003). The TAM has been chosen as the main theoretical foundation for this study over the later extended versions like TAM2, TAM3 and UTAUT as it is simple yet powerful, and has been validated in different and a wide variety of technology and users contexts (Lee et al., 2003; Schepers & Wetzels, 2007; Venkatesh & Davis, 2000). Bagozzi (2007) also acknowledged that the TAM had consistently outperformed the Theory of Reasoned Action (TRA) and Theory of Planned Behaviour (TPB) in terms of explained variance across many studies.

This study proposes to use an adapted version of TAM to investigate users' intentions to adopt the Facebook for information search and evaluation. A number of recent studies using various adapted or extended versions of TAM for examinations into social media and social networking sites have seek to answer questions like the use of user-generated content for

travel planning (Ayeh et al., 2013); influence on intention to attend event (Lee et al., 2012); factors affecting purchase intentions (See et al., 2012); motives and influences for using social networking sites (Lin & Lu, 2011); cultural influences and impact on purchase intentions (Pookulangara & Koesler, 2011); and procedural learning (Lee & Lehto, 2013).

As the main premise for this study is Facebook, which essentially is a social networking site, the external variables that will be included are subjective norm, accessibility and also Facebook intensity, a Facebook usage score introduced by researchers (Ellison et al., 2007). These variables will be discussed further in subsequent sections.

2.2   THE VARIABLES AND HYPOTHESES

The variety of external variables used in past studies on technology adoption includes for example users' demographics, self efficacy, voluntariness, compatibility, complexity, subjective norms / social influence and others (Lee et al., 2003).

In this study, besides the main determinants of attitude and intention towards usage in the TAM (*perceived ease of use and perceived usefulness*), three other variables that has been included are *social influence*, *accessibility* and *Facebook intensity*.

2.2.1   Subjective norm (SN)

Subjective norm has been defined as "the person's perception that most people who are important to him think he should or should not perform the behaviour in question" (Fishbein & Ajzen, 1975, p. 302 as cited in Venkatesh & Davis, 2000). The variable was excluded in the original TAM as Davis et al. (1989) found that subjective norm had no significant effect on intentions. Subjective norm was later incorporated into the TAM2 and was found to have a positive link with perceived usefulness (Venkatesh & Davis, 2000). Research results also suggested that social influences through *identification* and *internalization* affects attitudes towards system adoption; and internalization of the behaviour may actually have a stronger impact in shaping acceptance and usage behavior than perceived usefulness (PU) (Malhotra & Galletta, 1999). *Identification* is when an individual accepts influence because he wants to

establish or maintain a satisfying relationship with another person or group; and *internalization* occurs when an individual accepts influence because the ideas or actions are congruent with his values (Kelman, 1958). Chiou (1998) demonstrated the importance of subjective norm in the prediction of purchase intentions and found that this was moderated by consumers' disposition towards using others for social comparison – wanting to be connected to others and belong to a group.

In the Unified Theory of Acceptance and Use of Technology (UTAUT), the social context was represented by social influence – "the degree to which an individual perceives that important others believe he or she should use the new system" (Venkatesh et al., 2003, p.451). Social influence is represented by the subjective norm, social factors (Thompson, Higgins & Howell, 1991) and image (Moore & Benbasat (1991) constructs (as cited in Venkatesh et al., 2003). However, all of them were found to behave similarly although they may have different labels.

In Table 5 above, it is interesting to note that there were respondents who answered that "I feel like I have to" or to "conform to others" in citing reasons for participating in social networking sites, which can be interpreted as the social influence. Moreover as the system being used is essentially social in nature and objective, it is not unreasonable to expect that social influence will be an important factor.

Based on the discussion above, the following hypothesis is proposed.

H1:   Subjective norm (SN) has a positive influence on consumers' perceived usefulness (PU) of Facebook.

2.2.2   Accessibility (AA)

According to Karahanna and Limayem (2000), accessibility comprises two types: (i) physical accessibility – the extent to which someone has physical access to the hardware needed to use the system; and (ii) information accessibility – the ability to retrieve the desired information from the system (as cited in Lee et al., 2003). Prior studies have found evidence that physical accessibility to the system or technology influence perceptions of the ease-of-use of the

system (Karahanna & Straub, 1999) and also actual usage (Rice & Shook, 1988). In a study on virtual communities, information accessibility was also found to have significant effects on user perceptions and intentions (Teo, Chan, Wei & Zhang, 2003). Overall, results of studies of the influence of accessibility on perceived ease of use was found to be significant, whereas results on its influence on perceived usefulness were mixed (Lee et al., 2003).

This study will examine both aspects of accessibility – physical and also information. As the telecommunication infrastructure continues to develop and the pervasive use of internet and especially Web 2.0 technologies, easier and faster accessibility is gradually becoming a reality.

As for physical accessibility, with more options and falling prices of smart phones, it is expected that the mobile platform will allow even greater penetration of social technologies to more users. In his interview with Bloomberg, Mark Zuckerberg said that the next big thing is going to be mobile and there were already 600 million users of Facebook on phones (Stone & Vance, 2012). Figure 9 below showed that mobile usage has been increasing with smart phones shipments increasing 45% from 2011 to 2012 (MobiThinking, 2013).

Figure 9: Mobile-cellular subscriptions per 100 inhabitants, 2001-2013
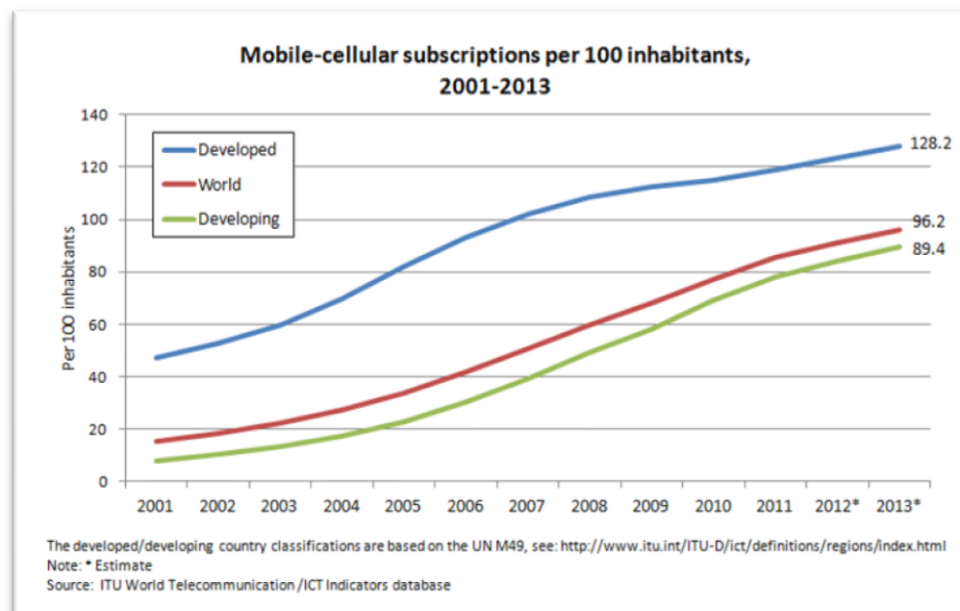
Note. From ITU (2013). *ICT data & statistics*. Retrieved April 15, 2012, from International Telecommunications Union : http://www.itu.int/en/ITU-D/Statistics

Based on the discussion presented, the following hypothesis is proposed.

H2:   Accessibility (AA) has a positive influence on consumers' perceived ease of use (PEOU) of Facebook.

2.2.3   Perceived ease of use (PEOU) and Perceived usefulness (PU)

The TAM posits that a user's intention to use a new technology is jointly determined by 2 beliefs – perceived ease of use and perceived usefulness. Perceived ease of use (PEOU) is "the degree to which a person believes that using a particular system would be free of effort", and perceived usefulness (PU) "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989, p. 320). Although the definitions started from the organizational context, the TAM has been widely used past studies in a variety of contexts. In this study PEOU and PU are being examined in relation to the use of Facebook. TAM also suggests that PU will be influenced by PEOU because the easier a technology is to use, the more useful it can be. PEOU and PU have been found to be a strong predictor of behavioral intention; and although the strength of PEOU on behavioral intention diminishes with increasing experience, PEOU effects on PU may increase (Venkatesh & Bala, 2008).
Based on the studies above, the following hypotheses are proposed.

H3:   Consumers' perceived ease of use (PEOU) of Facebook has a positive influence on their perceived usefulness (PU) of Facebook.

H4:   Consumers' perceived ease of use (PEOU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI).

H5:   Consumers' perceived usefulness (PU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI).

2.2.4   Intention to use Facebook for search and evaluation (BI)

Attitude toward performing the behaviour is the person's "positive or negative evaluation of about performing the behaviour in question" (Fishbein & Ajzen, 2010, p.20). Attitude

together with subjective norm leads to the formation of behavioural intentions or a readiness to perform that behaviour which then leads to actual behaviour in the TRA. This relationship is fundamental to TRA (Davis et al., 1989).

The attitude-behavioural intention relationship in the TAM implies that, all else being equal, people will form intentions to perform behaviours toward which they have positive feelings. However, other intention models provided justification and evidence of direct beliefs-intention links (Davis et al., 1989). Later revisions of TAM – TAM2, TAM3, UTAUT – eliminated the attitude construct to link beliefs directly to intentions to use (Venkatesh & Davis, 2000; Venkatesh et al., 2003; Venkatesh & Bala, 2008)

The behavioural intention in this study is the user's intention to use Facebook to search for and evaluate information about a product or service of interest. This is stages 2 and 3 of the five-stage of the consumer buying process (Kotler & Keller, 2012) discussed in the previous section 2.2.1.

Using Facebook for these activities may not be an obvious choice, given the popularity of search engines like Google or Yahoo. However, there is still a huge potential for the use of Facebook for this purpose. In a study on social search, the process of finding information online using social resources like friends or unknown online persons, it was found that respondents preferred social sites over search engines for opinion and recommendations (Morris, Teevan & Panovich, 2010), while social interactions are also often used as the first stage of information search. (Evans & Chi, 2010).

Recent studies that used the adapted TAM had mostly confined their investigations to behavioural intentions (Ayeh et al., 2013; Lee et al., 2012; See et al., 2012; Lin & Lu, 2011; Pookulangara & Koesler, 2011). This work will follow along the same vein as the objective is to examine how users' beliefs may impact the specific stages in the buying process which eventually leads to the purchase or use.

2.2.5 Facebook intensity (FI)

In past studies involving TAM, certain factors are also found to moderate the relationship between the belief factors and intentions. For example in TAM2 and TAM3, the moderating factors identified were experience and voluntariness (Venkatesh & Davis, 2000; Venkatesh & Bala, 2008) and UTAUT added another 2 moderators – age and gender (Venkatesh et al., 2003). Pookulangara & Koesler (2011) used three of Hofstede's cultural dimensions, individualism /collectivism, time orientation and uncertainty avoidance as moderators.

Facebook users may range from those who just check in from time to time to those who are constantly checking in and updating their friends on all the happenings in lives. Their intensity of usage is therefore likely to moderate their intentions to use Facebook for search and evaluation.

Ellison et al. (2007) found that there the level of Facebook usage predicted increased levels of maintained social capital, the resources accumulated through relationships among people. They created a new scale which they named Facebook intensity (FI) to measure Facebook usage. The FI scale is a reliable measure (Cronbach's alpha =.83) and provides a better gauge than just frequency and duration measures.

Based on the discussion above, the following hypotheses are proposed.

H6a: **The relationship between consumers' perceived usefulness (PU) of Facebook and their intentions to use Facebook for search and evaluation of products or services (BI) is moderated by Facebook intensity.**

H6b: **The relationship between consumers' perceived ease of use (PEOU) of Facebook and their intentions to use Facebook for search and evaluation of products or services (BI) is moderated by Facebook intensity.**

2.3   CHAPTER SUMMARY

This literature review provided an overview of the findings and common themes from past research done on technology adoption and in particular social media and social networking sites. Social technologies have seen rapid growth in less than a decade, especially Facebook, Twitter, You Tube and others. Social media and social networking sites have become so entrenched in people's daily lives with people interacting on the sites constantly. The supporting infrastructure and the Web 2.0 internet technologies has been the major drivers allowing this revolution to take shape, and it seems set to take off even faster with the technologies moving to the mobile platform. The technology and also the social communities has revolutionised the way people and also businesses communicate and conduct their business, with new and exciting innovations, removing traditional barriers of size and resources and levelling the playing field for big or small players.

CHAPTER 3

RESEARCH METHODOLOGY

3.0   INTRODUCTION

This chapter describes the research framework, sampling data and the methodology used to conduct this research. The variables used in the research model will be discussed in detail as well as the theories behind the use of the methods used to carry out this research. The process of constructing and refining the survey questionnaire including a description of the scales used to measure the variables is presented, followed by a discussion of the statistical techniques that were used to analyse the data collected.

3.1   RESEARCH FRAMEWORK

This sub-section presents the research framework and summarises the hypotheses that has been developed in the previous sub-section. Figure 10 below shows the hypothesized research model for this work.

Figure 10: Hypothesised Research Model
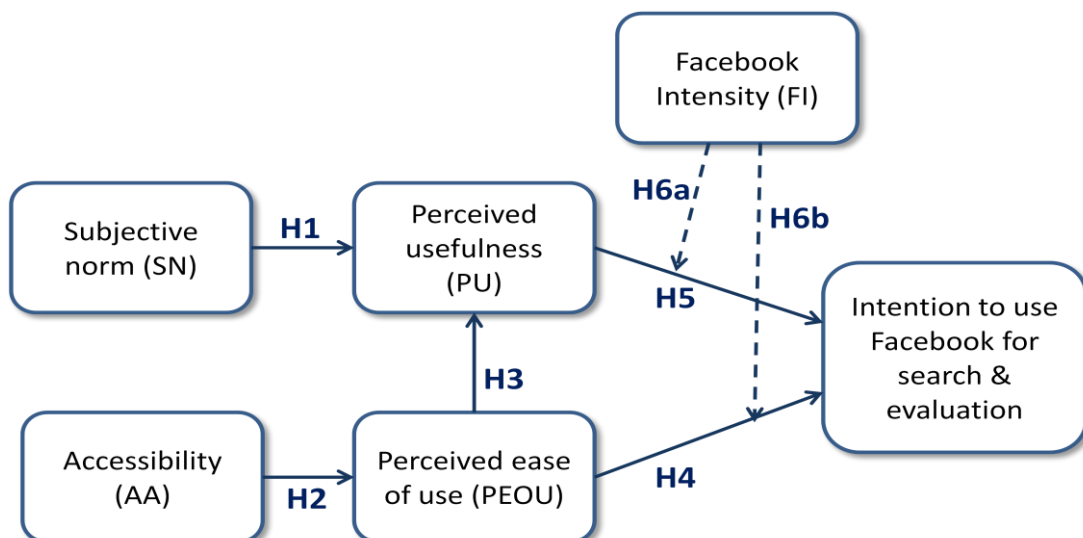
Summary of hypotheses:

H1:   Subjective norm (SN) has a positive influence on consumers' perceived usefulness (PU) of Facebook.

H2:   Accessibility (AA) has a positive influence on consumers' perceived ease of use (PEOU) of Facebook.

H3:   Consumers' perceived ease of use (PEOU) of Facebook has a positive influence on their perceived usefulness (PU) of Facebook.

H4:   Consumers' perceived ease of use (PEOU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI).

H5:   Consumers' perceived usefulness (PU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI).

H6a: The relationship between consumers' perceived usefulness (PU) of Facebook and their intentions to use Facebook for search and evaluation of products or services (BI) is moderated by Facebook intensity.

H6b: The relationship between consumers' perceived ease of use (PEOU) of Facebook and their intentions to use Facebook for search and evaluation of products or services (BI) is moderated by Facebook intensity.

3.2   RESEARCH APPROACH

This sub-section distinguishes between the different research approaches, the types of data and discusses their use in this research.

3.2.1 Type of research

The basic types of research are exploratory, descriptive and explanatory. Exploratory studies purpose is to develop hypotheses or questions for further research. All studies have some elements of exploration in them. A descriptive study is concerned with finding out who, what, when, where or how much. An explanatory study attempts to explain an event, act or characteristic, in other words it is concerned about learning why. It may be causal-explanatory – how one variable produces changes in another or the relationships among the variables. A causal-predictive study attempts to predict an effect on one variable by manipulating another variable while holding all other variables constant (Cooper & Schindler, 2011).

In terms of time dimension, the research may be cross-sectional studies that are carried out once and represent a snapshot of one point in time. Longitudinal studies on the other hand, are repeated over an extended period and are therefore able to track changes over time (Cooper & Schindler, 2011).

This study was a cross-sectional causal-explanatory study as the focus was in attempting to discover the relationships between the variables (subjective norm, accessibility, perceived usefulness, perceived ease of use, consumers' intentions to use Facebook for search and evaluation and intensity of Facebook usage) and was done at one point in time as opposed to over an extended period of time due to the constraints of this work.

3.2.2 Qualitative and quantitative methods

There are two main types of research methods used in academic research - quantitative and qualitative methods. Generally quantitative techniques are used to answer questions like what happened, how often it happens while qualitative techniques seek to answer the questions on why and how things happen they way they do. The following discusses the differences between the two types of research and the approach selected for this work.

Qualitative research involves the researcher using techniques that elaborate interpretations of market phenomenon without using numerical measurements. It is less structured and the

researcher is intimately involved to extract meaning from unstructured responses from interviews, focus groups or observations. Qualitative research is used to discover new ideas and exploratory studies with general objectives. The outcomes of these, testable hypotheses may then be tested through confirmatory tests using quantitative data (Zikmund, Babin, Carr, & Griffin, 2010).

In contrast, *quantitative research* addresses research objectives through empirical assessments using numerical measurements and statistical analysis of the data that were coded and categorised. The researcher is an uninvolved observer and the results are objective. Quantitative research is usually used to answer specific research questions, test hypotheses and confirmatory research (Zikmund et al., 2010).

Some criticisms of qualitative approaches are that it is too subjective and susceptible to human error and bias in data collection and interpretation. Also because qualitative research normally involves smaller samples compared to quantitative methods, the results cannot be generalized to a larger population. On the other hand, quantitative methods do not provide the insights that are becoming increasingly important in the complex business environment (Cooper & Schindler, 2011).

To summarise, both approaches have their merits and limitations and the choice depend mainly on the research objectives. In this study, the quantitative approach was used as the objective was to test the hypotheses that had been developed.

3.2.3   Primary and secondary data

Zikmund et al. (2010) defined data as the facts or recorded measures of certain phenomena that are collected in the research process. The type of research method selected will determine how the data will be collected such as through surveys, interviews, observations, notes or others.

Primary data are collected directly from the source of the data whilst secondary data are existing information available from published work either online or in print such as journals, books, news articles, commentaries or statistical data from governments or research firms.

Secondary data does not require access to the respondents and is faster and easier to collect, especially using electronic retrieval. However, since the secondary data was designed for and collected for other research, it may not meet the researcher's needs (Zikmund et al., 2010)

In this work, both primary and secondary data has been used. Pertinent secondary data used includes prior studies and other literature pertinent to this work as well as statistical data. Primary data for testing of the research model was collected using a survey questionnaire, which is discussed in detail in the following section.

3.3   RESEARCH INSTRUMENT

Data collection was done through a survey questionnaire created using the web-based Google Forms and disseminated through email and a link posted on the researcher's Facebook wall. Hard copies were also printed and distributed to ensure that the targeted responses were obtained. This sub-section describes the process of creating and refining the questionnaire used in the research.

3.3.1   Questionnaire design

The survey questionnaire was developed and refined in a process involving two stages. In the first stage, the measures for the constructs in the research model were developed by adapting scales from prior studies. In this stage, the measures underwent reviews and revisions with the assistance of colleagues and researchers in the social sciences. The following issues were considered in formulating the items (statements or questions) of the measures in constructing the overall questionnaire.

a) Clarification of questions and instructions – using appropriate language, length and complexity of statements or questions and eliminating biases in questions.
b) Verifying that the items appear to measure what they are supposed to measure.
c) Order of the sections for each variable measured and the order of the items within each section.

In stage two of the questionnaire refinement process, a pilot test was conducted to detect any weaknesses in the design and to obtain feedback from some participants.

3.3.2 Pilot testing

A pilot test is a small scale preliminary study done to detect weaknesses in the questionnaire design and to provide proxy data for selection of a probability sample (Cooper & Schindler, 2011). The pilot testing in this study was conducted among 20 of the researcher's work colleagues using hard copy questionnaires with requests for comments and suggestions for improvements to be noted on the forms. Therefore the forms were not distributed electronically to allow for the participants to make the necessary comments easily and conveniently.

The participants in the pilot study were made up of staff from various job positions - lecturers, managers, administrative executives and administrative assistant cum driver. Generally the respondents had no major comments and were able to answer the questions without further explanation.

Adjustment was made to one of the measures for the variable Facebook Intensity: Question 2.2 – On average, how much time a day do you spend on Facebook? There were only 4 answer options: 1 – Less than 1 hour, 2 – 1-2 hours, 3 – 2-3 hours and 4 – More than 3 hours. The other items for the variable all had 5 answer options. The answer options were increased to 5: 1 – Less than 10 minutes, 2 – 11-60 minutes, 3 – 1-2 hours, 4 – 2-3 hours and 5 – More than 3 hours.

3.3.3 Measures

This sub-section describes the scales used to measure the variables relevant to this research. These scales were the result of the questionnaire design and refinement process described in the previous sub-section. A sample of the actual questionnaire used in the survey is in Appendix A.

The two qualitative measurement scales are the nominal and ordinal scales. *Nominal* scales are the most elementary of measurement scales where values are assigned to an object for identification or classification without any ranking, used commonly in for example for gender, ethnicity, religion or questions requiring Yes/No responses. *Ordinal* scales allow items to be arranged based on some quality they possess (ranked), used in for example education level or attitudes (delighted, very satisfied, satisfied, dissatisfied) (Zikmund et al., 2010).

The quantitative measurement scales are the interval and ratio scales. *Interval* scales have both nominal and ordinal properties, and also capture information about differences in quantities of a concept from one observation to the next, for example temperature scales. Ratio scales have all the properties of interval scales and also capture the absolute quantities including a meaningful zero; for example income per month in RM (Zikmund et al., 2010).

With the exception of the variable "Facebook intensity" and demographics, the instrument for each variable in the research model were made up of multiple items (questions or statements) that were measured using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The Likert scale is the most frequently used summated rating scale that express a favourable or unfavourable attitude toward the object of interest (Cooper & Schindler, 2011).

The questionnaire was divided into 3 sections – Section 1: General Information; Section 2: Facebook intensity; Section 3: Subjective norm; Section 4: Accessibility; Section 5: Perceived usefulness; Section 6: Perceived ease of use; and Section 7: Intention to use Facebook for search and evaluation.

Section 1: General Information

This section comprised questions that provide information about the respondents. The questions included demographic information such as gender, age group, marital status, highest level of education, occupation group, income group, nationality and current place of residence.

<u>Section 2: Facebook intensity (FI)</u>

The items used for this variable were adapted from Ellison et al. (2007) with minor modifications to reflect the context of this study. FI measures the extent to which the users are actively engaged in Facebook activities – the number of "friends" and the amount of time spent on Facebook. Ten possible answers were created for the number of friends, which were then transformed to 1 until 5, with 1 depicting the lowest value and 5 the highest as follows:

Categories in questionnaire		**Transformed to**
10 or less	⎫	
11 – 50	⎬	1
51 – 100	⎫	
101 – 150	⎬	2
151 – 200	⎫	
201 – 250	⎬	3
251 – 300	⎫	
301 – 350	⎬	4
351 – 400	⎫	
More than 400	⎬	5

Similarly, the time spent on Facebook was also measured as 1 for less than 10 minutes, 2 for 11-60 minutes, 3 for 1-2 hours, 4 for 2-3 hours and 5 for more than 3 hours. Therefore, the lowest value of 1 for these 2 questions indicate the lowest engagement, while 5 indicates the highest engagement.

In addition a set of questions designed to gauge the extent to which the users was emotionally connected to Facebook and the extent to which Facebook was integrated into their daily lives was measured using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

<u>Section 3: Subjective norm (SN)</u>

The items used for this variable were adapted from the subjective norm and social influence constructs from Davis et al. (1989) and Venkatesh et al. (2003) respectively, and modified to reflect the context of this study. The items consist of 3 self-reported assessments that used a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

Section 4: Accessibility (AA)

The items created for accessibility was guided by the measures used in (Rice & Shook, 1988) and (Teo et al., 2003). Many organizations are known to block the use of Facebook and other social networking sites on the company network in the belief that people spend too much time on the sites at the detriment of productivity. This measure comprises 3 self-reported assessments by the user on the level of ease or restriction he or she may face in accessing Facebook in the workplace, using company facilities or personal devices. The items were measured using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

Section 5: Perceived usefulness (PU)

The items used for perceived usefulness were adapted from Lee et al. (2012) and Venkatesh et al. (2003) which have already established their reliability and validity. This measure comprises 3 self-reported assessments by the user on his or her belief of the usefulness of Facebook for search and evaluation of products or services. The items were measured using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

Section 6: Perceived ease of use (PEOU)

The items used for perceived ease of use were adapted from Lee et al. (2012) and Venkatesh et al. (2003) which have already established their reliability and validity. This measure comprises 3 self-reported assessments by the user on his or her belief of how easy it is to use Facebook for search and evaluation of products or services. The items were measured using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

Section 7: Intention to use Facebook for search and evaluation (BI)

The items for behavioural intention were adapted from Venkatesh et al. (2003). The measure comprises 3 self-reported assessments by the user on his or her intention to use Facebook for search and evaluation of products or services. The items were measured using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

3.4   SAMPLE DESIGN

3.4.1   Target population

"A target population are those people, events or records that contained the desired information for the study that determine whether a sample or census should be selected" (Cooper & Schindler, 2011 p.729). The population of interest for this study is from the Facebook user community of Malaysia which according to ADMA (2012) numbered at 12.4 million.

3.4.2   Sample size

Time, resources as well as practicality necessitate the use of sampling of the target population used in this survey. Moreover research has substantiated that sampling provides greater accuracy of results than do census especially in larger populations (Cooper & Schindler, 2011).

According to Zikmund et al. (2010) the following factors need to be considered when estimating a sample size:

i)   The heterogeneity (or variance) of the population – sample size must increase as heterogeneity increases.

ii)   The magnitude of acceptable error or the confidence interval – this indicates how precise the estimate must be.

iii)   The confidence level i.e. 90%, 95% or 99% – most business research will use the 95% confidence level.

A sample size calculator from the Australia's National Statistics Service was used to calculate the sample size in this study (ABS, 2014). Based on the target population of approximately 12.4 million, and using a confidence interval of ±5% and a 95% confidence level, it was estimated that a sample of 384 was required.

3.4.3 Sampling technique

Two basic methods can be used to determine the sample – probability or non-probability sampling. Probability sampling is a technique that ensures each population element has a known, non-zero chance of selection; whereas non-probability sampling is an arbitrary and subjective procedure in which each population element does not have a known, non-zero chance of selection (Cooper & Schindler, 2011).

This study used a non-probabilistic convenience sampling method where readily available participants from researcher's direct and extended social network of friends, colleagues or acquaintances were invited to participate in the survey through distribution of hard copies and also a link posted on the researcher's Facebook wall and through emails. The hard copies were distributed through the researcher's colleagues to their students. This method enabled completed questionnaires to be collected quickly, conveniently and economically. The sample was selected from the Malaysian Facebook community. For the purpose of this study these users may include Malaysian as well as non-Malaysian citizens, residing in or outside Malaysia who form part of the Facebook social network having members who are Malaysians. Those who do not fall under this group will not have been accessed or have access to the survey questionnaire.

3.4.4 Sampling period

The survey questionnaires were distributed online through a link posted on the researcher's Facebook wall and through email. Hardcopy questionnaires were also distributed through social contacts of the researcher. Responses were collected between 31 August 2013 and 28 September 2013

3.5 DATA ANALYSIS TECHNIQUES

The analysis of data collected in this study was guided by literature on quantitative methods in social sciences research – i.e. Cooper and Schindler (2011), Zikmund et al. (2010) and also by past survey-based studies on users' attitudes and behaviour for example Ayeh et al. (2013);

Brashear, Kashyap, Musante & Donthu (2009); Chiou (1998) and others. The software applications employed for data analysis were MS Excel and SPSS (Statistical Package for the Social Sciences).

The data analysis involved a set of procedures set out as follows.

3.5.1 Data preparation

The raw data was downloaded from Google Forms as a ".csv" (comma separated values) file and imported to MS Excel spreadsheet. The data were scrutinized to ensure that there are no missing data. Although all the questions had been set as "required" this process was carried out as a precaution in case of any data corruption during the download process. The actual download process proceeded without any errors.

The next stage was to assign numbers to the responses to each question, e.g. for gender, the answer 'male' was converted to '1' and 'female' to '2'. A detailed coding schema specifying each variable and the numerical codes for them was created for the entire questionnaire. Data collected through the hardcopy forms were keyed directly into MS Excel using the same coding rules.

As a precaution against errors during the data entry process, a random sample of 5% of the questionnaires were picked and verified independently by one of the researcher's colleagues and checked against the MS Excel spreadsheet.

3.5.2 Descriptive analyses

Descriptive analyses were performed to understand the nature of each variable measured. These analyses were used to describe the survey sample based on their responses to the measured variables and to determine, based on the characteristics of the responses, the appropriate statistical test that should be applied in the subsequent analyses.

According to Cooper and Schindler (2011), descriptive statistics are used to summarise the characteristics of the responses obtained such as central tendency, distribution and variability. Measures of central tendency include – mean, that is arithmetic average of the values; median, the midpoint of the distribution; and mode, the most frequently occurring value. The means were measured for individual items (questions) as well as the total for each variable, i.e. taking the average of the summation of all values of the individual items used to measure the variable.

Some of the measures of variability or dispersion of the values includes the variance which is a measure of score dispersion about the mean; the standard deviation which summarises how far away from the average the data values are; and the range which is the difference between the largest and smallest scores in the distribution. Lastly, measures of shape, skewness describe departures from the symmetry of a distribution and kurtosis, its flatness or peakedness.

3.5.3 Tests of significance and reliability

According to Cooper and Schindler (2011), there are two classes of significance tests – parametric tests are more powerful as the data are from interval and ratio measurments and non-parametric tests which are based on nominal and ordinal data. In this study, parametric tests were applied after confirming that the assumptions for parametric tests had been met.
A measure is reliable to the degree it gives consistent results. Reliability is an important critierion to determine the validity of a measure (Cooper & Schindler, 2011). The Cronbach's alpha coefficient of reliability was used to check for internal consistency in the measures used for each of the variables examined in this study.

The following rules of thumb provided by George and Mallery (2003) may be used to assess the coefficient (as cited in Gliem & Gliem, 2003):

$> .9$	Excellent
$> .8$	Good
$> .7$	Acceptable
$> .6$	Questionable
$> .5$	Poor
$< .5$	Unacceptable

Bivariate and multivariate analyses

According to Cooper and Schindler (2011), bivariate correlation analysis is used to assess the relationship of two continuous variables measured on an interval or ratio scale whereas multivariate techniques focus upon the simultaneous relationships among three or more variables.

The commonly used Pearson's product-moment correlation coefficient estimates the linear association of the sampling data (r) or population (p). The correlation coefficients indicates the magnitude and direction (+1 through -1) of relationships between two continuous variables. Simple linear regression may also be used for interval or ratio scales (Cooper & Schindler, 2011).

Multivariate techniques enable relationships of three or more variables to be examined simultaneously, as was required in this study's research framework. Based on the guidelines in Cooper and Schindler (2011), a combination of various analyses were used as appropriate for testing the relationships in different parts of the research framework.

According to Coakes, Steed and Ong (2010), several assumptions need to be met in using the above tests.

i)   Normality – the scores for each variable should be normally distributed.

ii)   Linearity – the relationship between the variables must be linear.

iii)   Homoscedasticity / homogeneity – the variability in scores for one variable is roughly the same at all values of the other variable, i.e. how the scores cluster uniformly about the regression line.

iv)   Outliers – extreme cases can have impact on the regression solution and should be removed to reduce their influence. This can be examined by checking the Mahalanobis distance values.

v)   Multicollinearity and singularity – multicollinearity refers to high correlations among the independent variables and singularity occurs when perfect correlations among independent variables exist.

Note:

i) – iii) can be examined from the residual scatter plots

iv) and v) are additional assumptions for regression analyses.

3.5.4 Moderator analysis

A moderating variable is an additional independent variable that is thought to have a significant contributory or contingent effect on the original independent variable – dependent variable relationship (Cooper & Schindler, 2011). Moderation effects are tested with multiple regression analysis. If the independent variable is denoted as X, the moderator as Z and the dependent variable as Y, Y is regressed on X, Z and XZ. Moderator effects are indicated by the significant effect of XZ while X and Z are controlled (Baron & Kenny, 1986).

The linear regression equation may be expressed as follows:

$$Y = \alpha + \beta_1 X + \beta_2 Z + \beta_3 XZ + e$$

Where α is the intercept and e is the residual in the equation. β_1 is the coefficient relating X to the outcome Y when $Z = 0$ and β_2 is the coefficent relating the moderator variable Z to Y when $X = 0$. In this equation, if β_3 is statistically significant, then there is significant moderation of the X-Y relationship and β_3 is the estimate of the moderation effect (Fairchild & MacKinnon, 2009).

The regression analyses was done in 3 steps as follows:

(i)   The dependent variable Y was regressed on the independent variable X

(ii)   The dependent variable Y was regressed on the independent variable X and the moderator variable Z

(iii)   The dependent variable Y was regressed on X, Z and XZ

3.6   ETHICAL CONSIDERATIONS

To ensure that participants or subjects of the study do not suffer any harm, discomfort, embarrassment or loss of privacy, researchers should follow three guidelines – (i) explain why the study is being done and its benefits; (ii) explain the participants' rights and protection of privacy (confidentiality) and (iii) get informed consent whereby the participant understands what is required of him/her and consents to the study (Cooper & Schindler, 2011).

Keeping the guidelines in mind, during the course of conducting this study every attempt has been made to adhere to the basic principles of honesty, integrity and respecting the rights and dignity of those who participated in this research project. The following measures were taken during the data collection process.

Individuals who participated in the survey were advised that participation is on a voluntary basis and that the data collected will only be used for academic purposes. No data that can identify the participants individually were requested. Participants were also given the email contact of the researcher to allow them to make further enquiries.

3.7   CHAPTER SUMMARY

This chapter described the proposed research framework, the hypotheses to be tested, the construction of research instrument, the sampling and data collection methods, the proposed data analysis techniques to test and analyse the results and also the ethical considerations during the research process. The following chapter will present and discuss the results of data collected in this study.

CHAPTER 4

RESULTS AND ANALYSES

4.0   INTRODUCTION

This results of the data collected and analysed will be discussed in this chapter. The discussion will commence with the descriptive analyses and checks on the assumptions for the parametric tests like normality and homogeneity. This is followed by the checks on internal consistency and reliability each of the measures. Finally the tests of the hypotheses proposed through the appropriate techniques.

4.1   DESCRIPTIVE ANALYSES

A total of 406 responses were collected throughout the period from 31 August 2013 to 28 September 2013. 106 (26%) responses were obtained online through the survey questionnaire hosted on Google Docs and distributed through links provided in the researcher's Facebook wall and email. A total of 310 responses were collected through the hardcopy questionnaires, but 10 had to be discarded because of they were incomplete. This response rate is well over the 384 sample size needed.

4.1.1   General information

The tables below give an overview of the general demographic characteristics of the respondents.

Table 6: Gender of Respondents

	Frequency	%
Male	194	47.8
Female	212	52.2
Total	**406**	**100**

Table 6 shows a slightly higher percentage of female respondents (52.2%) over the male respondents (47.8%).

Table 7: Marital Status of Respondents

	Frequency	%
Single	358	88.2
Married	42	10.3
Others (divorced, widowed etc)	6	1.5
Total	**406**	**100**

As shown in Table 7, most of the respondents were single (88.2%), only 10.3% were married and the rest at 1.5% were either divorced or widowed. This is mainly due to the fact that many of the respondents were young adults and students, as shown in the following tables.

Table 8: Age Group of Respondents

	Frequency	%
19 years & younger	86	21.2
20-29 years	265	65.3
30-39 years	29	7.1
40-49 years	11	2.7
50-59 years	14	3.4
60 years & older	1	0.2
Total	**406**	**100**

Table 8 shows that 86.5% of the respondents were young adults aged 29 years and below. Respondents from the 30's age group made up only 7.1%; those from the 40's age group

2.7%; the 50's age group 3.4% and only one respondent in the 60's and above age group representing 0.2%

Table 9: Education Level of Respondents

	Frequency	%
Primary	0	0
Secondary / high school	2	0.5
Tertiary (college or university)	404	99.5
Total	**406**	**100**

Almost all of the respondents had tertiary education except for 2 of them as shown in Table 9 above.

Figure 11: Occupation Group of Respondents
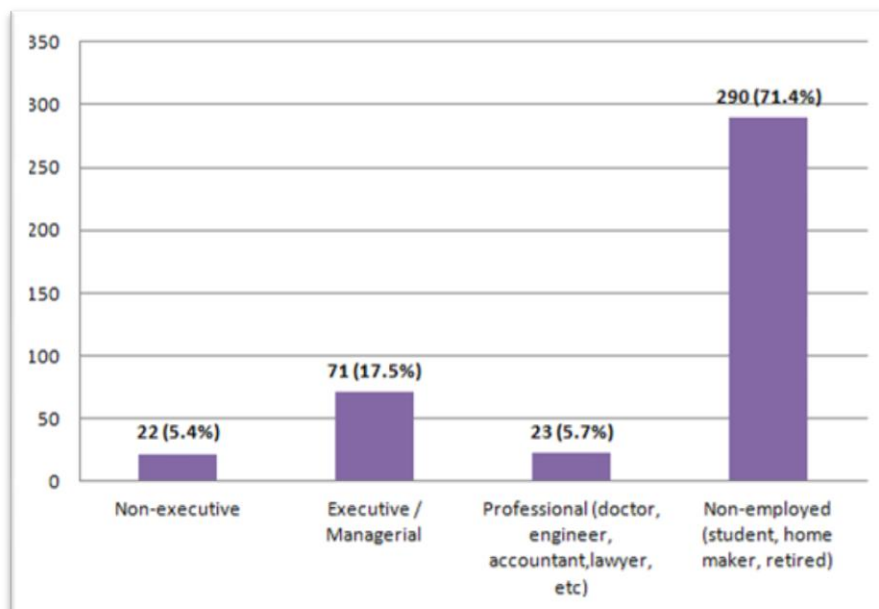
As shown in Figure 11 above, 71.4% of the respondents were in the non-employed group, i.e. they were either students, home makers or retired. The non-executives made up 5.4%, 17.5% of them fall under the executives or managerial group and the rest at 5.7% were professionals.

Figure 12: Income Group of Respondents
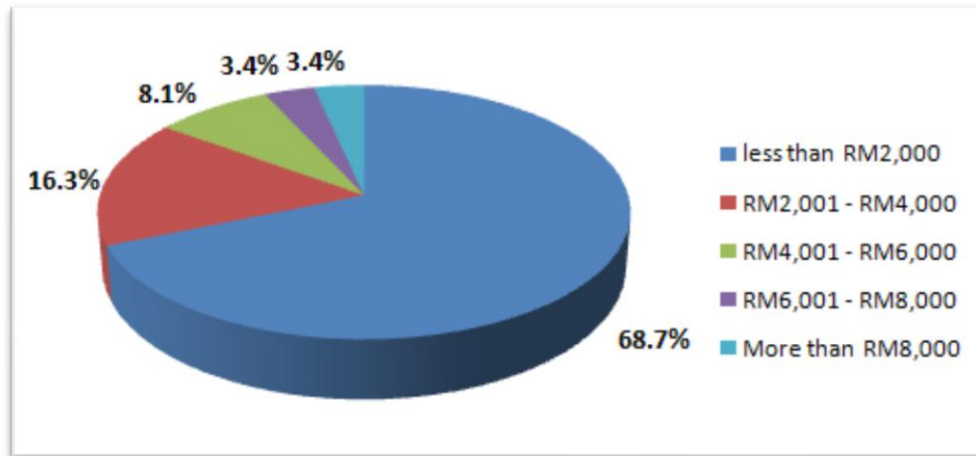
In Figure 12, most of the respondents (68.7%) had income of RM2,000 or less per month, mainly because they were students. 16.3% of the respondents earned between RM2001 – RM4,000 and 8.1% earned between RM4,001 – RM6,000. The last 2 groups earning between RM6,001 – RM8,000 and more than RM8,000 per month made up the remaining respondents at 3.4% each.

Table 10: Place of Residence by Nationality of Respondents

	Malaysian		Non-Malaysian	
	Frequency	%	Frequency	%
Malaysia	304	99.7	99	98.0
Outside Malaysia	1	0.3	2	2.0
Total	305	75.1	101	24.9

Table 10 shows that 75.1% of the respondents were Malaysians with almost all of them (99.7%) residing in Malaysia. 24.9% were non-Malaysians with 98% residing in Malaysia while the other 2% were outside Malaysia. This is mainly because the questionnaires were distributed at a private university with a substantial foreign student population.

4.1.2   Facebook intensity (FI)

Facebook Intensity was measured using 8 items in Section 2 of the survey questionnaire: Questions 2.1 to 2.8. The following summarises the results for this variable.

Figure 13: Number of Facebook Friends
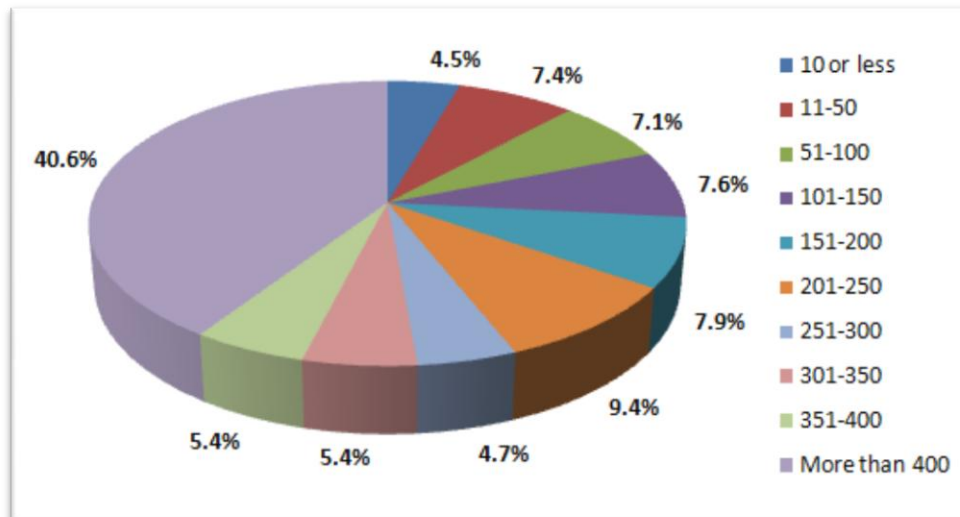
Figure 13 above shows that over 40% of the respondents had more than 400 Facebook friends, with 81% of them having more than 100 Facebook friends. These results supports ADMA (2012)'s report that Malaysia has the highest average number of social media friends at 233.

Table 11: Mean scores of items of Facebook intensity (FI)

	Mean
2.1 No. of Facebook friends	3.64
2.2 Time spent on Facebook	2.48
2.3 Facebook is part of everyday activity	2.93
2.4 Proud to be part of Facebook	2.63
2.5 Facebook part of daily routine	2.87
2.6 Feel out of touch if not logged onto Facebook	2.52
2.7 Feel part of Facebook community	2.66
2.8 Sorry if Facebook shut down	2.83
Overall for FI	**2.82**

Table 11 above summarises the mean scores of the items used to measure Facebook intensity (FI) and also the mean score of the variable.

4.1.3 Subjective norm (SN)

Subjective norm was measured using 4 items in Section 3 of the survey questionnaire: Questions 3.1 to 3.4. The following summarises the results for this variable.

Table 12: Mean scores of items of subjective norm (SN)

	Mean
3.1 People think I should use Facebook	2.90
3.2 It would be a good idea to use Facebook	3.05
3.3 People want me to use Facebook	2.97
3.4 Feel under social pressure to use Facebook	2.45
Overall for SN	**2.84**

Table 12 above summarises the mean scores of the items used to measure subjective norm (SN) and also the mean score of the variable.

4.1.4 Accessibility (AA)

Accessibility was measured using 3 items in Section 4 of the survey questionnaire: Questions 4.1 to 4.3. The following summarises the results for this variable.

Table 13: Mean scores of items of accessibility (AA)

	Mean
4.1 Can access Facebook anywhere	3.35
4.2 Can access Facebook at workplace using company facilities	2.74
4.3 Can access Facebook at workplace using personal facilities	3.51
Overall for AA	**3.20**

Table 13 above summarises the mean scores of the items used to measure accessibility (AA) and also the mean score of the variable.

4.1.5 Perceived usefulness (PU)

Perceived usefulness was measured using 3 items in Section 5 of the survey questionnaire: Questions 5.1 to 5.3. The following summarises the results for this variable.

Table 14: Mean scores of items of perceived usefulness (PU)

	Mean
5.1 Facebook is useful for finding products/services	3.12
5.2 Facebook is useful for finding out what friends are using	3.08
5.3 Facebook is useful for finding what is being offered	3.31
Overall for PU	**3.17**

Table 14 above summarises the mean scores of the items used to measure perceived usefulness (PU) and also the mean score of the variable.

4.1.6 Perceived ease of use (PEOU)

Perceived ease of use was measured using 3 items in Section 6 of the survey questionnaire: Questions 6.1 to 6.3. The following summarises the results for this variable.

Table 15: Mean scores of items of perceived ease of use (PEOU)

	Mean
6.1 Easy to learn how to find and share products in Facebook	3.40
6.2 Finding products on Facebook is easy	3.35
6.3 Easy to find out about products that friends are using	3.24
Overall for PEOU	**3.30**

Table 15 above summarises the mean scores of the items used to measure perceived ease of use (PEOU) and also the mean score of the variable.

4.1.7 Intention to use Facebook for search and evaluation (BI)

Intention to use Facebook for search and evaluation was measured using 3 items in Section 7 of the survey questionnaire: Questions 7.1 to 7.3. The following summarises the results for this variable.

Table 16: Mean scores of items of intention to
use Facebook for search and evaluation (BI)

	Mean
7.1 Intend to use Facebook for search and evaluation	2.97
7.2 Most likely will use Facebook for search and evaluation	2.88
7.3 Plan to use Facebook for search and evaluation	2.92
Overall for BI	**2.93**

Table 16 above summarises the mean scores of the items used to measure intention to use Facebook for search and evaluation (BI) and also the mean score of the variable.

4.2   RELIABILITY ANALYSES

All items used to measure the variables being investigated were checked for reliability and internal consistency. The following summarises the value of the Cronbach's alpha coefficient of reliability extracted from Appendix B.

Table 17: Cronbach's Alpha Coefficient of Reliability

	No. of items	Cronbach's Alpha	Remarks
Facebook Intensity (FI)	8	0.858	Good
Subjective Norm (SN)	4	0.795	Acceptable
Accessibility (AA)	3	0.768	Acceptable
Perceived usefulness (PU)	3	0.854	Good
Perceived ease of use (PEOU)	3	0.853	Good
Intention to use Facebook for search & evaluation (BI)	3	0.914	Excellent

Based on the Cronbach's alpha coefficient in Table 17 above, all items used to measure the independent and dependent variables were found to have good internal consistency and are there reliable.

4.3   ASSUMPTIONS TESTING

The assumptions required for the next set of parametric tests were confirmed by examining the assumptions tests as shown in Table 18 below:

Table 18: Assumptions Testing

Assumptions / tests	Results	Reference
<u>Normality, linearity</u> Observation of scatter plots and Normal P-P Plots	Assumption met	Appendix C - I
<u>Homoscedasticity / homogeneity</u> Levene's test	Assumption met	Appendix J
<u>Outliers</u> Observation of the Mahalanobis distance values	Not serious	Appendix C - I
<u>Multicollinearity and singularity</u> Pearson correlation coefficient	Assumption met	Table 19

4.4   CORRELATION ANALYSES

The Pearson correlation coefficient for the study variables are extracted from Appendix K and summarised below.

Table 19: Pearson Correlation Coefficient

	FI	**SN**	**AA**	**PU**	**PEOU**	**BI**
FI	1	.527**	.415**	.476**	.437**	.483**
SN	.527**	1	.325**	.365**	.357**	.425**
AA	.415**	.325**	1	.428**	.383**	.285**
PU	.476**	.365**	.428**	1	.732**	.572**
PEOU	.437**	.357**	.383**	.732**	1	.552**
BI	.483**	.425**	.285**	.572**	.552**	1

** Correlation is significant at 0.01 level (1-tailed)

As shown in Table 19 above, the linear correlation as indicated by the Pearson coefficient for the variables are significant at 0.01 level. Table 20 below summarises the correlation results of the variables involved in the hypotheses.

Table 20: Summary of Hypotheses and Correlation

Hypotheses	**Results**
H1: Subjective norm (SN) has a positive influence on users' perceived usefulness (PU) of Facebook	Subjective norm (SN) has a positive relationship with perceived usefulness (PU) (r = .365, p <.05)
H2: Accessibility (AA) has a positive influence on perceived ease of use (PEOU) of Facebook	Accessibility (AA) has a positive relationship with perceived ease of use (PEOU) (r = .383, p <.05)
H3: Users' perceived ease of use (PEOU) of Facebook has a positive influence on their perceived usefulness (PU) of Facebook	Perceived ease of use (PEOU) has a positive relationship with perceived usefulness (PU) (r = .732, p <.05)

Hypotheses	Results
H4: Users' perceived ease of use (PEOU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI)	Perceived ease of use (PEOU) has a positive relationship with intention to use Facebook for search and evaluation (BI) (r = .552, p <.05)
H5: Users' perceived usefulness (PU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI)	Perceived usefulness (PU) has a positive relationship with intention to use Facebook for search and evaluation (BI) (r = .572, p <.05)

It is noted that correlation only tests the symmetrical relationship between the two variables and does not differentiate between the independent and dependent variables, which is done through regression analyses.

4.5   HYPOTHESES TESTING WITH REGRESSION ANALYSES

4.5.1   H1: Subjective norm (SN) has a positive influence on consumers' perceived usefulness (PU) of Facebook

The following are the regression results extracted from Appendix C.

Table 21:   Regression Results Summary for Hypothesis H1

Model Summary **R Square**	0.133
ANNOVA **Regression – F-value**	62.243 p-value = .000

Residuals Statistics
 Mahalanobis distance
    - Min.
    - Max.
	
	 0.012
	 6.688

Table 22:   Regression Coefficients for Hypothesis H1

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.971	.158		12.460	.000
	Avg Subjective Norm	.421	.053	.365	7.889	.000

a. Dependent Variable: Avg Perceived Usefulness

In Table 21 above, the variable subjective norm (SN) explained 13.3% of the variance in the variable perceived usefulness (PU) and is highly significant as indicated by the F-value of 62.243 (p-value = .000).

An examination of the Mahalanobis distance values indicated that there were no outliers among the variable subjective norm (SN), i.e. there were no values > or equal to the critical chi-square value of 10.83 at alpha level of .001 (df=1).

Also, in Table 22, the t-value of 7.889 (p-value=.000) indicated that subjective norm (SN)contributed significantly to the prediction of perceived usefulness (PU).

Therefore, the hypothesis *H1 is accepted* :

Subjective norm (SN) has a positive influence on consumers' perceived usefulness (PU) of Facebook.

The linear regression equation to represent the effect is:

PU = 1.971 + 0.421SN

4.5.2 H2: Accessibility (AA) has a positive influence on consumers' perceived ease of use (PEOU) of Facebook

The following are the regression results extracted from Appendix D.

Table 23: Regression Results Summary for Hypothesis H2

Model Summary R Square	0.146
ANNOVA Regression – F-value	69.339 p-value = .000
Residuals Statistics Mahalanobis distance - Min. - Max.	0.018 4.728

Table 24: Regression Coefficients for Hypothesis H2

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.187	.140		15.616	.000
	Avg Accessibility	.348	.042	.383	8.327	.000

a. Dependent Variable: Avg Perceived Ease of Use

In Table 23 above, the variable accessibility (AA) explained 14.6% of the variance in the variable perceived ease of use (PEOU) and is highly significant as indicated by the F-value of 69.339 (p-value = .000).

An examination of the Mahalanobis distance values indicated that there were no outliers among the variable accessibility (AA), i.e. there were no values > or equal to the critical chi-square value of 10.83 at alpha level of .001 (df=1).

Also, in Table 24, the t-value of 8.327 (p-value=.000) indicated that accessibility (AA) contributed significantly to the prediction of perceived ease of use (PEOU).

Therefore, the hypothesis *H2 is accepted* :

Accessibility (AA) has a positive influence on consumers' perceived ease of use (PEOU) of Facebook.

The linear regression equation to represent the effect is:

PEOU = 2.187 + 0.348AA

4.5.3 H3: Consumers' perceived ease of use (PEOU) of Facebook has a positive influence on their perceived usefulness (PU) of Facebook

The following are the regression results extracted from Appendix E.

Table 25: Regression Results Summary for Hypothesis H3

Model Summary	
R Square	0.536
ANNOVA	
Regression – F-value	465.824
	p-value = .000
Residuals Statistics	
Mahalanobis distance	
- Min.	0.001
- Max.	6.265

Table 26: Regression Coefficients for Hypothesis H3

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.640	.122		5.262	.000
	Avg Perceived Ease of Use	.766	.036	.732	21.583	.000

a. Dependent Variable: Avg Perceived Usefulness

In Table 25 above, the variable perceived ease of use (PEOU) explained 53.6% of the variance in the variable perceived usefulness (PU) and is highly significant as indicated by the F-value of 465.824 (p-value = .000).

An examination of the Mahalanobis distance values indicated that there were no outliers among the variable perceived ease of use (PEOU), i.e. there were no values > or equal to the critical chi-square value of 10.83 at alpha level of .001 (df=1).

Also, in Table 26, the t-value of 21.583 (p-value=.000) indicated that perceived ease of use (PEOU) contributed significantly to the prediction of perceived usefulness (PU).

Therefore, the hypothesis *H3 is accepted* :

Consumers' perceived ease of use (PEOU) of Facebook has a positive influence on their perceived usefulness (PU) of Facebook.

The linear regression equation to represent the effect is:

PU = .640 + 0.766PEOU

4.5.4 H4: Consumers' perceived ease of use (PEOU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI)

The following are the regression results extracted from Appendix F.

Table 27: Regression Results Summary for Hypothesis H4

Model Summary R Square	0.304
ANNOVA Regression – F-value	176.635 p-value = .000
Residuals Statistics Mahalanobis distance - Min. - Max.	0.001 6.265

Table 28: Regression Coefficients for Hypothesis H4

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.937	.155		6.032	.000
	Avg Perceived Ease of Use	.602	.045	.552	13.290	.000

a. Dependent Variable: Avg Behaviour Intention

In Table 27 above, the variable perceived ease of use (PEOU) explained 30.4% of the variance in the variable intention to use Facebook for search and evaluation (BI) and is significant as indicated by the F-value of 176.635 (p-value = .000).

An examination of the Mahalanobis distance values indicated that there were no outliers among the variable perceived ease of use (PEOU), i.e. there were no values > or equal to the critical chi-square value of 10.83 at alpha level of .001 (df=1).

Also, in Table 28, the t-value of 13.290 (p-value=.000) indicated that perceived ease of use (PEOU) contributed significantly to the prediction of intention to use Facebook for search and evaluation (BI) .

Therefore, the hypothesis **H4 is accepted** :

Consumers' perceived ease of use (PEOU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI).

The linear regression equation to represent the effect is:

BI = 0.937 + 0.602PEOU

4.5.5 H5: Consumers' perceived usefulness (PU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI)

The following are the regression results extracted from Appendix G.

Table 29: Regression Results Summary for Hypothesis H5

Model Summary **R Square**	0.327
ANNOVA **Regression – F-value**	196.602 p-value = .000
Residuals Statistics **Mahalanobis distance** - Min. - Max.	0.029 5.080

Table 30: Regression Coefficients for Hypothesis H5

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.033	.141		7.333	.000
	Avg Perceived Usefulness	.597	.043	.572	14.021	.000

a. Dependent Variable: Avg Behaviour Intention

In Table 29 above, the variable perceived usefulness (PU) explained 32.7% of the variance in the variable intention to use Facebook for search and evaluation (BI) and is highly significant as indicated by the F-value of 196.602 (p-value = .000).

An examination of the Mahalanobis distance values indicated that there were no outliers among the variable perceived usefulness (PU), i.e. there were no values > or equal to the critical chi-square value of 10.83 at alpha level of .001 (df=1).

Also, in Table 30, the t-value of 13.290 (p-value=.000) indicated that perceived usefulness (PU) contributed significantly to the prediction of intention to use Facebook for search and evaluation (BI).

Therefore, the hypothesis *H5 is accepted* :

Consumers' perceived usefulness (PU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI).

The linear regression equation to represent the effect is:

BI = 1.033 + 0.597PU

4.5.6 H6a: The relationship between consumers' perceived usefulness (PU) of Facebook and their intentions to use Facebook for search and evaluation of products or services (BI) is moderated by Facebook intensity

Moderator effects were tested using a 3-step regression analyses as follows:

(i)   Intention to use Facebook for search and evaluation (BI) was regressed on perceived usefulness (PU).

(ii)   Intention to use Facebook for search and evaluation (BI) was regressed on perceived usefulness (PU) and Facebook intensity (FI).

(iii)   Intention to use Facebook for search and evaluation (BI) was regressed on perceived usefulness (PU), Facebook intensity (FI) and the combined PU and FI (PU*FI).

4.5.6.1 H6a: Step (i)

The results forthis step is the same as for hypothesis **H5**.

4.5.6.2 H6a: Step (ii)

The following are the regression results for Step (ii) extracted from Appendix H.

Table 31: Regression Results Summary for Hypothesis H6a: Step (ii)

Model Summary	
R Square	0.385
ANNOVA	
Regression – F-value	125.889 p-value = .000
Residuals Statistics **Mahalanobis distance**	
- Min.	0.030
- Max.	10.397

Table 32: Regression Coefficients for Hypothesis H6a (Step (ii)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.594	.153		3.887	.000
	Avg Perceived Usefulness	.462	.046	.443	9.960	.000
	Avg FB Intensity	.307	.050	.272	6.119	.000

a. Dependent Variable: Avg Behaviour Intention

In Table 31 above, the variable perceived usefulness (PU) and Facebook intensity (FI) explained 38.5% of the variance in the variable intention to use Facebook for search and evaluation (BI) and is highly significant as indicated by the F-value of 125.889 (p-value = .000).

An examination of the Mahalanobis distance values indicated that there were no outliers among the variable perceived usefulness (PU) and Facebook intensity (FI), i.e. there were no values > or equal to the critical chi-square value of 13.82 at alpha level of .001 (df=2).

Also, in Table 32, the t-values of 9.960 (p-value=.000) for perceived usefulness (PU) and 6.119 (p-value = .000) for Facebook intensity (FI) indicated that both PU and FI contributed significantly to the prediction of intention to use Facebook for search and evaluation (BI) .

4.5.6.3 H6a: Step (iii)

The following are the regression results for Step (iii) extracted from Appendix H.

Table 33: Regression Results Summary for Hypothesis H6a: Step (iii)

Model Summary	
R Square	0.386
ANNOVA **Regression – F-value**	84.262 p-value = .000
Residuals Statistics **Mahalanobis distance** **- Min.** **- Max.**	0.201 21.292

Table 34: Regression Coefficients for Hypothesis H6a (Step (iii))

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.242	.383		.632	.528
	Avg Perceived Usefulness	.580	.127	.556	4.580	.000
	Avg FB Intensity	.442	.143	.391	3.088	.002
	Avg PUxFI	-.043	.043	-.203	-1.003	.317

a. Dependent Variable: Avg Behaviour Intention

In Table 33 above, the variable perceived usefulness (PU) and Facebook intensity (FI) explained 38.6% of the variance in the variable intention to use Facebook for search and evaluation (BI) and is highly significant as indicated by the F-value of 84.262 (p-value = .000).

An examination of the Mahalanobis distance values indicated that there were a few outliers among the variable perceived usefulness (PU) and Facebook intensity (FI), i.e. there were 5 cases that were > or equal to the critical chi-square value of 16.27 at alpha level of .001 (df=3).

Also, in Table 34, the t-values of 4.480 (p-value=.000) for perceived usefulness (PU) and 3.088 (p-value = .002) for Facebook intensity (FI) indicated that PU and FI contributed significantly to the prediction of intention to use Facebook for search and evaluation (BI). However, the t-value of -1.003 (p-value = .317), i.e. combined perceived usefulness and Facebook intensity (PU*FI) did not contribute significantly to the prediction of intention to use Facebook for search and evaluation (BI).

Based on the results in steps (i), (ii) and (iii), moderator effects were not indicated as the effect of PU*FI was not significant while PU and FI were controlled.

Therefore, the hypothesis *H6a is rejected* :

The relationship between consumers' perceived usefulness (PU) of Facebook and their intentions to use Facebook for search and evaluation of products or services (BI) is not moderated by Facebook intensity.

 The linear regression equation to represent the effect is:

$$BI = 0.242 + 0.580PU + 0.442FI - .043PU*FI$$

4.5.7 H6b: The relationship between consumers' perceived ease of use (PEOU) of Facebook and their intentions to use Facebook for search and evaluation of products or services (BI) is moderated by Facebook intensity

Moderator effects were tested using a 3-step regression analyses as follows:

(i)   Intention to use Facebook for search and evaluation (BI) was regressed on perceived ease of use (PEOU).

(ii)   Intention to use Facebook for search and evaluation (BI) was regressed on perceived ease of use (PEOU) and Facebook intensity (FI).

 (iii)   Intention to use Facebook for search and evaluation (BI) was regressed on perceived ease of use (PEOU), Facebook intensity (FI) and the combined PEOU and FI (PEOU*FI).

4.5.7.1 H6b: Step (i)

The results for this step is the same as for hypothesis **H4**.

4.5.7.2 H6b: Step (ii)

The following are the regression results for Step (ii) extracted from Appendix I.

Table 35: Regression Results Summary for Hypothesis H6b: Step (ii)

Model Summary R Square	0.376
ANNOVA Regression – F-value	121.667 p-value = .000
Residuals Statistics Mahalanobis distance - Min. - Max.	0.004 13.528

Table 36: Regression Coefficients for Hypothesis H6b (Step (ii))

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.454	.163		2.781	.006
	Avg Perceived Ease of Use	.460	.048	.421	9.629	.000
	Avg FB Intensity	.338	.049	.299	6.835	.000

a. Dependent Variable: Avg Behaviour Intention

In Table 35 above, the variable perceived ease of use (PEOU) and Facebook intensity (FI) explained 37.6% of the variance in the variable intention to use Facebook for search and

evaluation (BI) and is highly significant as indicated by the F-value of 121.667 (p-value = .000).

An examination of the Mahalanobis distance values indicated that there were no outliers among the variable perceived ease of use (PEOU) and Facebook intensity (FI), i.e. there were no values > or equal to the critical chi-square value of 13.82 at alpha level of .001 (df=2).

Also, in Table 36, the t-values of 9.629 (p-value=.000) for perceived ease of use (PEOU) and 6.835 (p-value = .000) for Facebook intensity (FI) indicated that both PEOU and FI contributed significantly to the prediction of intention to use Facebook for search and evaluation (BI) .

4.5.7.3 H6b: Step (iii)

The following are the regression results for Step (iii) extracted from Appendix I.

Table 37: Regression Results Summary for Hypothesis H6b: Step (iii)

Model Summary	
R Square	0.377
ANNOVA **Regression – F-value**	80.990 p-value = .000
Residuals Statistics **Mahalanobis distance**	
- Min.	0.158
- Max.	24.592

Table 38: Regression Coefficients for Hypothesis H6b (Step (iii)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.308	.409		.754	.452
	Avg Perceived Ease of Use	.505	.125	.462	4.030	.000
	Avg FB Intensity	.396	.157	.350	2.515	.012
	Avg PEOUxFI	-.017	.044	-.080	-.388	.699

a. Dependent Variable: Avg Behaviour Intention

In Table 37 above, the variable perceived ease of use (PEOU) and Facebook intensity (FI) explained 37.7% of the variance in the variable intention to use Facebook for search and evaluation (BI) and is highly significant as indicated by the F-value of 80.990 (p-value = .000).

An examination of the Mahalanobis distance values indicated that there were a few outliers among the variable perceived usefulness (PU) and Facebook intensity (FI), i.e. there were 7 cases that were > or equal to the critical chi-square value of 16.27 at alpha level of .001 (df=3).

Also, in Table 38, the t-values of 4.030 (p-value=.000) for perceived usefulness (PEOU) and 2.515 (p-value = .012) for Facebook intensity (FI) indicated that PEOU and FI contributed significantly to the prediction of intention to use Facebook for search and evaluation (BI). However, the t-value of -0.388 (p-value = .699), i.e. combined perceived ease of use and Facebook intensity (PEOU*FI) did not contribute significantly to the prediction of intention to use Facebook for search and evaluation (BI). The results remained insignificant even with the removal of the outliers (Appendix

Based on the results in steps (i), (ii) and (iii), moderator effects were not indicated as the effect of PEOU*FI was not significant while PEOU and FI were controlled.

Therefore, the hypothesis **H6b is rejected** :

The relationship between consumers' perceived usefulness (PU) of Facebook and their intentions to use Facebook for search and evaluation of products or services (BI) is not moderated by Facebook intensity.

The linear regression equation to represent the effect is:

$$BI = 0.308 + 0.505PEOU + 0.396FI - 0.017PEOU*FI$$

4.6   CHAPTER SUMMARY

The results of the data collected through the survey were analysed and presented in this chapter. As the sample collected (406) exceeded the targeted sample size of 384, parametric tests were used in the analyses. The overall results supported the proposed hypotheses except for the moderating effects which were found to be not significant. The interpretation, detail discussion conclusions and recommendations will be the focus of the next chapter.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.0   INTRODUCTION

This chapter shall present the findings of this study, followed by implications and recommendations on the use of Facebook and other social media as part of the marketing communication mix. The chapter shall conclude with a discussion on the limitations of this study and recommendations for future research.

5.1   INTERPRETATION OF RESULTS

5.1.1   Summary of hypotheses tests results

The results of the hypotheses testing are summarised in Table 39 below.

Table 39: Summary of Hypotheses Testing

Hypotheses	Results
H1: Subjective norm (SN) has a positive influence on consumers' perceived usefulness (PU) of Facebook	Accepted
H2: Accessibility (AA) has a positive influence on consumers' perceived ease of use (PEOU) of Facebook	Accepted
H3: Consumers' perceived ease of use (PEOU) of Facebook has a positive influence on their perceived usefulness (PU) of Facebook	Accepted
H4: Consumers' perceived ease of use (PEOU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI)	Accepted

Hypotheses	Results
H5: Consumers' perceived usefulness (PU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI)	Accepted
H6a: The relationship between consumers' perceived usefulness (PU) of Facebook and their intentions to use Facebook for search and evaluation of products or services (BI) is moderated by Facebook intensity	Rejected
H6b: The relationship between consumers' perceived ease of use (PEOU) of Facebook and their intentions to use Facebook for search and evaluation of products or services (BI) is moderated by Facebook intensity	Rejected

5.1.2   The influence of subjective norm

The results of this study showed that subjective norm or the social influence has a positive influence on the prediction of users' perceived usefulness of Facebook. This finding is unsurprising since Facebook is a social networking platform where people chose to interact and share content not only for personal but also business reasons.

Although subjective norm in this study only explained 13.3% of the variance in the dependent variable perceived usefulness it was still significant - β = .421; p-value = .000. Lee et al. (2003) had found mixed results, in the relationship between subjective norm and perceived usefulness in past studies. Venkatesh et al. (2003) found that social influence as an independent variable on behavioural intention was moderated by gender, age and voluntariness. Therefore the findings of this study is in line with research investigating the social influence variable within the context of the Technology Acceptance Model (TAM) (Davis, 1989; Venkatesh & Davis, 2000; Malhotra & Galletta, 1999).

5.1.3   The influence of accessibility

Accessibility was found to have a positive influence on perceived ease of use of Facebook as per past studies by Karahanna & Straub (1999) as well as Lee et al. (2003). Accessibility

explained 14.6% of the variance in the dependent variable perceived ease of use and was significant – β = .348; p-value = .000.

Accessibility to the devices and communication infrastructure are key factors that will allow many more users to have access to not only Facebook but all types of social media content. In a recent news article, it was reported that according to Gartner, 50% of handsets sold in 2013 were smart phones and manufacturers are set to present even more low-cost options to boost smart phone sales in developing markets and (AFP, 2013). The mobile platform definitely holds great promise for the industry with the number of unique mobile subscribers expected to reach 4 billion in the next 5 years (MobiThinking, 2013).

5.1.4 Perceived ease of use and perceived usefulness of Facebook

Users' perceived ease of use of Facebook was found to have a strong positive influence on perceived usefulness of Facebook. As in past studies, the original TAM relationship between perceived ease of use and perceived usefulness was found to be highly significant with perceived ease of use explaining 53.6% of the variance in perceived usefulness – β = .766; p-value = .000. (Davis,1989; Venkatesh & Davis, 2000; Malhotra & Galletta, 1999). This attests to the robustness of the TAM in studies on technology adoption.

5.1.5 Influence of perceived ease of use on consumers' intentions to use Facebook for search and evaluation

Consumers' perceived ease of use of Facebook was found to have a strong positive influence on user's intention to use Facebook for search and evaluation. This result is in line with past studies based on the TAM model. The relationship between perceived ease of use and the consumers' intentions to use was found to be highly significant with perceived ease of use explaining 30.4% of the variance in intentions to use – β = .602; p-value = .000 (Davis,1989; Venkatesh & Davis, 2000; Malhotra & Galletta, 1999).

5.1.6 Influence of perceived usefulness on consumers' intentions to use Facebook for search and evaluation

Consumers' perceived usefulness of Facebook was found to have a strong positive influence on users' intention to use Facebook for search and evaluation. This result is also in line with past studies based on the TAM model. The relationship between perceived usefulness and the consumers' intentions to use was found to be highly significant with perceived usefulness explaining 32.7% of the variance in intentions to use – $\beta = .597$; p-value = .000 (Davis,1989; Venkatesh & Davis, 2000; Malhotra & Galletta, 1999).

5.1.7 Facebook intensity as a moderator

The results in this study do not support Facebook intensity as a moderator between the relationship for perceived usefulness to consumers' intentions to use Facebook for search and evaluation. The effect of the interaction between perceived usefulness and Facebook intensity was found to be not significant when perceived usefuleness and Facebook intensity were controlled – $\beta = -1.003$; p-value = .317 (i.e. > .05).

The results also do not support Facebook intensity as a moderator between the relationship for perceived ease of use to consumers' intentions to use Facebook for search and evaluation. The effect of the interaction between perceived ease of use and Facebook intensity was found to be not significant when perceived ease of use and Facebook intensity were controlled – $\beta = -.017$; p-value = .699 (i.e. > .05).

The results were still not significant even after the removal of outliers. Although it may be logical to assume that consumers who are more active in Facebook may have a tendency to use the platform for their searches for products and services, the results dispute this assumption. In fact the results suggested that Facebook intensity may actually diminish that relationship as indicated by the negative β values of the regression analyses. One possible reason could be the Facebook users with high Facebook intensity were using the site mainly for recreational and social activities indicated by the high number of friends and time spent. Facebook games can be very addictive and users could spend hours playing and competing with their online friends. A deeper insight into the types of their activities should be able to help shed some light on the results.

5.1.8 Overall results

To summarise, the results discussed above has helped us to answer the research questions set out in Chapter 1:

i)   Will consumers use social technologies for search and evaluation in the consumer buying process?

The intention of consumers to use social technologies, specifically Facebook in this study, for seeking out information and making evaluations about products and services is positively influenced by their perceived usefulness and perceived ease of use of Facebook.

ii)   What factors influence the use of social technologies in the buying process?

One of the factors examined in this study, that is, subjective norm or social influence of people who are important to the consumer like his family and friends, was found to have a positive influence on consumers' perceived usefulness of Facebook which was also found to have a positive influence on their intentions to use Facebook for search and evaluation.

The other factor, accessibility to Facebook, was found to have a positive influence on consumers' perceived ease of use of Facebook which was also found to have a positive influence on their intentions to use Facebook for search and evaluation.

However the last factor examined, intensity of Facebook usage by consumers, referring to how actively they are engaged to Facebook activities, their extent of emotional connection and the extent that Facebook is part of their daily lives, did not have any moderating effect on their intentions to use Facebook for search and evaluation.

5.2   IMPLICATIONS

It is indisputable that social media is an important platform for individuals' personal communication and businesses are beginning to realise the huge potential that this platform offers not only as a marketing communication but more importantly as a tool for product

innovation through problem tracking, customer profiling and creative content development (Muscroft, 2014).

This study has provided significant support to the use of social media, specifically Facebook, as a tool for consumers' search and evaluation for products and services during the buyer decision making process. The implication for businesses is quite clear: they simply cannot afford to ignore social media as part of their marketing communication mix.

In spite of the clear potential of social technologies, it appears that most companies in Malaysia have yet to recognise how social media can impact their businesses. In PriceWaterhouse Coopers' survey report on social media use among Malaysian companies and the involvement of senior management, it was reported that many do not have a clear strategy or formal performance measurement to track investment in social media. 77% of users polled also felt that A CEO's presence impacts their feelings about the brand and yet 47% of the C-level executives use social media only for personal purposes. (Ee, 2013).

Pew Research Centre's recent survey found that user growth on all five services studied – Facebook, LinkedIn, Pinterest, Twitter and Instagram – increased from 2012 to 2013 (Bercovici, 2013). Clearly the growth trend is not about to cease anytime soon, especially with the growing interest in the other services like Instagram.

The opportunities are clear and businesses should definitely make their mark on social media if they have yet to embark on it. Due to the dynamic and volatile nature of the social platforms, it is understandable that many organisations feel insecure or even threatened as they cannot control the conversations. Organisations need to have a strategy to guide their social media endeavours and have measures in place to quantify their benefits. It is also recommended that the senior level management should lead the strategy and be genuinely engaged with the audience.

5.3   LIMITATIONS

As with any research, there are limitations in this study. The following limitations had been identified for improvements to future research projects.

Firstly, this study only focused on Facebook as it is considered the most popular social networking site with the highest number of registered users at more than a billion. There are several other social media sites like Instagram, Pinterest or Scan Chat which were becoming more popular with younger audiences – teenagers and younger (Grove, 2013).

Secondly, the sampling method employed in this study is convenience sampling, which may not reflect the general population as this type of sampling is non-probability method. As noted in the descriptive analyses, most of the respondents were young adults and most were students. This profile may not be representative of the Malaysian Facebook population. For future research, it is recommended that stratified sampling methods may be employed to ensure that key demographics like age or occupation are appropriately included to be of greater value for businesses.

Lastly, the sample came mainly from respondents located in the Klang Valley, the nation's metropolis. The culture, lifestyle and indeed sophistication of metropolitan inhabitants will likely differ from those in rural areas. Although the questionnaires were distributed on and offline, 74% of the responses were received from the hard copy questionnaires handed out. The geographical coverage is limited and this may not accurately reflect the attitudes and intentions of the targeted population.

5.4   RECOMMENDATIONS

Future research could consider the following suggestions to provide a better understanding of the effectiveness of different types of social technologies in different areas of consumer behaviour.

Facebook or Google+ are considered general interest or social sites. There are other significant sites targeted at specific audiences. For example LinkedIn is the largest professional network with 277+ million users (LinkedIn, 2014). This may be only a fraction of Facebook's phenomenal population, but this is still very significant as these are the business and professional users. The latest report from Barnes & Lescault (2013b) indicated that the Inc 500 companies' preferred platform was LinkedIn and perceived that Twitter has the greatest potential for sales growth. There are also country and language specific sites like

China's Qzone with over 600 million users (Incitez_China, 2013) or micro blogging site similar to Twitter, Sina Weibo with over 500 million users (Cooper, 2013).

Future research could therefore explore these immensely popular social sites with more specific audiences and purposes. The research could also delve deeper into the attitudes and intentions of a wider population based on locations and lifestyles which could be really valuable for businesses looking to serve consumers who may not have accesses to the choices available to metropolitans.

5.5   CONCLUSIONS

This study has provided evidence that Facebook specifically and social media in general hold great opportunities for marketers and brands to engage with consumers in conversations and hopefully in furthering the push to actual purchase. Social media has been used successfully by different companies not only as part of the marketing communication mix, but also in customer interactions, monitoring trends or develop new product ideas. The benefits brought about by social media usage include increased awareness of the company and brand, increased traffic to company website, favourable perceptions, identifying new product opportunities and even increase in new business (Harvard Business Review Analytic Services, 2010).

Businesses that currently do not have any social presence are losing out on this opportunity to be part of a dynamic and vibrant community where many conversations about brands and organizations are rife.

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APPENDICES

Beyond liking and sharing: An examination of consumers' intentions to use Facebook for search and evaluation

INTRODUCTION

Dear Respondent,

This study is conducted as part of the course requirements of the Master of Business Administration in Universiti Tunku Abdul Rahman (UTAR). Facebook is the most popular social networking site (SNS) with the highest number of users. The objective of this study is to get an insight into the factors influencing Facebook users' intentions to use it for search and evaluation of products and services, which are very important stages during a consumer's buying decision process. I would like to extend my sincere gratitude to you for taking the time to participate in this study. It should take up no more than 10 minutes of your time. Although your input is very important to me, participation is entirely on a voluntary basis. All data given shall be treated with the strictest confidence and used solely for academic purposes. If you have any queries, please feel free to contact me at limwpei@gmail.com.

Thank you.

Sincerely,
Lim Wun Pei

Mark only one oval
* Required

Section 1: GENERAL INFORMATION

This section contains questions that will help us understand some general information about you

1.1 Gender *

☐   Male

☐   Female

1.2 Age group *

☐   19 years and younger

☐   20 - 29 years

☐   30 - 39 years

☐   40 - 49 years

☐   50 - 59 years

☐   60 years and older

1.3 Marital status *

☐   Single

☐   Married

☐   Others (divorced, widowed, etc)

1.4 Highest level of education *

☐   Primary

☐   Secondary / High School

☐   Tertiary (college, university)

1.5 Occupation group *

☐   Non-executive

☐   Executive / Managerial

☐   Professional (doctor, engineer, accountant, lawyer)

☐   Non-employed (student, home maker, retired)

1.6 Income group (per month) *

☐   Less than RM2000

☐   RM2001 - RM4000

☐   RM4001 - RM6000

☐   RM6001 - RM8000

☐   More than RM8000

1.7 Nationality *
☐   Malaysian
☐   Non-Malaysian

1.8 Current place of residence *
☐   Malaysia
☐   Outside Malaysia

Section 2: FACEBOOK INTENSITY

This section contains questions that will help us understand the extent of your involvement and use of Facebook. Please indicate your agreement with the statements below.

2.1 About how many total Facebook friends do you have? *
☐   10 or less
☐   11-50
☐   51-100
☐   101-150
☐   151-200
☐   201-250
☐   251-300
☐   301-350
☐   351-400
☐   More than 400

2.2 On average, how much time a day do you spend on Facebook? *
☐   Less than 10 minutes
☐   11 - 60 minutes
☐   1 - 2 hours
☐   2 - 3 hours
☐   More than 3 hours

2.3 Facebook is part of my everyday activity *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

2.4 I am proud to tell people I'm on Facebook *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

2.5 Facebook has become part of my daily routine *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

2.6 I feel out of touch when I haven't logged onto Facebook for a while *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

2.7 I feel I am part of the Facebook community *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

2.8 I would be sorry if Facebook shut down *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

Section 3: SUBJECTIVEW NORM

This section contains questions that will help us understand the social factors influencing your use of Facebook for searching and evaluating products or services. Please indicate your agreement with the statements below.

3.1 Most people who are important to me think I should use Facebook *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

3.2 Most people who are important to me think it would be a good idea to use Facebook*

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

3.3 Most people who are important to me want me to use Facebook *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

3.4 I feel under social pressure to use Facebook *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

SECTION 4: ACCESSIBILITY

This section contains questions that will help us understand how easy it is for you to gain access to use Facebook. Please indicate your agreement with the statements below.

4.1 I can access Facebook freely anywhere at any time using my own or company facilities *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

4.2 I can access Facebook at my workplace using company facilities *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

4.3 I can access Facebook at my workplace using my personal devices (smart phone or tablet computer) *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

SECTION 5: PERCEIVED USEFULNESS

This section contains questions that will help us understand how useful you think Facebook is for search and evaluation of product or services. Please indicate your agreement with the statements below.

5.1 Facebook is useful for finding products or services *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

5.2 Facebook is useful for finding out about what products or services my friends are using *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

5.3 Facebook is useful for finding out about a person/group/company that is offering a product or service *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

SECTION 6: PERCEIVED EASE OF USE

This section contains questions that help us understand of how easy you think Facebook is for searching and evaluating products or services. Please indicate your agreement with the statements below.

6.1 Learning how to find and share products or services on Facebook is easy *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

6.2 Finding products or services on Facebook is easy *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

6.3 Finding out about products or services my friends are using is easy on Facebook *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

SECTION 7: INTENTION TO USE FOR SEARCH & EVALUATION

This section contains questions that will help us understand your intention to use Facebook for search and evaluation of products or services. Please indicate your agreement with the statements below.

7.1 I intend to use Facebook for search and evaluation of products or services in the future *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

7.2 I will most likely use Facebook for search and evaluation of products or services in the future *

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

7.3 I plan to use Facebook for search and evaluation of products or services in the future*

	1	2	3	4	5	
Strongly disagree	☐	☐	☐	☐	☐	Strongly agree

Reliability Tests

Accessibility

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.768	.768	3

Inter-Item Correlation Matrix

	Can access FB anywhere	Can access FB at workplace using company facilities	Can access FB at workplace using personal facilities
Can access FB anywhere	1.000	.484	.627
Can access FB at workplace using company facilities	.484	1.000	.464
Can access FB at workplace using personal facilities	.627	.464	1.000

Subjective norm

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.795	.790	4

Inter-Item Correlation Matrix

	People think I should use FB	It would be a good idea to use FB	People want me to use FB	Feel under social pressure to use FB
People think I should use FB	1.000	.723	.693	.267
It would be a good idea to use FB	.723	1.000	.694	.214
People want me to use FB	.693	.694	1.000	.319
Feel under social pressure to use FB	.267	.214	.319	1.000

Perceived usefulness

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.854	.855	3

Inter-Item Correlation Matrix

	FB is useful for finding products & services	FB is useful for finding out what friends are using	FB is useful for finding what is being offered
FB is useful for finding products & services	1.000	.633	.656
FB is useful for finding out what friends are using	.633	1.000	.697
FB is useful for finding what is being offered	.656	.697	1.000

Perceived ease of use

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.853	.853	3

Inter-Item Correlation Matrix

	Easy to learn how to find & share products in FB	Finding products on FB is easy	Easy to find out about products that friends are using
Easy to learn how to find & share products in FB	1.000	.682	.626
Finding products on FB is easy	.682	1.000	.672
Easy to find out about products that friends are using	.626	.672	1.000

Facebook intensity

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.858	.866	8

Inter-Item Correlation Matrix

	No.of FB friends	Time spent on FB	FB part of everyday activity	Proud to be part of FB	FB part of daily routine	Feel out of touch if not logged into FB	Feel part of FB community	Sorry if FB shut down
No.of FB friends	1.000	.356	.329	.182	.266	.111	.161	.171
Time spent on FB	.356	1.000	.547	.280	.551	.362	.383	.244
FB part of everyday activity	.329	.547	1.000	.568	.825	.558	.603	.425
Proud to be part of FB	.182	.280	.568	1.000	.601	.498	.629	.467
FB part of daily routine	.266	.551	.825	.601	1.000	.632	.616	.464
Feel out of touch if not logged into FB	.111	.362	.558	.498	.632	1.000	.628	.468
Feel part of FB community	.161	.383	.603	.629	.616	.628	1.000	.561
Sorry if FB shut down	.171	.244	.425	.467	.464	.468	.561	1.000

Intention to use Facebook for search and evaluation

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.914	.915	3

Inter-Item Correlation Matrix

	Intend to use FB for search & evaluation	Most likely will use FB for search & evaluation	Plan to use FB for search & evaluation
Intend to use FB for search & evaluation	1.000	.788	.737
Most likely will use FB for search & evaluation	.788	1.000	.819
Plan to use FB for search & evaluation	.737	.819	1.000

Regression Results

H1: Subjective norm (SN) has a positive influence on users' perceived usefulness (PU) of Facebook

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.365[a]	.133	.131	.89663

a. Predictors: (Constant), Avg Subjective Norm

b. Dependent Variable: Avg Perceived Usefulness

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.040	1	50.040	62.243	.000[a]
	Residual	324.793	404	.804		
	Total	374.832	405			

a. Predictors: (Constant), Avg Subjective Norm

b. Dependent Variable: Avg Perceived Usefulness

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.971	.158		12.460	.000
	Avg Subjective Norm	.421	.053	.365	7.889	.000

a. Dependent Variable: Avg Perceived Usefulness

MAH_1 column - no multivariate outliers among
 IV: SN i.e. no values > or equal to critical chi-square value of 10.83
 at alpha level of .001 (df = 1)

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.3921	4.0773	3.1683	.35150	406
Std. Predicted Value	-2.208	2.586	.000	1.000	406
Standard Error of Predicted Value	.045	.124	.060	.018	406
Adjusted Predicted Value	2.3537	4.0595	3.1685	.35176	406
Residual	-2.65603	2.60790	.00000	.89552	406
Std. Residual	-2.962	2.909	.000	.999	406
Stud. Residual	-2.973	2.930	.000	1.002	406
Deleted Residual	-2.67534	2.64628	-.00020	.90094	406
Stud. Deleted Residual	-3.002	2.958	.000	1.004	406
Mahal. Distance	.012	6.688	.998	1.288	406
Cook's Distance	.000	.063	.003	.007	406
Centered Leverage Value	.000	.017	.002	.003	406

a. Dependent Variable: Avg Perceived Usefulness

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Avg Perceived Usefulness
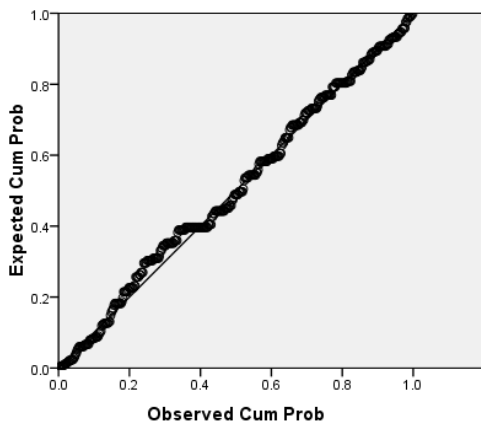
Normal distribution

Scatterplot

Dependent Variable: Avg Perceived Usefulness
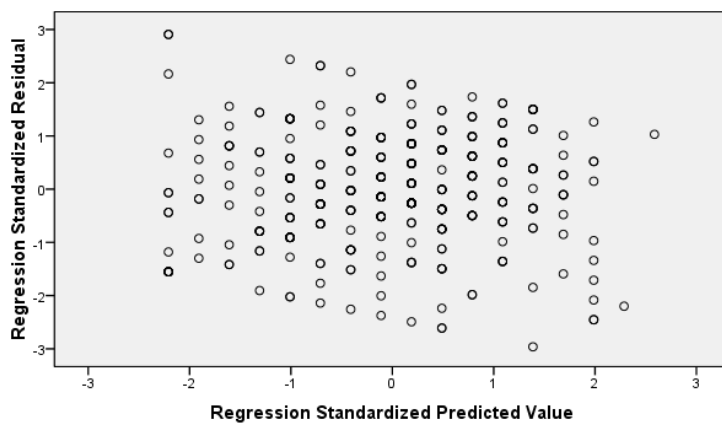
No clear relationship, linearity assumed

H2: Accessibility (AA) has a positive influence on perceived ease of use (PEOU) of Facebook

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.383^a	.146	.144	.84986

a. Predictors: (Constant), Avg Accessibility

b. Dependent Variable: Avg Perceived Ease of Use

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.081	1	50.081	69.339	.000^a
	Residual	291.792	404	.722		
	Total	341.873	405			

a. Predictors: (Constant), Avg Accessibility

b. Dependent Variable: Avg Perceived Ease of Use

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.187	.140		15.616	.000
	Avg Accessibility	.348	.042	.383	8.327	.000

a. Dependent Variable: Avg Perceived Ease of Use

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MAH_2 column - no multivariate outliers among IV:
 ACC i.e. no values > or equal to critical chi-square value of 10.83 at alpha
 level of .001 (df = 1)
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Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.5350	3.9256	3.2997	.35165	406
Std. Predicted Value	-2.174	1.780	.000	1.000	406
Standard Error of Predicted Value	.043	.101	.057	.016	406
Adjusted Predicted Value	2.5188	3.9560	3.2999	.35165	406
Residual	-2.92559	2.34908	.00000	.84881	406
Std. Residual	-3.442	2.764	.000	.999	406
Stud. Residual	-3.460	2.779	.000	1.002	406
Deleted Residual	-2.95600	2.37489	-.00019	.85363	406
Stud. Deleted Residual	-3.508	2.803	.000	1.004	406
Mahal. Distance	.018	4.728	.998	1.216	406
Cook's Distance	.000	.062	.003	.006	406
Centered Leverage Value	.000	.012	.002	.003	406

a. Dependent Variable: Avg Perceived Ease of Use

**Normal P-P Plot of Regression Standardized Residual**

Dependent Variable: Avg Perceived Ease of Use
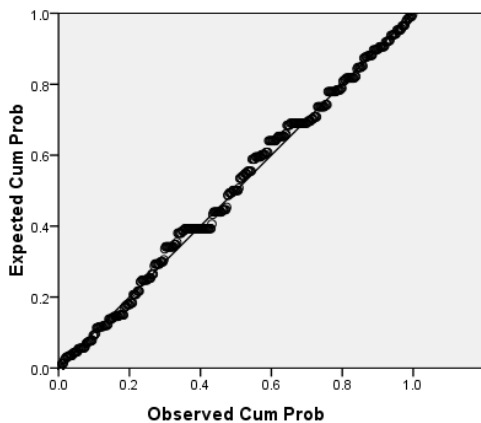
Normal distribution
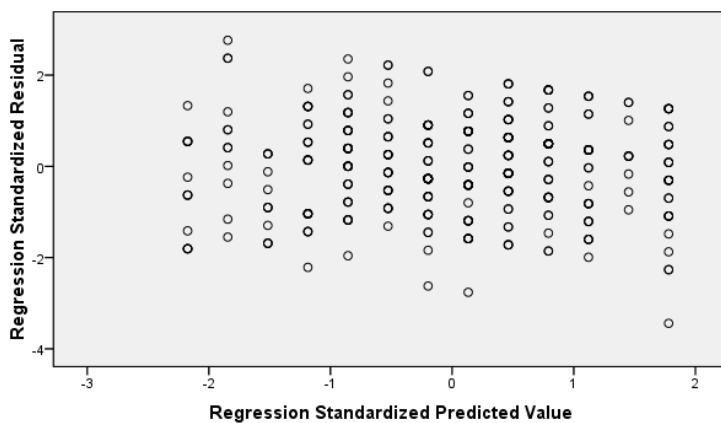
Scatterplot

Dependent Variable: Avg Perceived Ease of Use

No clear relationship , linearity assumed

H3: Users' perceived ease of use (PEOU) of Facebook has a positive influence on their perceived usefulness (PU) of Facebook

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.732[a]	.536	.534	.65645

a. Predictors: (Constant), Avg Perceived Ease of Use

b. Dependent Variable: Avg Perceived Usefulness

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	200.737	1	200.737	465.824	.000[a]
	Residual	174.095	404	.431		
	Total	374.832	405			

a. Predictors: (Constant), Avg Perceived Ease of Use

b. Dependent Variable: Avg Perceived Usefulness

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.640	.122		5.262	.000
	Avg Perceived Ease of Use	.766	.036	.732	21.583	.000

a. Dependent Variable: Avg Perceived Usefulness

MAH_3 column – no multivariate outliers among IV:
PEOU i.e. no values > or equal to critical chi-square value of 10.83 at alpha
level of .001 (df = 1)

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.4061	4.4712	3.1683	.70402	406
Std. Predicted Value	-2.503	1.851	.000	1.000	406
Standard Error of Predicted Value	.033	.088	.044	.013	406
Adjusted Predicted Value	1.3892	4.4911	3.1685	.70415	406
Residual	-2.44953	1.72799	.00000	.65564	406
Std. Residual	-3.731	2.632	.000	.999	406
Stud. Residual	-3.737	2.636	.000	1.001	406
Deleted Residual	-2.45654	1.73271	-.00023	.65900	406
Stud. Deleted Residual	-3.798	2.656	.000	1.005	406
Mahal. Distance	.001	6.265	.998	1.300	406
Cook's Distance	.000	.046	.003	.006	406
Centered Leverage Value	.000	.015	.002	.003	406

a. Dependent Variable: Avg Perceived Usefulness

**Normal P-P Plot of Regression Standardized Residual**

Dependent Variable: Avg Perceived Usefulness

Normal distribution

Scatterplot

Dependent Variable: Avg Perceived Usefulness
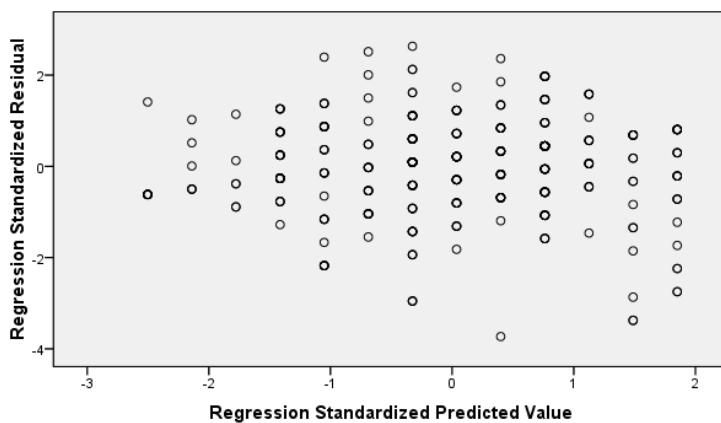
No clear relationship, linearity assumed

H4: Users' perceived ease of use (PEOU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.552[a]	.304	.302	.83816

a. Predictors: (Constant), Avg Perceived Ease of Use

b. Dependent Variable: Avg Behaviour Intention

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	124.089	1	124.089	176.635	.000[a]
	Residual	283.817	404	.703		
	Total	407.906	405			

a. Predictors: (Constant), Avg Perceived Ease of Use

b. Dependent Variable: Avg Behaviour Intention

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.937	.155		6.032	.000
	Avg Perceived Ease of Use	.602	.045	.552	13.290	.000

a. Dependent Variable: Avg Behaviour Intention

MAH_6 – no multivariate outliers among IVs: PEOU i.e.
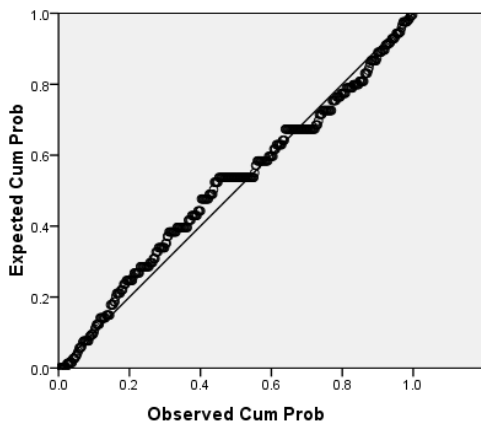no case > or equal to critical chi-square value of 10.83 at alpha level of
.001 (df = 1)

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.5390	3.9489	2.9245	.55353	406
Std. Predicted Value	-2.503	1.851	.000	1.000	406
Standard Error of Predicted Value	.042	.112	.057	.016	406
Adjusted Predicted Value	1.5367	3.9777	2.9248	.55349	406
Residual	-2.61553	2.25608	.00000	.83713	406
Std. Residual	-3.121	2.692	.000	.999	406
Stud. Residual	-3.138	2.695	.000	1.001	406
Deleted Residual	-2.64440	2.26224	-.00038	.84134	406
Stud. Deleted Residual	-3.173	2.717	.000	1.004	406
Mahal. Distance	.001	6.265	.998	1.300	406
Cook's Distance	.000	.054	.003	.005	406
Centered Leverage Value	.000	.015	.002	.003	406

a. Dependent Variable: Avg Behaviour Intention

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Avg Behaviour Intention
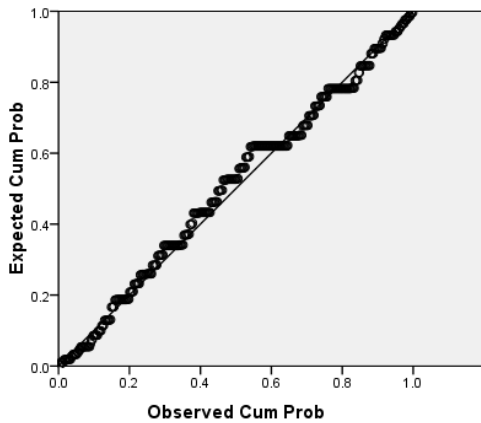
Normal distribution

Scatterplot

Dependent Variable: Avg Behaviour Intention
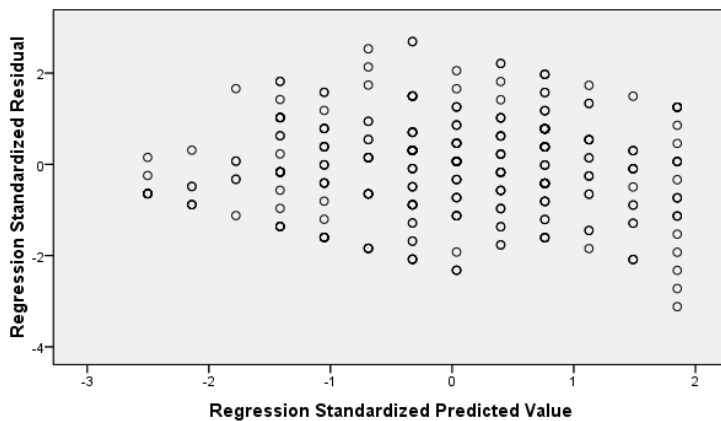
No clear relationship, linearity assumed

H5: Users' perceived usefulness (PU) of Facebook has a positive influence on their intentions to use Facebook for search and evaluation of products or services (BI)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.572[a]	.327	.326	.82411

a. Predictors: (Constant), Avg Perceived Usefulness

b. Dependent Variable: Avg Behaviour Intention

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	133.525	1	133.525	196.602	.000[a]
	Residual	274.381	404	.679		
	Total	407.906	405			

a. Predictors: (Constant), Avg Perceived Usefulness

b. Dependent Variable: Avg Behaviour Intention

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.033	.141		7.333	.000
	Avg Perceived Usefulness	.597	.043	.572	14.021	.000

a. Dependent Variable: Avg Behaviour Intention

MAH_5 – no multivariate outliers among IVs: PU
 i.e. no case > or equal to critical chi-square value of 10.83 at alpha level
 of .001 (df = 1)

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.6303	4.0177	2.9245	.57419	406
Std. Predicted Value	-2.254	1.904	.000	1.000	406
Standard Error of Predicted Value	.041	.101	.056	.016	406
Adjusted Predicted Value	1.6044	4.0487	2.9246	.57413	406
Residual	-2.68437	2.17599	.00000	.82309	406
Std. Residual	-3.257	2.640	.000	.999	406
Stud. Residual	-3.276	2.644	.000	1.001	406
Deleted Residual	-2.71536	2.18153	-.00014	.82748	406
Stud. Deleted Residual	-3.316	2.664	.000	1.004	406
Mahal. Distance	.029	5.080	.998	1.291	406
Cook's Distance	.000	.062	.003	.005	406
Centered Leverage Value	.000	.013	.002	.003	406

a. Dependent Variable: Avg Behaviour Intention

**Normal P-P Plot of Regression Standardized Residual**

Dependent Variable: Avg Behaviour Intention
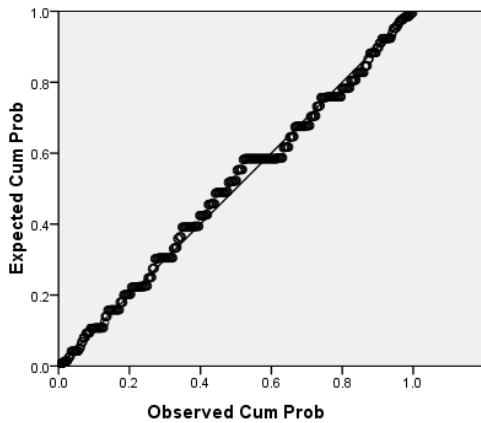
Normal distribution

Scatterplot

Dependent Variable: Avg Behaviour Intention
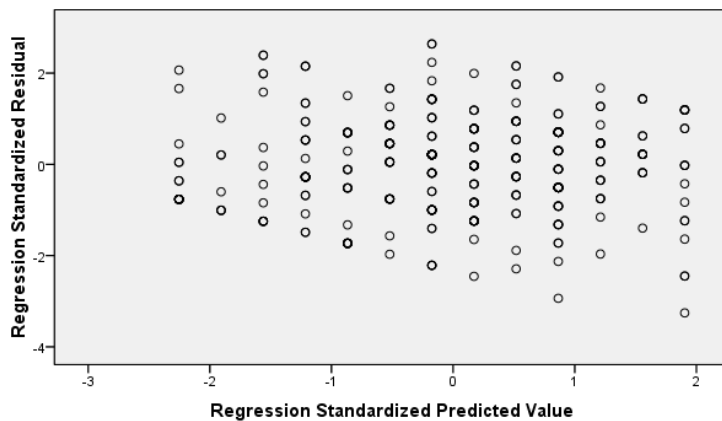
No clear relationship, linearity assumed

H6a: The relationship between consumers' perceived usefulness (PU) of Facebook and their intentions to use Facebook for search and evaluation of products or services (BI) is moderated by Facebook intensity

STEP 1 - same as H5 above

STEP 2

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.620^a	.385	.381	.78928

a. Predictors: (Constant), Avg FB Intensity, Avg Perceived Usefulness

b. Dependent Variable: Avg Behaviour Intention

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	156.850	2	78.425	125.889	.000^a
	Residual	251.056	403	.623		
	Total	407.906	405			

a. Predictors: (Constant), Avg FB Intensity, Avg Perceived Usefulness

b. Dependent Variable: Avg Behaviour Intention

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.594	.153		3.887	.000
	Avg Perceived Usefulness	.462	.046	.443	9.960	.000
	Avg FB Intensity	.307	.050	.272	6.119	.000

a. Dependent Variable: Avg Behaviour Intention

MAH_9 - no multivariate outliers among IV : PU, FI
 i.e. no case > or equal to critical chi-square value of 13.82 at alpha level
 of .001 (df=2)

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.3635	4.4018	2.9245	.62232	406
Std. Predicted Value	-2.508	2.374	.000	1.000	406
Standard Error of Predicted Value	.040	.132	.065	.020	406
Adjusted Predicted Value	1.3640	4.4151	2.9246	.62219	406
Residual	-2.83788	2.40560	.00000	.78733	406
Std. Residual	-3.596	3.048	.000	.998	406
Stud. Residual	-3.618	3.055	.000	1.002	406
Deleted Residual	-2.87359	2.41720	-.00017	.79387	406
Stud. Deleted Residual	-3.674	3.087	.000	1.005	406
Mahal. Distance	.030	10.397	1.995	1.880	406
Cook's Distance	.000	.055	.003	.005	406
Centered Leverage Value	.000	.026	.005	.005	406

a. Dependent Variable: Avg Behaviour Intention

**Normal P-P Plot of Regression Standardized Residual**

Dependent Variable: Avg Behaviour Intention
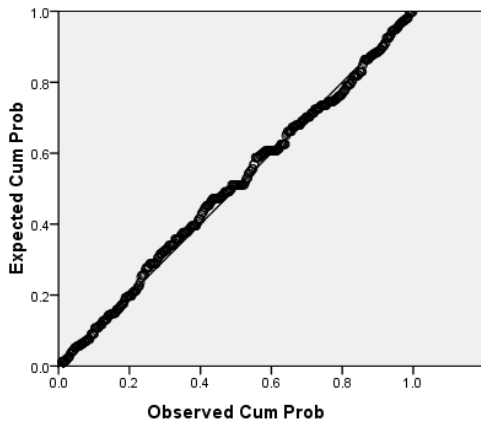
Normal distribution

Scatterplot

Dependent Variable: Avg Behaviour Intention
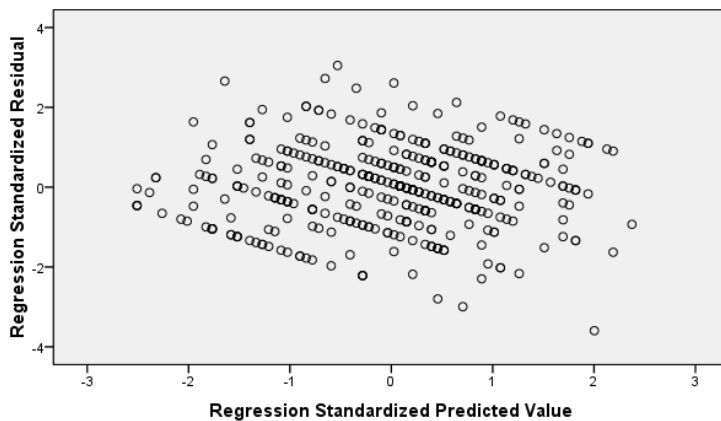
No clear relationship, linearity assumed

STEP 3

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.621^a	.386	.381	.78928

a. Predictors: (Constant), Avg PUxFI, Avg Perceived Usefulness, Avg FB Intensity

b. Dependent Variable: Avg Behaviour Intention

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	157.476	3	52.492	84.262	.000^a
	Residual	250.430	402	.623		
	Total	407.906	405			

a. Predictors: (Constant), Avg PUxFI, Avg Perceived Usefulness, Avg FB Intensity

b. Dependent Variable: Avg Behaviour Intention

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.242	.383		.632	.528
	Avg Perceived Usefulness	.580	.127	.556	4.580	.000
	Avg FB Intensity	.442	.143	.391	3.088	.002
	Avg PUxFI	-.043	.043	-.203	-1.003	.317

a. Dependent Variable: Avg Behaviour Intention

MAH_12 - minor multivariate outliers among IV : PU,
 FI, PUxFI i.e. 5 cases > or equal to critical chi-square value of 16.27 at
 alpha level of .001 (df=3)

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.2208	4.2490	2.9245	.62356	406
Std. Predicted Value	-2.732	2.124	.000	1.000	406
Standard Error of Predicted Value	.043	.185	.073	.029	406
Adjusted Predicted Value	1.2148	4.2829	2.9247	.62355	406
Residual	-2.74525	2.39226	.00000	.78635	406
Std. Residual	-3.478	3.031	.000	.996	406
Stud. Residual	-3.525	3.039	.000	1.002	406
Deleted Residual	-2.81889	2.40448	-.00023	.79499	406
Stud. Deleted Residual	-3.576	3.070	.000	1.005	406
Mahal. Distance	.201	21.292	2.993	3.605	406
Cook's Distance	.000	.083	.003	.006	406
Centered Leverage Value	.000	.053	.007	.009	406

a. Dependent Variable: Avg Behaviour Intention

**Normal P-P Plot of Regression Standardized Residual**

Dependent Variable: Avg Behaviour Intention
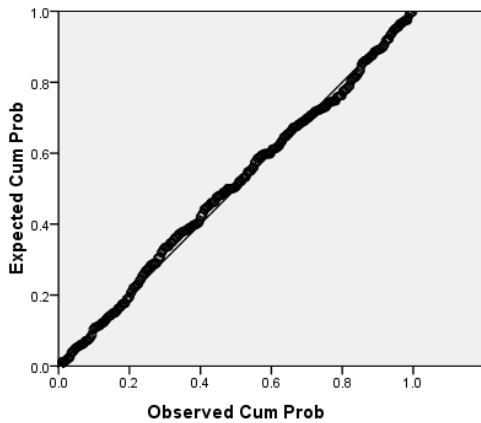
Normal distribution

Scatterplot

Dependent Variable: Avg Behaviour Intention
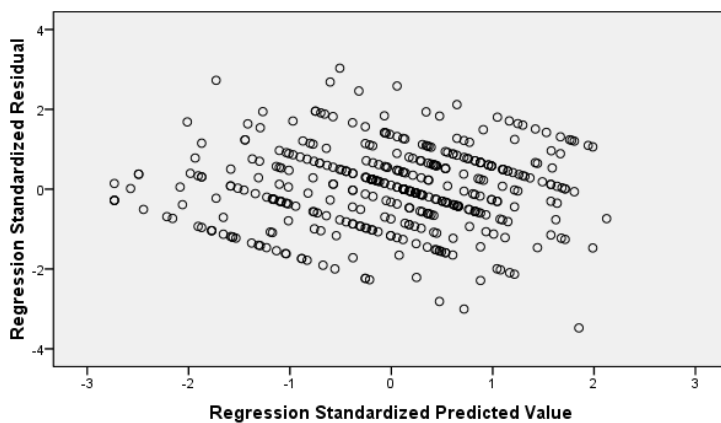
No clear relationship, linearity assumed

H6b: The relationship between consumers' perceived ease of use (PEOU) of Facebook and their intentions to use Facebook for search and evaluation of products or services (BI) is moderated by Facebook intensity

STEP 1 – same as H4 above

STEP 2

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.614[a]	.376	.373	.79442

a. Predictors: (Constant), Avg FB Intensity, Avg Perceived Ease of Use

b. Dependent Variable: Avg Behaviour Intention

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	153.570	2	76.785	121.667	.000[a]
	Residual	254.336	403	.631		
	Total	407.906	405			

a. Predictors: (Constant), Avg FB Intensity, Avg Perceived Ease of Use

b. Dependent Variable: Avg Behaviour Intention

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.454	.163		2.781	.006
	Avg Perceived Ease of Use	.460	.048	.421	9.629	.000
	Avg FB Intensity	.338	.049	.299	6.835	.000

a. Dependent Variable: Avg Behaviour Intention

MAH_11 - no multivariate outliers among IV : PEOU,
FI i.e. no case > or equal to critical chi-square value of 13.82 at alpha
level of .001 (df=2)

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.2517	4.3160	2.9245	.61578	406
Std. Predicted Value	-2.717	2.260	.000	1.000	406
Standard Error of Predicted Value	.040	.150	.065	.020	406
Adjusted Predicted Value	1.2499	4.3052	2.9250	.61567	406
Residual	-2.81375	2.18394	.00000	.79246	406
Std. Residual	-3.542	2.749	.000	.998	406
Stud. Residual	-3.564	2.754	.000	1.001	406
Deleted Residual	-2.84865	2.19218	-.00049	.79870	406
Stud. Deleted Residual	-3.617	2.777	.000	1.004	406
Mahal. Distance	.004	13.528	1.995	1.962	406
Cook's Distance	.000	.053	.003	.005	406
Centered Leverage Value	.000	.033	.005	.005	406

a. Dependent Variable: Avg Behaviour Intention

**Normal P-P Plot of Regression Standardized Residual**

Dependent Variable: Avg Behaviour Intention
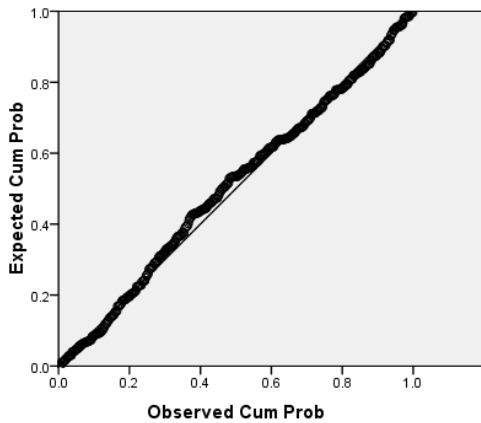
Normal distribution

Scatterplot

Dependent Variable: Avg Behaviour Intention
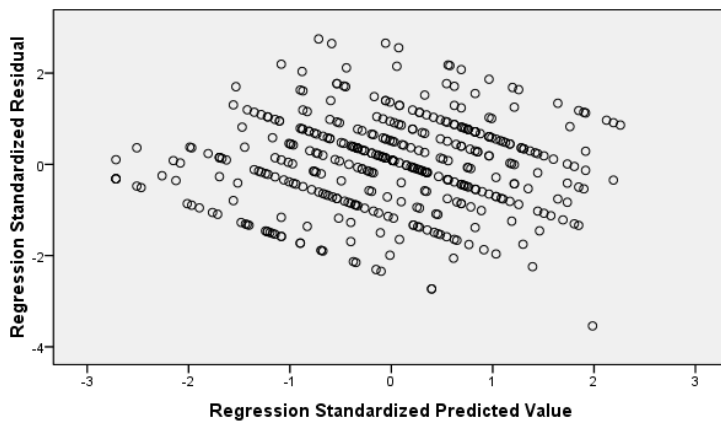
No clear relationship, linearity assumed

STEP 3

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.614[a]	.377	.372	.79526

a. Predictors: (Constant), Avg PEOUxFI, Avg Perceived Ease of Use, Avg FB Intensity

b. Dependent Variable: Avg Behaviour Intention

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	153.665	3	51.222	80.990	.000[a]
	Residual	254.241	402	.632		
	Total	407.906	405			

a. Predictors: (Constant), Avg PEOUxFI, Avg Perceived Ease of Use, Avg FB Intensity

b. Dependent Variable: Avg Behaviour Intention

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.308	.409		.754	.452
	Avg Perceived Ease of Use	.505	.125	.462	4.030	.000
	Avg FB Intensity	.396	.157	.350	2.515	.012
	Avg PEOUxFI	-.017	.044	-.080	-.388	.699

a. Dependent Variable: Avg Behaviour Intention

MAH_13 - minor multivariate outliers among IV : PEOU,
 FI, PEOUxFI i.e. 7 cases > or equal to critical chi-square value of 16.27
 at alpha level of .001 (df=3)

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.1918	4.2656	2.9245	.61597	406
Std. Predicted Value	-2.813	2.177	.000	1.000	406
Standard Error of Predicted Value	.042	.200	.073	.030	406
Adjusted Predicted Value	1.1830	4.2358	2.9252	.61566	406
Residual	-2.77734	2.18099	.00000	.79231	406
Std. Residual	-3.492	2.742	.000	.996	406
Stud. Residual	-3.539	2.748	.000	1.001	406
Deleted Residual	-2.85207	2.18942	-.00072	.80044	406
Stud. Deleted Residual	-3.591	2.770	.000	1.004	406
Mahal. Distance	.158	24.592	2.993	3.866	406
Cook's Distance	.000	.084	.003	.006	406
Centered Leverage Value	.000	.061	.007	.010	406

a. Dependent Variable: Avg Behaviour Intention

### Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Avg Behaviour Intention
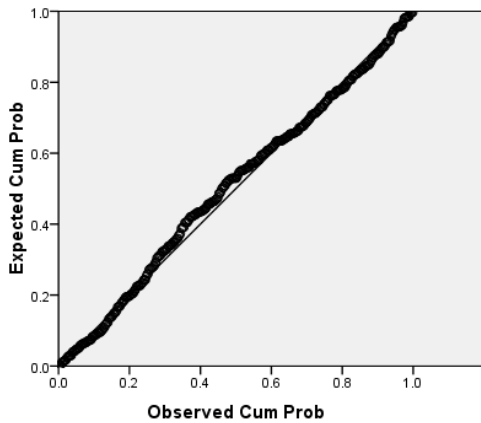
Normal distribution

Scatterplot

Dependent Variable: Avg Behaviour Intention

No clear relationship, linearity assumed

Levene's Test

Independent Samples Test

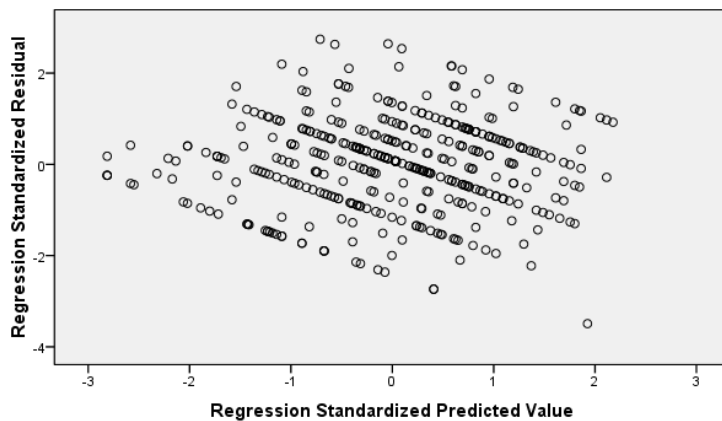|		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Avg FB Intensity	Equal variances assumed	.562	.454	-1.188	404	.235	-.10476	.08815	-.27806	.06853
	Equal variances not assumed			-1.186	397.548	.236	-.10476	.08831	-.27837	.06884
Avg Subjective Norm	Equal variances assumed	.879	.349	-1.182	404	.238	-.09791	.08285	-.26079	.06496
	Equal variances not assumed			-1.178	394.192	.239	-.09791	.08311	-.26130	.06548
Avg Accessibility	Equal variances assumed	.171	.679	.618	404	.537	.06215	.10058	-.13558	.25987
	Equal variances not assumed			.617	398.605	.537	.06215	.10070	-.13582	.26012
Avg Perceived Usefulness	Equal variances assumed	1.036	.309	-1.100	404	.272	-.10515	.09556	-.29301	.08270
	Equal variances not assumed			-1.097	393.130	.273	-.10515	.09589	-.29367	.08337
Avg Perceived Ease of Use	Equal variances assumed	.475	.491	-.555	404	.579	-.05070	.09136	-.23031	.12890
	Equal variances not assumed			-.553	393.585	.580	-.05070	.09166	-.23092	.12951
Avg Behaviour Intention	Equal variances assumed	2.274	.132	-1.356	404	.176	-.13504	.09961	-.33086	.06077
	Equal variances not assumed			-1.350	390.090	.178	-.13504	.10005	-.33175	.06167

Levene's test for homogeneity of variance is not significant, so assumption of homogeneity is not violated

Pearson's Correlations

Correlations

		Avg FB Intensity	Avg Subjective Norm	Avg Accessibility	Avg Perceived Usefulness	Avg Perceived Ease of Use	Avg Behaviour Intention
Avg FB Intensity	Pearson Correlation	1	.527**	.415**	.476**	.437**	.483**
	Sig. (1-tailed)		.000	.000	.000	.000	.000
	N	406	406	406	406	406	406
Avg Subjective Norm	Pearson Correlation	.527**	1	.325**	.365**	.357**	.425**
	Sig. (1-tailed)	.000		.000	.000	.000	.000
	N	406	406	406	406	406	406
Avg Accessibility	Pearson Correlation	.415**	.325**	1	.428**	.383**	.285**
	Sig. (1-tailed)	.000	.000		.000	.000	.000
	N	406	406	406	406	406	406
Avg Perceived Usefulness	Pearson Correlation	.476**	.365**	.428**	1	.732**	.572**
	Sig. (1-tailed)	.000	.000	.000		.000	.000
	N	406	406	406	406	406	406
Avg Perceived Ease of Use	Pearson Correlation	.437**	.357**	.383**	.732**	1	.552**
	Sig. (1-tailed)	.000	.000	.000	.000		.000
	N	406	406	406	406	406	406
Avg Behaviour Intention	Pearson Correlation	.483**	.425**	.285**	.572**	.552**	1
	Sig. (1-tailed)	.000	.000	.000	.000	.000	
	N	406	406	406	406	406	406

**. Correlation is significant at the 0.01 level (1-tailed).

Regression results for moderator effects (H6a & H6b) after removal of outliers

Results showed that moderator effects still not significant even after removal of outliers

H6a: PU + FI + PUxFI

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Avg PUxFI, Avg Perceived Usefulness, Avg FB Intensity[a]	.	Enter

a. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.584[a]	.341	.336	.79765

a. Predictors: (Constant), Avg PUxFI, Avg Perceived Usefulness, Avg FB Intensity

b. Dependent Variable: Avg Behaviour Intention

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	127.984	3	42.661	67.052	.000[a]
	Residual	246.863	388	.636		
	Total	374.847	391			

a. Predictors: (Constant), Avg PUxFI, Avg Perceived Usefulness, Avg FB Intensity

b. Dependent Variable: Avg Behaviour Intention

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.489	.507		.965	.335
	Avg Perceived Usefulness	.497	.163	.462	3.049	.002
	Avg FB Intensity	.355	.180	.304	1.968	.050
	Avg PUxFI	-.014	.054	-.066	-.267	.790

a. Dependent Variable: Avg Behaviour Intention

Moderator effects still not significant after removing 14 outliers

Casewise Diagnostics^a

Case Number	Std. Residual	Avg Behaviour Intention	Predicted Value	Residual
29	-3.519	1.33	4.1404	-2.80711
82	3.004	5.00	2.6037	2.39632

a. Dependent Variable: Avg Behaviour Intention

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.6136	4.2111	2.9575	.57212	392
Std. Predicted Value	-2.349	2.191	.000	1.000	392
Standard Error of Predicted Value	.044	.166	.075	.029	392
Adjusted Predicted Value	1.6415	4.2338	2.9577	.57213	392
Residual	-2.80711	2.39632	.00000	.79458	392
Std. Residual	-3.519	3.004	.000	.996	392
Stud. Residual	-3.577	3.012	.000	1.002	392
Deleted Residual	-2.90046	2.40943	-.00018	.80437	392
Stud. Deleted Residual	-3.633	3.044	.000	1.005	392
Mahal. Distance	.191	16.011	2.992	3.289	392
Cook's Distance	.000	.106	.003	.008	392
Centered Leverage Value	.000	.041	.008	.008	392

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.6136	4.2111	2.9575	.57212	392
Std. Predicted Value	-2.349	2.191	.000	1.000	392
Standard Error of Predicted Value	.044	.166	.075	.029	392
Adjusted Predicted Value	1.6415	4.2338	2.9577	.57213	392
Residual	-2.80711	2.39632	.00000	.79458	392
Std. Residual	-3.519	3.004	.000	.996	392
Stud. Residual	-3.577	3.012	.000	1.002	392
Deleted Residual	-2.90046	2.40943	-.00018	.80437	392
Stud. Deleted Residual	-3.633	3.044	.000	1.005	392
Mahal. Distance	.191	16.011	2.992	3.289	392
Cook's Distance	.000	.106	.003	.008	392
Centered Leverage Value	.000	.041	.008	.008	392

a. Dependent Variable: Avg Behaviour Intention

No more multivariate outliers among IVs

H6b: PEOU + FI + PEOUxFI

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Avg PEOUxFI, Avg Perceived Ease of Use, Avg FB Intensity[a]	.	Enter

a. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.548^a	.301	.295	.80155

a. Predictors: (Constant), Avg PEOUxFI, Avg Perceived Ease of Use, Avg FB Intensity

b. Dependent Variable: Avg Behaviour Intention

Coefficients^a

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.094	.672		.139	.889
	Avg Perceived Ease of Use	.610	.205	.526	2.971	.003
	Avg FB Intensity	.471	.234	.404	2.018	.044
	Avg PEOUxFI	-.052	.068	-.237	-.769	.442

a. Dependent Variable: Avg Behaviour Intention

Moderator effects still not significant after removing 24 outliers

Casewise Diagnostics^a

Case Number	Std. Residual	Avg Behaviour Intention	Predicted Value	Residual
29	-3.338	1.33	4.0091	-2.67573

a. Dependent Variable: Avg Behaviour Intention

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.6596	4.0091	2.9668	.52371	382
Std. Predicted Value	-2.496	1.990	.000	1.000	382
Standard Error of Predicted Value	.045	.165	.077	.028	382
Adjusted Predicted Value	1.6446	4.1105	2.9675	.52405	382
Residual	-2.67573	2.15868	.00000	.79839	382
Std. Residual	-3.338	2.693	.000	.996	382
Stud. Residual	-3.401	2.699	.000	1.002	382
Deleted Residual	-2.77713	2.16882	-.00067	.80758	382
Stud. Deleted Residual	-3.450	2.722	.000	1.005	382
Mahal. Distance	.192	15.102	2.992	3.093	382
Cook's Distance	.000	.110	.003	.007	382
Centered Leverage Value	.001	.040	.008	.008	382

a. Dependent Variable: Avg Behaviour Intention

No more multivariate outliers among IVs