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**THE DEVELOPMENT OF SOCIAL COMMERCE INTENTION
MODEL SNS AMONG UNIVERSITY STUDENTS**



AMRO MAREI ABIDRABBU ALSHAWAWREH

**DOCTOR OF PHILOSOPHY
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Awang Had Salleh
Graduate School
of Arts And Sciences

Universiti Utara Malaysia

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Tandatangan
(Signature)

Pemeriksa Luar:
(External Examiner)

Dr. Sulfieza Mohd Drus

Tandatangan
(Signature)

Pemeriksa Dalam:
(Internal Examiner)

Prof. Dr. Wan Rozaini Sheik Osman

Tandatangan
(Signature)

Nama Penyelia/Penyelia-penyelia:
(Name of Supervisor/Supervisors)

Assoc. Prof. Dr. Ariffin Abdul Mutalib

Tandatangan
(Signature)

Nama Penyelia/Penyelia-penyelia:
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Assoc. Prof. Dr. Norsiah Abdul Hamid

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Abstrak

Kecenderungan yang ketara untuk menggunakan urus niaga perdagangan melalui platform media sosial di kalangan belia Saudi untuk membuat siasatan yang mendalam mengenai fenomena ini adalah keperluan bagi banyak pengguna media sosial, peruncit dan pembuat keputusan. Memahami pembolehubah yang menyumbang dalam meningkatkan minat pengguna media sosial ke arah perdagangan sosial menjadi amat penting dalam pasaran inovatif yang menjanjikan ini di dalam Saudi konteks. Walau bagaimanapun, disebabkan kekurangan kajian yang memperjelaskan mengenai peranan kepercayaan, sikap, dan kepuasan dalam hubungan antara niat perdagangan niat sosial dan sokongan maklumat, sokongan emosi, dan kemudahan penggunaan, kegunaan yang dirasakan, keselamatan yang dirasakan, dan keselamatan yang dirasakan; Teori Tindakan yang Dipetik, Teori Perilaku Yang Dirancang dan Model Penerimaan Teknologi telah digunakan dalam kajian ini untuk membangunkan model konseptual dengan 25 hipotesis yang sengaja menyiasat perhubungan ini. Kajian ini menggunakan pendekatan kuantitatif. Data dikumpulkan melalui soal selidik dari 538 pelajar yang belajar di lima universiti Saudi, SPSS versi 23 digunakan dalam menganalisis data dan teknik SEM-PLS digunakan untuk menguji hipotesis yang dirumuskan. Daripada 25 hipotesis, hasilnya menunjukkan bahawa sokongan maklumat, kemudahan penggunaan dan kegunaan yang dirasakan mempunyai kesan yang tidak penting atau hubungan tidak langsung kepada kepercayaan, sementara sokongan emosi, keselamatan dan keselamatan yang dirasakan sangat mempengaruhi kepercayaan. Di samping itu, kepercayaan mempunyai kesan yang signifikan terhadap sikap dan kepuasan. Kepuasan juga mempunyai kesan yang signifikan terhadap niat dan niat perdagangan sosial dan akhirnya, sikap mempengaruhi pengaruh niat sosial. Akibatnya, model membuktikan terhadap pengaruh langsung sokongan emosional, keamanan yang dirasakan, dan keselamatan yang dirasakan kepada kepercayaan yang secara langsung mempengaruhi kepuasan dan secara sempurna; kedua-dua variable moderasi ini memiliki kesan positif pada niat perdagangan sosial. Pengajian ini membahas kepentingan wawasan bagi pengaruh perdagangan sosial untuk membangunkan kempen strateginya berdasarkan persepsi mahasiswa terhadap perdagangan sosial untuk memaksimumkan niat dan keterlibatan mereka di dalamnya.

Kata Kunci: Niaga perdagangan sosial, Sokongan sosial, Kepercayaan sikap, Kepercayaan, Kepuasan

Abstract

The tendency toward using commerce transactions through social media platforms among Saudi youth made deep investigation of this phenomenon a necessity for many social media users, retailers and decision makers. Understanding the variables that contribute in increasing social media users' intentions towards social commerce became crucial in this promising innovative market in Saudi context. Nevertheless, due to the lack of studies that clarify the mediating roles of trust, attitude, and satisfaction on the relationships between the Saudis' social commerce intention and information support, emotional support, and perceived ease of use, perceived usefulness, perceived security, and perceived privacy; the Theory of Reasoned Action, Theory of Planned Behaviour and Technology Acceptance Model were used in the present study to develop a conceptual model with 25 hypotheses purposely to investigate these relationships. The study adopted a quantitative approach Data were collected through questionnaires from 538 students studying in five Saudi universities, SPSS version 23 was used in analysing the data and SEM-PLS technique was utilised to test the postulated hypotheses. Out of 25 hypotheses, the results showed that informational support, perceived ease of use and the perceived usefulness have insignificant impact or indirect relationship to trust, while emotional support, perceived security and privacy significantly impact the trust. In addition, trust has a significant effect on attitude and satisfaction. Satisfaction has a significant impact on attitude and social commerce intention and finally, attitude significantly influences social commerce intention. Consequently, the model proved a direct influence of emotional support, perceived security, and perceived privacy on trust which influence directly the satisfaction and attitude; both of these moderating variables have a positive impact on the social commerce intention. This study overture important insights to the social commerce retailers to build campaign strategies based on university students' perceptions toward social commerce to maximize their intention and engagement in it.

Keywords: Social commerce intention, Social support, Attitudinal beliefs, Trust, Satisfaction

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Table of Contents

CHAPTER ONE INTRODUCTION	1
1.1 Overview	1
1.2 Background of the Study.....	1
1.3 Problem Statement	5
1.4 Research Questions	11
1.5 Research Objectives	11
1.6 Scope of the Study	12
1.7 Research Significance	13
1.8 Operational Definitions.....	15
1.9 Organization of the Thesis	17
CHAPTER TWO LITERATURE REVIEW	19
2.1 Introduction	19
2.2 Background	19
2.3 Electronic Commerce.....	21
2.3.1 Definition of Electronic Commerce.....	21
2.3.2 E-commerce Business Benefits.....	22
2.3.3 Benefits to Customers	24
2.3.4 Benefits for Businesses	24
2.3.5 Benefits for Society.....	25
2.3.6 E-commerce in KSA	26
2.3.6.1 Limitation of E-commerce in Saudi Arabia	28
2.4 WEB 2.0 and Social Media.....	29
2.4.1 Definition WEB 2.0 and Social Media	29
2.4.2 Evolutions of the Social Media and WEB 2.0	30
2.4.3 Social Media Business Impact	36
2.4.4 Social Media in Saudi Arabia	40
2.4.5 Popular Social Media Platforms	40
2.5 Social Commerce	47
2.5.1 Evolution of Social Commerce	48
2.5.2 Benefits of Social Commerce	51
2.5.3 Social Commerce in Saudi Arabia	54

2.6 Theoretical Models.....	55
2.6.1 Theory of Reasoned Action	56
2.6.2 Theory of Planned Behaviour	58
2.6.3 Technology Acceptance Model (TAM).....	59
2.7 Factors Affecting Social Commerce Intention.....	62
2.7.1 Social Support.....	62
2.7.2 Perceived Usefulness	65
2.7.3 Perceived Security	66
2.7.4 Perceived Ease of Use.....	69
2.7.5 Perceived Privacy.....	71
2.7.6 Trust	72
2.7.7 Satisfaction.....	76
2.7.8 Attitude	77
2.7.9 Social Commerce Intention.....	78
2.8 Conceptual Framework	78
2.9 Research Framework and Hypothesis Formulation	81
2.9.1 Linkages between Informational Support, Emotional Support and Trust.	82
2.9.2 Association between Perceived Ease of Use, Trust, and Perceived Usefulness.....	83
2.9.3 Link between Perceived Privacy, Trust, and Perceived Security	85
2.9.4 Linkages between Trust, Satisfaction and Attitude	86
2.9.5 Link between Satisfaction and Attitude	87
2.9.6 Link between satisfaction, social commerce intention, and attitude.....	88
2.9.7 Trust as a Mediator	89
2.9.8 Attitude as a Mediator.....	90
2.9.9 Satisfaction as a Mediator	91
2.10 Chapter Summary.....	91
CHAPTER THREE RESEARCH METHODOLOGY	93
3.1 Introduction.....	93
3.2 Research Design.....	93
3.3 Research Purpose	94
3.4 Research Approach	94
3.5 Research Strategy.....	94

3.6 Data Collection Methods	95
3.7 Measurement	96
3.8 Target Population and Sample	98
3.9 Sampling Technique.....	101
3.9.1 Sample Size.....	101
3.10 Pretesting the Instruments	103
3.11 Pilot Test	104
3.12 Data Collection Procedure	105
3.13 Technique of Data Analysis and Hypothesis Testing	106
3.14 Data Screening	107
3.15 Chapter Summary.....	108
CHAPTER FOUR RESULTS AND FINDINGS	109
4.1 Introduction	109
4.2 Response Rate	109
4.3 Data Screening and Preliminary Analysis	110
4.3.1 Missing Value Analysis	110
4.3.2 Assessment of Outliers.....	112
4.3.3 Normality Test	112
4.3.4 Multicollinearity Test.....	113
4.4 Non-Response Bias	116
4.5 Common Method Variance Test	119
4.6 Demographic Profile of the Respondents	120
4.7 Descriptive Analysis of the Latent Constructs	122
4.8 Assessment of PLS-SEM Path Model Results.....	124
4.9 Assessment of Measurement Model	126
4.9.1 Individual Item Reliability	127
4.9.2 Internal Consistency Reliability.....	127
4.9.3 Convergent Reliability	130
4.9.4 Discriminant Validity.....	131
4.10 Assessment of Significance of the Structural Model	135
4.10.1 Assessment of the Variance Explained in the Endogenous Variable	138
4.10.2 Assessment of Effect Size (F^2).....	139
4.10.3 Assessment of Predictive Relevance	141

4.11 Hypothesis Testing for Mediation Relationships	142
4.12 Summary of the Chapter	146
CHAPTER FIVE DISCUSSION AND CONCLUSION	147
5.1 Introduction	147
5.2 Recapitulation of the Findings	147
5.3 Discussion	149
5.3.1 The Influence of Informational Support on Trust.....	149
5.3.2 The Influence of Emotional Support on Trust	151
5.3.3 The Influence of Perceived Ease of Use on Trust.....	151
5.3.4 The Influence of Perceived Usefulness on Trust	153
5.3.5 The Influence of Perceived Security on Trust	154
5.3.6 The Influence of Perceived Privacy on Trust	155
5.3.7 Influence of Trust on Attitude.....	156
5.3.8 Influence of Trust on Satisfaction.	158
5.3.9 Influence of Satisfaction on Attitude.	159
5.3.10 The Influence of Attitude on Social Commerce Intention.	160
5.3.11 Influence of Satisfaction on Social Commerce Intention.	161
5.3.12 Mediating Effect of Trust on the Relationship between Informational Support and Attitude.....	162
5.3.13 Mediating Effect of Trust on the Relationship between Emotional Support and Attitude.....	163
5.3.14 Mediating Effect of Trust on the Relationship between Perceived Ease of Use and Attitude	165
5.3.15 Mediating Effect of Trust on the Relationship between Perceived Usefulness and Attitude	166
5.3.16 Mediating Effect of Trust on the Relationship between Perceived Security and Attitude.....	167
5.3.17 Mediating Effect of Trust on the Relationship between Perceived Privacy and Attitude.....	169
5.3.18 Mediating Effect of Trust on the Relationship between Informational Support and Satisfaction	171
5.3.19 Mediating Effect of Trust on the Relationship between Emotional Support and Satisfaction.....	172

5.3.20 Mediating Effect of Trust on the Relationship between Perceived Ease of Use and Satisfaction.....	173
5.3.21 Mediating Effect of Trust on the relationship between Perceived Usefulness and Satisfaction	174
5.3.22 Mediating Effect of Trust on the Relationship between Perceived Security and Satisfaction.....	175
5.3.23 Mediating Effect of Trust on the Relationship between Perceived Privacy and Satisfaction.....	177
5.3.24 Mediating Effect of Attitude on the Relationship between Trust and Social Commerce Intention.	179
5.3.25 Mediating Effect of Satisfaction on the Relationship between Trust and Social Commerce Intention.	180
5.4 Theoretical Implications.....	182
5.4.1 Additional Empirical Evidence in the Domain of Theory of Planned Behaviour.....	182
5.4.2 Additional Empirical Evidence in the Domain of Theory of Acceptance Model.....	183
5.4.3 Additional Empirical Evidence in the Domain of Theory of Reasoned Action.....	184
5.5 Significant Mediating Roles of Trust, Attitude, and Satisfaction	185
5.6 Practical Implications.....	186
5.7 Limitations and Future Research Directions.....	188
5.8 Conclusion	189
REFERENCES.....	191
APPENDIX A	226
APPENDIX B	245
APPENDIX C	252
APPENDIX D	262
APPENDIX E	268
APPENDIX F.....	271
APPENDIX G.....	275
APPENDIX H.....	279
APPENDIX I	285

APPENDIX J	291
APPENDIX K.....	294



List of Tables

Table 2.1 Types of and Popular Social Media Platforms.....	47
Table 3.1 Measurement construct	98
Table 3.2 Distribution of Universities in the Kingdom of Saudi Arabia	101
Table 3.3 Distribution of Questionnaires in Universities in KSA	103
Table 3.4 Summary of the Pilot Test's Result	105
Table 4.1 The Responses Rates of the Questionnaires	110
Table 4.2 Number and Percentage of Missing Values.....	111
Table 4.3 Correlation Matrix of the Exogenous Latent Construct.....	114
Table 4.4 Tolerance and Variance Inflation Factors (VIF).....	116
Table 4.5 The Result of Independent-Samples T-Test for Non-Response Bias	118
Table 4.6 Demographic Characteristics of the Respondents (N=360).....	121
Table 4.7 Descriptive Statistics for the Latent Variables.....	123
Table 4.8 Loadings, Composite Reliability and Average Variance Extracted	128
Table 4.9 Heterotrait-Monotrait (HTMT) Ratio	132
Table 4.10 Cross Loadings.....	133
Table 4.11 Structural Model Assessment with Mediator (Full Model)	138
Table 4.12 Variance Explained in the Endogenous Variable	139
Table 4.13 Effect Size of the Latent Variables on Cohen's (1998)	140
Table 4.14 Construct Cross-Validated Redundancy	142
Table 4.15 Indirect Effects of Mediation Test	144

List of Figures

Figure 2.1. Theory of reasoned action.	58
Figure 2.2. Theory of planned behavior.	59
Figure 2.3 Technology acceptance model (Davis & Yi, 1989).	61
Figure 2.4. Theoretical framework.	81
Figure 2.5. Conceptual framework.	81
Figure 3.1. Research diagram for the study	93
Figure 4.1 Normality and normal probability plots..	113
Figure 4.2. Two-way procedure of PLS path model assessment	125
Figure 4.3. Assessment of measurement model Model	126
Figure 4.4. Structural model with mediation (full model)	136



CHAPTER ONE

INTRODUCTION

1.1 Overview

Chapter One introduces the background of the study, the statement of the problem, the research questions and objectives, the scope and the contribution of the study.

1.2 Background of the Study

At present, the global nature of social media cannot be denied for its popularity and influence. In December 2017, Facebook, Twitter and other social media sites have hosted over 1.4 billion users daily (Tsai & Men, 2017). Social Network Sites (SNSs) provide online platforms through which people of similar interests can recreate and communicate with one another by posting and exchanging information (Litt & Hargittai, 2016). These sites also supply some online socially oriented services, such as texting, tools for profiling, blogging, walls posting and sharing through a technology-enabled platform to sustain the recreation and exchange of user-generated content to satisfy the social needs of the users (Hu, Kettinger & Poston, 2015). Based on the activities of these sites, users are often encouraged to participate actively through interaction and contribution to the online content thus enhancing the value for online interaction or collaboration (Heinonen, K. (2011). Importantly, longer and deeper participation assist users to expand and maintain their social network relationships (Ellison, Vitak, Gray, & Lampe, 2014).

having the necessity to interact with one another in the real world and create contents (Papazolomou, & Melanthiou, 2012), and this reality has been made

possible by means of the Web 2.0 applications which assisted in transferring the internet to the social setting by means of introducing the social media (Buglass, Binder, Betts, & Underwood, 2016). In other words, the advent of Web 2.0 has facilitated users with the connection, information sharing and participation on the web activities without limitations (Tsai & Men, 2017). Social Networking Site using Web 2.0 are among the popular topics nowadays because of their effectiveness in helping users to socially interact and share information (Kim, Lee, & Preis, 2016).

Recently, SNSs have been increasingly becoming technologically and environmentally-driven the centre-nerve of e-commerce, since they enable the consumers' participation in social activities and the connection on the cyberspace (Ketelaar, Janssen, Vergeer, van Reijmersdal, Crutzen, & van 't Riet, 2016). Consumers can access a large quantity of information and obtain some experience, and these are made possible through SNS (Can & Kaya, 2016). Recently, online communities and SNS are growing very fast (Kim, Lee, & Preis, 2016). Consequently, SNSs, such as Facebook and Twitter have become the primary sources of communications through which consumers can locate and identify their friends and other people in their network. SNS as a web-based service enables the users for creating their public or semi-public profiles within enclosed systems for locating, connecting and sharing information with other users who are on the same network. SNSs offer an enabling environment through which emerging and contemporary social, behavioural changes can be identified.

At present, business organisations must identify some social and behavioural changes that are affecting or influencing the development of e-commerce (Ngai, Tao, & Moon, 2015). The underpinning idea concerning the social commerce is that it aids

vendors to carry out their commercial transactions through development and enrichment of intimate business relationships with customers thus leading to increase sales and motivating customers' loyalty to the business. To achieve these aims, it has become essential for business organisations to employ SNSs as a tool for gaining access to social platforms as well as marketing activities (Kjellberg, Haider, & Sundin, 2016). In this regard, Larosiliere, Meske, and Carter (2015) assert that organisations could add two features of SNSs and social networking's capabilities to the sites of e-commerce since they are the two foremost trends in social commerce. In addition, the third trend of social media could also be added by offline organisations since they enable using social media tools to offer better connections with the consumers, communicate and engage in social shopping (Kim, Sun, & Kim, 2013).

Before the emergence of social media applications, many business activities had already existed in the online electronic world. These business activities which were regarded as e-commerce has helped in creating a new business model thereby serving as a platform for products trading on the Internet. That is, when features of the social networking are added to e-commerce, it can result in improving the level of trust between customers and organisations (Martínez-Navarro & Bigné, 2017). The developed situation requires system recommendations, product reviews, and search functions to be adequately integrated with the e-commerce websites, and the characteristics of SNSs are being adopted rapidly by online businesses (Olufadi, 2016). The incorporation of the social media with the e-commerce attracts the attention and interest of users in the online business environment because it is a new and fast-growing trend in the e-commerce business (Turel, He, Brevers, & Bechara, 2017).

In spite of the highly significant position occupied by Saudi Arabia in the Middle East's retail market, the percentage of online sales constitutes a small in relation to the whole percentage of the sales (Hameed & Rahman, 2017). In other words, utilising of social media for the e-commerce transaction yet is still at premature stages in Saudi Arabia since only 9% of medium and large Saudi commercial companies engage in manufacturing and Business-to-Business (B2B) services using the social media. In the Middle East, although Saudi Arabia has the fastest and largest ICT marketplaces (Lampinen, 2016), the development rate of e-commerce is not as the same level as that of the Information Communication Technology (Al-Saggaf & Simmons, 2015). Regarding affecting the slow pace of the of e-commerce increasing in the Arabiccountries generallyand Saudi Arabia particularly, studies revealed that cultural issues, trust and privacy issues, poor ICT infrastructure, lack of explicit legislations, and rules for protecting the rights of all involved parties constitute the main reasons for this slow growth (Al-Ghaith, 2016). However, studies on the social commerce in Saudi Arabia are inadequate (Habbash, 2016) because some factors play pertinent role in improving social commerce but are being neglected. Information disseminated in SNSs concerning any particular discourse has its own role to play as well determines the calibre of students who may eventually form social groups or community. Social group is another determinant for improving social commerce intention amongst students. These provide social support and improve social commerce by encouraging students with similar motifs interact online. Nevertheless, it is pertinent to know that SNSs tools need to satisfy student motives when engaging in social commerce. These tools must be secured to avoid intruders and it must be user friendly to students who engage in social commerce. These will support student's intention both socially and behaviourally to engage in

social commerce. It is imperative to note that this study focuses mainly on the attitude, satisfaction and trust of students in Saudi Arabian Universities towards the use of SNSs with an intention to enhance or leverage social commerce for social media transactions.

1.3 Problem Statement

In 2007, Internet sales increased to more than \$1.2 billion worldwide and are expected to continue to rise (World Internet Users and Population Stats, 2007). The occurrence of social media emerged as a new type of e-commerce called social commerce (Hanna, Rohm, & Crittenden, 2011) claimed using social media in the e-commerce is known as social commerce. Social commerce has been increasing rapidly in the last few years. Wang and Zhang (2012) refer it as an emerging trend.

The phenomenal popularity of social media in the early twenty-first century has prompted e-commerce companies to exploit this popularity for creating a business value based on the consumers' online social interactions (Watson, Pitt, Berthon, & Zinkhan, 2002). In Saudi Arabia, is not an exception; with significant attention towards online commercial transactions, particularly through social media; according to (Riyadh, Bunker, & Rabhi, 2010) the online commercial activities had been doubled within three years to reach \$556 million in 2005. This new phenomenon spur researchers, organizations and companies to explore it in terms of understanding Saudi online-users' attitudes towards online commerce and their actual behaviour when doing online shopping. Arezki, Mottaghi, Barone, Fan, Kiendrebeogo, & Lederman (2018) claimed that the tools of social commerce have obtained tremendous rapid and have been employed extremely in online business in

Saudi Arabia. However, Makki & Chang (2015) claimed that there is very rare research consider social commerce in Saudi Arabia.

According to Borgerson and Miller (2016), the need for more examination arises to better understand the social commerce. Therefore, this study is an attempt to explore and understand the intention and attitude of social users towards social commerce in Saudi context, and to be more specific among the majority of Saudi customers, the young users, in terms of understanding their attitudes and behaviours towards social commerce. Additionally, the present study aims at identifying the consequence of the influencing factors in an emergent social commerce intention among university students in Saudi Arabia. According to Makki & Chang (2015), further studies are vital to examine and make an assessment of the social commerce theoretically and empirically in order to present a comprehensive issue among university students.

In this study, the focus was on the sector of university students mainly because their impact on e-commerce is vital according to the latest statistics released in 2018 by Saudi Communications and Information Technology Commission (CITC). The statistics showed that young people of age group between 20 and 24 years are the largest group of social media users with 98.70 percent, Therefore, studying students' university who represent perfectly this segment of people can reveal a significant information and a clearer image about the social commerce attitudes and intention among Saudi people in general. Similarly, the Organisation for Economic Co-operation and Development (OECD) stated that online customers are young and educated which makes university students the best representative group when it comes to studying online commerce users and future. In addition to that in a Meta-

analysis study King and He (2006) confirmed the value of using students over professionals.

Most of the previous studies focused on the social commerce from two different perspectives: social and business perspective (Curty & Zhang, 2011). For instance, researchers studying the social commerce from a social perspective has uncovered some social features on social commerce websites (Sheikh, Islam, Rana, Hameed, & Saeed, 2017). Other researchers who studied the social commerce from a business perspective have analysed the business requirements the marketing needs (Xanthidis, Alali, & Koutzampasopoulou, 2016), retailers' expectations (Khalaf, 2016), and differences and similarities in the relationships between the e-commerce and the social commerce (Helal, 2017).

However, limited studies have focused on student's intention-behaviour in interfacing with social network sites towards the social commerce intention (Al-Maghrabi & Dennis, 2011). In other words, limited focus was given to the role of social support as well as the attitudinal support in exploring the new determinant of social commerce intentions among students of Saudi Arabian universities (Makki & Chang (2015; Albarq, 2014). Hence, lack of research in this area may impede the effectiveness of social commerce strategies and defeat SNS platform users among university students in Saudi Arabia (Baethge, Klier, & Klier, 2016).

In spite of the increasing studies on the issue of the social commerce, the description of the social commerce regarding the features that generate its usefulness among university students towards the social commerce intention are limited (Yan, Wu, Wang, Wu, Chen, & Wei, 2016; Alqahtani, Goodwin, & de Vries, 2014). In addition, studies' focus was only on analysing the markets of the social commerce

(Alshuwaikhat, Adenle, & Saghir, 2016; Zhang & Benyoucef, 2016) and the differences between the social commerce and systems of the e-commerce as well as adopting the e-commerce (Yan et al., 2016). However, very few limited studies have investigated the roles of attitude, trust, and satisfaction within the context of the social commerce, particularly the important characteristics of the social commerce that could result in trust performance (Bahkali, Alfurh, Aldremly, Ma'an Alzayyat, Alsurimi, & Househ, 2016), including purchase intentions.

The issue of purchase intention has been originally restated by Azam (2015) who argued that without trust, the relationship between the consumers and the firms might not lead to a good one. Trust and privacy are always an issue in any type of commerce and especially in e-commerce where, due to its nature, a higher level of risk and uncertainty exist (Kim & Park, 2013)

Issues of privacy or security in SNS have been also critically discussed in public media, with a particular reference to Facebook in the US media (Müller, Dreier, Beutel, Duven, Giralt, & Wölfling, 2016). In spite of the continuous rise in the use of SNS globally, limited knowledge is available about SNS privacy in non-Western developing countries (Forbush & Foucault-Welles, 2016). Since multiple users join SNSs and upload their profiles, which reveal their private information, the issue of reputation and trust of the SNSs have equally continued to decline, especially with some adverse incidents being publicised by the news media (Kuss & Griffiths, 2017). In this regard, Jan, Abdullah, and Momen (2015) argued that unsafe disclosure of personal information, addictions, cyber bullies, and contact with vulnerable communities, and risky behaviours are popular issues raised by users, thereby reducing the level of trust in the SNSs.

The process of investing in the social networks allows users to obtain trust and informational support that are basically essential for successful engagement in the collective activities (Valenzuela, Park, & Kee, 2009; Halpern, Valenzuela, & Katz, 2017). However, the benefits derived from such investments have been dashed by previous unpalatable events and outcomes in the platforms of SNSs (Pentina, Gammoh, Zhang, & Mallin, 2013; Shi, Poorisat, & Salmon, 2018). In this respect, Nisar and Whitehead (2016) emphasized that the absence of trust forms the basic reason for the failure of online firms, failure in having a positive relationship between the consumers. Despite the growth and spread of social commerce, users remained sceptical about the quality of information support provided by social commerce firms, security, and the credibility of their sites (Van Ouytsel, Van Gool, Walrave, Ponnet, & Peeters, 2016). Essentially, building trust is very significant for social commerce companies compared to other companies since social commerce is anchored on SNSs as the sites permit the users to create the content and share it (Wang, Min, & Han, 2016). However, the ease of creating the content and sharing with other users underscores the importance of trust towards developing satisfaction and attitude in harbouring intention to adopt social commerce sites (Rowan-Kenyon, Martínez Alemán, Gin, Blakeley, Gismondi, Lewis, & Knight, 2016; Bachmann & Brattström, 2018).

Furthermore, even though the social commerce has become extremely widespread, some consumers continue to have concerns regarding the privacy and security of using the social commerce thus hindering the growth of the social commerce (Hu Kettinger, & Poston, 2015), and could possibly deter the social commerce from achieving its full potential. Abdelghaffar and Samer (2016) suggested that some consumers refrain from making online purchases because of their concerns towards

the payments by means of online method and lacking the privacy policy. Consequently, perceptions of security and privacy positively influence trust (Can & Kaya, 2016). Within the Saudi Arabian context, Askool (2012) identified the essential factors including security and privacy concerns negatively affect the Saudi Arabian consumers' trust of SNSs; therefore, further research is required for examining the effect of security and privacy on trust in the current study.

Also, studies have shown that some selected people who employed the sites of social networking such as Facebook are frequently less satisfied towards their lives (Hussain & Mkpojiogu, 2016). Hence, the authors believe that the site probably assist the individual users in overcoming this low satisfaction (Sekret, 2016). It seems that satisfaction importantly results from service users' value perspectives. Since the advantages are more than the costs, the value calculations are considered as one of the greatest outstanding estimations in increasing the users' satisfaction towards a service (Meng, Martinez, Holmstrom, Chung, & Cox, 2017). In this context, Information System studies demonstrated the support for the relationship of trust and satisfaction (Feng & Xie, 2015) and previous studies have shown many cases of dissatisfaction among Saudi Arabian students towards some of the SNS, thus resulting in the failure to fulfil adequate social commerce intention. That is, various social networking sites who struggle to attract the attention of students have lost the existing viewers over time as a result of not meeting their expectations in terms of their satisfaction. In this sense, further research is required since instructions for meeting these expectations are varied (Mitra, 2016).

As a conclusion, the need to study social commerce is very essential to understand the fast- going world around us. This study aimed to understand the attitude and the

influencing factors in social commerce intention among university students in Saudi Arabia. this study tries to clarify the issues that prevent Saudi customers from being seriously involved and effective in online activities. This study examines the variables that influence social commerce and customers in Saudi Arabia; such as the informational and emotional support, perceived ease of use, usefulness, security, and privacy in increasing their trust, and what effects they have on attitude and satisfaction toward social commerce intention.

1.4 Research Questions

The present study addressed the following research questions:

1. What are the antecedent factors that influence the Saudi university students' trust in social commerce?
2. How does the Saudi university students' trust in the socialcommerce influence their satisfaction and attitude towards it?
3. How does the Saudi university students' satisfaction in social commerce influence their attitude towards it?
4. How do Saudi university students' satisfaction and attitude influence their intention to use social commerce?

1.5 Research Objectives

The present study aimed at enhancing our understanding of the aspect of the social commerce concern in the framework of Saudi Arabia through proposing and testing a research model that is associated with students' intention to use the social commerce. The proposed model combines factors that have not been previously examined together in the context of Saudi Arabia. To achieve this purpose, the following research objectives were addressed.

1. To identify the antecedent factors that influence the Saudi university students trust in social commerce.
2. To clarify the relationship between Saudi university students' trust and their satisfaction and attitude towards using social commerce.
3. To determine the relationships between the satisfaction of Saudi university students and their attitude in the context of the social commerce.
4. To investigate the influence of the satisfaction and attitude of Saudi University students on their intention towards using social commerce.

1.6 Scope of the Study

The scope of this study covers five universities in the Kingdom of Saudi Arabia as it will be discussed intensively in Chapter 3 of this study. The study however, focused enormously on the growth and development of SNSs as a tool to improve the intention of consumers use towards social commerce. The scope of the variables covered in this study involved perceived ease of use, perceived usefulness, informational support, emotional support, perceived privacy, trust, perceived security, attitude, satisfaction, and social commerce intentions.

This study aims to identify the relationship between the social support and attitudinal belief and social commerce intention of consumers at Saudi Arabia. In addition to that, this study focused on the social commerce intention predictors like information support, perceived security, emotional support, perceived privacy, perceived ease of use, and perceived usefulness, because these variables have the capacity to influence the social commerce intention.

1.7 Research Significance

The fast expansion of internet recently, came up with new concepts and ideas where speed and effectiveness is crucial in surviving in the current time. Social media occurrence opened wide doors to users from different areas to contribute in this new method of commercial transaction. However social commerce emerged to ease the life and satisfy both online customers and sellers. The significance of this study lies in what it can offer to the existing body of literature and more importantly what it can practically offers to social media users and their commercial activities beyond the traditional limited markets and traditional customers.

A major theoretical significance of this study is that it presents a new single conceptual framework which enables intellectual and researchers in this area to link the social commerce intention with its various determinants all at once. Previous studies have shown some of the relationships between the variables related to social commerce such as social support, informational support, emotional support, perceived security, perceived usefulness, perceived ease of use, and perceived privacy (Akhlq & Ahmed, 2013). However, after an extensive reading of literature, this study offers one empirical combination of all of these variables in one model which gives researchers a deeper understanding and better prediction of the future of social commerce in Saudi context. In other words, the all-inclusive model applied in this study has never been used before and it could be employed for predicting and evaluating the social commerce intention among Saudi users. In fact, the present quantitative study is a substantial contribution added to the body of knowledge in this area. Therefore, this study employed quantitative study on consumers' online intention due to lack of study in this area in the setting of King Saudi Arabia (Alhamadi, 2017). As another strength point, quantitative research has been

considered more rigorous and has gained more credibility (White, Afolayan, & Plant, 2014).

In fact, social commerce fast-spreading use around the world has changed the companies and e-vendors' views toward it; they realized the importance of updating themselves with the new emerging commercial transactions. The instant influencing feedbacks they receive from customers make it very valuable to consider and study their attitudes and intentions.

Additionally, this study aims to answer questions usually arisen by companies in terms of understanding their customers' attitudes toward social commerce. Hence, the study could be good guide to e-vendors when designing their commercial campaigns. It helps them to understand the influential variables that have the biggest impact in dragging the customers' attention and increasing their intention to buy their products or services electronically. The significance of this study is evident to these companies, it helps them to recalculate their production process based on the real attitudes of customers and improving reliable modern ways of commercial communication and advertising to meet the modern customers desires and needs. Taking in consideration the emotional support, informational support, security, privacy, ease of use and usefulness of a product, in other words the variables studied in this research, will definitely impact on saving a lot of expenses such as extra products shipping, storing and marketing which, collectively, results in increasing their sales via social media.

Moreover, some other people depend on social media to make living such as content makers, graphic designers, video makers, advertisers and writers will also find this

study very useful in understanding their customers' mentality so they can design materials that are suitable and satisfactory to their customers or audience.

On the other hand, customers need to see the whole picture related to their social commerce intention. Understanding the variables that play an essential role in making decisions toward a certain product or service by others increases the new customers' intention and safe involvement in social commerce. Therefore, this study is significant to customers because it helps them in making decisions based on others' recommendations of security, privacy, ease of use, usefulness, emotional and informational support. In particular, this study hopes to increase the rate of Saudi university students' usage by understanding their intention, trust and satisfaction towards social commerce.

Finally, the findings of this study are significant to the government and decision makers because it helps them to evaluate the truth of advertisements and control the validity of information offered by companies which will protect their online citizens and protect their security. In other words, this study hopes to assist the government to obtain good policies and strategies that can assist the enhancement of the modern social commerce as a new mean of communication and transaction among people in Saudi context.

1.8 Operational Definitions

- **Social Media:** are a set of applications which are mainly internet-based and founded on the foundations of aspects of ideology and technology aspects of Web 2.0, which enable creating and exchanging the content that is generated by the user (Felix, Rauschnabel, & Hinsch, 2017).

- **Social Network:** is known as a web-enabled site that enables the individual user to build either public or semi-public profiles or outline within an enclosed system through which they can find and connect other users, and view and pass through their list of connections within the system (Lu, Fan, & Zhou, 2016).
- **Social Commerce:** refers to the use of Web 2.0 and the social technology to enhance the transactions in the online context to assist the customers in getting products and services through the internet (Turban, King, Lee, Liang, & Turban, 2015).
- **Trust:** refers to customer's faith in using the social commerce. In other words, it implies good or bad experiences in buying products/services online (Fang et al., 2014).
- **Attitude:** refers to the customer's feeling towards using the social commerce. In other words, it implies positive or negative emotions that the consumer has towards purchasing the products and services through the Internet (Li, 2017).
- **Social Support:** is defined as perceived love, support, and care of the support of group members (Sallam, & Algammash, 2016).
- **Perceived ease of use:** it is the level of users' feeling, perception, or response that the usage of a system is free of physical and mental efforts (Abdullah, Jayaraman, Shariff, Bahari, & Norfezah, 2017).

- ***Perceived Usefulness:*** is the extent of perception that users of a particular system would do to achieve their work or daily objectives (Kassim, Azman, Othman, & Zamzuri, 2017).
- ***Satisfaction:*** refers to the level of contentment that online customers derive either in a long time or short time, which influence their future repurchase intention (Lu, Hirschheim, & Schwarz, 2015).
- ***Social commerce Intention:*** refers to the possibility of a customer to use social media in their future commercial interactions. In other words, it refers whether the customer has a willingness to use the social commerce in the future or not (Lim et al., 2016).

1.9 Organization of the Thesis

This study has five chapters, with the following structure:

- **Chapter one** gives the study's background, problem statement, research questions, research objectives, and significance of the study. Also included are: scope and significance of the study, and finalizes with the definition of terms and the organization of the thesis.
- **Chapter two** presents the review of related literature to the domain of knowledge, with explanation about of the definitions of e-commerce, benefits of e-commerce, e-commerce in Saudi Arabia. As well as, Web 2.0, Social Media, Social Commerce are also reviewed. This chapter also presents an expansive review of essential literatures associated with theoretical models, and this offers a wide-ranging plan of the core theoretical concepts that the

study has chosen to use. Lastly, this chapter comprises of discussion on the theories, followed by the chapter's summary and conclusion.

- **Chapter three** presents the research design (purpose of research, study approach, unit of analysis, identifying demographic population size and sample, measurement of variables/instrumentation, and questionnaire instrument).
- **Chapter four** presents the preparation of the data for analysis, preliminary analysis, descriptive statistics, research's underlying statistical assumptions, effectiveness of the measurement instrument, and hypothesis testing using the Partial Least Squares-Structural Equation Model (PLS-SEM).
- **Chapter five** presents a summary of research findings, completion of the research questions and objectives, research contributions, limitations, and future research.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Chapter Two reviews previous studies related to the concepts and variables discussed in this study. This study critically analyses articles from researchers and scholars whose investigations are published in reliable and highly regarded sources. The review also includes discussions of findings that support the research topics. The review is divided into a preliminary part which meant to examine the electronic commerce industry and how this industry led to the evolution of Web 2.0. Besides, this chapter provides the underpinning theories that are related to the research topic.

2.2 Background

Since the Internet was introduced, different technologies, new concepts, and theories have been deployed. In conjunction with these new theories and technologies, other services and new applications have also emerged in different forms. Recently, the evolution of the Internet among web portals was the common feature of the day; however, things have changed and developing in different directions in most cases. At present, however, Web 2.0 presents people with new opportunities for personalized and socialized-based services. In essence, the world is embracing Web 2.0 that has a high capacity for penetration as it focusses on human-centric characteristics such as physical, intellectual, social, emotional, moral, and social as the fundamental elements of the social network service (SNS). Hence, due to the typical use of Web 2.0, SNS now occupies the central issues of discussions among researchers.

In this view, different forms of SNS have come to front through which people can easily communicate, exchange ideas, and collaborate. Therefore, exploring the resources behind the SNS is now a valuable area for every SNS provider (Shuen, 2018). Currently, the majority of services being rendered by SNS are based on entertainment. However, the large quantities of users' information along with their social relations have not been employed usefully (Hajli Sims, Zadeh, & Richard, 2017).

Contemporary SNS requires a new form of application and services to allow users to engage with SNS. Therefore, it is essential for designers to embed features that will increase the rate of satisfaction among users. At the same time, the growing trend in e-commerce is also facing new challenges with the opportunities that it has brought. Even though Business-to-Consumer (B2C) and Consumer-to-Consumer (C2C) meet the requirements of online customers, contemporary users are much interested in a platform that makes sharing the information highly effective (Jiang, Ma, Shang, & Chau, 2014). In this regard, e-commerce and social network (SN) integration are two great platforms of the contemporary market that help enlarge the fields of the SN website by providing the value to users, and through which users can exchange and evaluate the information. These merits will assist users in making a decision as well as aid the development of E-commerce. Indeed, this form of integration is determined by the demand of both users and SN.

2.3 Electronic Commerce

2.3.1 Definition of Electronic Commerce

E-commerce implies making business transactions through the Internet where transactions could involve exchanging valuable information, services such as payments, and employing a web-based technology. For Eid (2011), e-commerce is defined as the transactions made by means of the Internet Protocol-based (IP) networks or other computer-mediated networks. The Internet and e-commerce transform the operations that firms follow by redefining how back-end operations are carried out (Basu, 2016). Studies on e-commerce issues in developed countries have revealed that in spite of the low adoption rate, issues confronted by SMEs in emerging countries could be utterly diverse (Mwika et al., 2018). It was found that several SMEs in emerging countries could not achieve slight levels in e-commerce adoption as well as adopting web-enabled transaction procedures by small businesses have not been prevalent as estimated (Makki & Chang, 2015). Makki and Chang (2015) defined e-commerce as either commercial or administrative transactions or any form of information exchange that is ICT-based or a computer-mediated network. This definition indicates that e-commerce is not exclusively limited to purchasing and vending products, but also involves other activities through the Web employing internet technologies, such as e-mails (Yahya& Dahlan, 2015). These activities involve pre-sale and post-sale through the supply chain while maintain business relationships at the same time (Almaimouni, Houghton, & Sandhu, 2014).

Al-Rubaiee, Qiu, & Li (2016) stated that e-commerce is “any electronically-enabled business activity or process”. Such a definition is simple since it does not cover other issues. Other definitions constrain and associate the activities of e-commerce with

the Internet. For instance, Thakur, Ali, Gai, and Qiu (2016) define e-commerce as “all business activities that use Internet technologies”. However, this definition fails to consider that e-commerce started before the Internet in the 1970s since the Internet was not used by businesses until the 1990s. In addition, Alqahtani, Goodwin, and de Vries (2014) restricted e-commerce to using the Internet stating “E-commerce is the use of the Internet and the Web to transact business. More formally, digitally-enabled commercial transactions between and among organizations and individuals”. However, other researchers have demonstrated that e-commerce can be achieved by means of networks such as the Internet. Basically, they define e-commerce as a process of buying, selling, transferring or exchanging products, services and/or information via computer networks, including the Internet (Shafiyah et al., 2013; Franke, Kroenung, Born, & Eckhardt, 2015; Alshahrani, 2016). For Alwagait, Shahzad, and Alim (2014), the Internet is an example of the network and concerned specifically with business occurring over networks, which use non-proprietary protocols that are established through an open standard-setting process such as the Internet. For instance, Choshin, and Ghaffari (2017) included government activities in e-commerce and Alabdan (2017) included information sharing as an aspect of e-commerce. This study, in particular, defines e-commerce the broadest sense by the overall process purchasing from the e-commerce in social network site subjected to satisfaction (Chaffey Dave, Tanya, & David, 2019).

2.3.2 E-commerce Business Benefits

New technologies paved the way for businesses to introduce option purchasing medium via e-commerce websites (Rose, Lauer, & Waltman, 2017). This resulted in benefits to businesses and customers alike. This study refers to students as a customer. Generally, e-commerce improves the accessibility to market information

and access to goods, improves the ability to acquire information on goods, compares prices, saves time both during the act of shopping and travel time that would otherwise be incurred going to physical stores if they are available without any time or location restrictions (Rose et al., 2017).

It also allows shopping to be time-shifted to time blocks to be more convenient to the consumer, whereby the products are available all-day-long, and it allows ease of networking (Alfuraih, 2008). Overall, e-commerce offers many distinct and substantial advantages to customers, businesses, and society. However, consumers are not able to directly touch or feel products, try clothes or judge the quality of these types of products (Siddiqui, 2008). A further disadvantage, particularly in developing countries, is the need for a device that is capable of accessing the internet (Ilin, Ivetić, & Simić, 2017).

It was proved that adopting e-commerce is the main cause of change to traditional patterns of commerce (ALraja, & Aref, 2015). In other words, e-commerce has offered consumers more opportunities in purchasing products and increasing exchanges and sales of information (Yahya& Dahlan, 2015). That is, in the emerging global economy, it can be argued that e-commerce is responsible for increasing trade and types of employment. B2C e-commerce is a solid catalyst for the increasing economic in the economies of countries with the infrastructure, both physically legally and in terms of physical security, to support e-commerce activities. A good recent example of an emerging economy using e-commerce to leverage economic growth is the case of China over the last ten years (Alghamdi, Nguyen, & Jones, 2013). Earlier research on e-commerce confirmed the positive benefit of customers'

perceived convenience on their online shopping intentions (Jiang et al., 2015). The next section targeted to the benefit towards customer.

2.3.3 Benefits to Customers

E-commerce reduces prices by limiting the number of stages in the value chain, thereby decreasing the costs of products (Rahayu & Day, 2017). Consumers can also buy products from anywhere in the world. Also, e-commerce delivers purchasers an extensive variety of selections, and consumers can compare the diverse brands to evaluate the best possible product efficiently since most online products, especially digitized products, can be delivered quickly. In short, consumers benefit from virtual auctions and dealing with other consumers (Chiu et al., 2014; Wang et al., 2016). Customers also benefited from wide-ranging products and services available infographic on e-commerce websites (Khan, 2016). The broader range of products and services available provides customers with a new dimension of the decision to enable customers to easily compare offers on particular products without the need for online stores (Nyagwencha, 2018). This mechanism leads to acquiring benefits of process comparing by saving time and reducing cost (Horkoff, et al., 2019).

2.3.4 Benefits for Businesses

A key benefit of e-commerce for businesses is the probable assist in increasing the market share by enhancing the ability of a given business to access distant markets within a country, regionally or globally via the Internet. Advertising using the Internet is often inexpensive compared to the cost of traditional advertising using print procedures or on television, and the global spread of the Internet ensures that new forms of Internet-only advertising, such as social media, can reach consumers worldwide with only minimal costs (Afshar Jahanshahi, et al., 2013; Cui et al., 2017,

2015; Hanna, 2016). Another major benefit of e-commerce is the reduction of the costs compared to those incurred by more traditional bricks and mortar competitors. Online start-ups also usually experience fewer barriers to enter into a given market space. In terms of the strategic benefits, e-commerce causes decreasing of the labour costs, improved the delivery times, and streamlined the supply chains with a greater choice of viable suppliers, and significant tax advantages depending on the jurisdiction from which an online company may choose to operate (Afshar Jahanshahi et al., 2013; Anwar & Daniel, 2014; Berger, Geimer & Hess, 2017). Beyond the strategic benefits, a host of operational benefits include but are not limited to: reduced costs associated with the preparation of documents, easier correction, detection and reduction of errors, more efficient mail contacts with clients, easier financial reconciliation; improved and more automated data entry, and the reduction of telephone expenses, supervision expenses and overtime expenses associated with labour (Afshar Jahanshahi et al., 2013; Anwar & Daniel, 2014; Hande & Ghosh, 2015).

2.3.5 Benefits for Society

E-commerce allows individuals in less developed countries and rural regions to access traditionally inaccessible services and products, enables the provision of the social services at an affordable cost for the governments, and allows more people to work at home. In addition, fewer people will have to travel for shopping and for business, thus reducing road congestion and easing the pressure on public infrastructure. Moreover, many goods that are both tangible and intangible can be traded at a lower cost, and businesses can sell more different items without having to maintain a complete inventory due to the ability to drop ship or direct ship from manufacturers and/or regional warehouses (Chiu et al., 2014, Yoo et al., 2013,

Hussain et al., 2015). The many benefits in terms of time and money saved increased choices and efficiency that e-commerce brings to all participants in the supply chain from the initial manufacturers to the final consumer makes e-commerce a compelling value proposition for all participants. The potential for both additional economic growths as well as the reduction of pressure on the public infrastructure that in some cases may eventuate make e-commerce attractive to governments even beyond e-commerce capabilities, thereby allowing those self-same governments to operate more efficiently and at a less cost for services provided (Bogue, 2016). The society benefits encouraged the KSA to introduce the e-transaction and cashless society since 2016 when the Saudi Arabian Monetary Agency (SAMA) had announced a mechanism for online purchasing. This move transfers KSA into an e-transaction and cashless society as a sign of innovative e-commerce solutions mainly for the local channel for payment in online purchases and a flexible platform provided by the bank through their electronic services (Van der Boor et al., 2014). However, the study agreed that these three segmentations of customers, businesses and social benefits were managed by e-commerce systems as it will be discussed in section 2.4.

2.3.6 E-commerce in KSA

According to the Statistics of the Internet World (2016), the users of the Internet in KSA have reached 200,000 in 2000, while this number has risen 13 million in 2012. Based on the Communication and Information Technology Commission (CITC) in Saudi Arabia, the population of Saudi Arabia reached 32 million, whereby 21 million Internet users were in 2015. This number revealed dramatic growth in the number of Internet users from 1% in 2000 (Internet World Stats, 2016) to 67.3% at the end of 2015.

Although the Internet users in the KSA have been increasing, most businesses did not employ e-commerce as a business strategy (Ater & Orlov, 2015). As a result of the fast progress of e-commerce globally, the Saudi government presented the activities of e-commerce in 2001. In this regard, Alghamdi, Drew and Alshehri, (2011) mentioned that e-commerce tasks were firstly allocated to the Ministry of Commerce and Industry, whereby a committee was responsible for the development of e-commerce. However, in 2006, all e-commerce duties were transferred to the (CITC) under (MCI). This was due to the s new e-commerce law that enforced on businesses to protect the user in many aspects. The enforcement of commercial registration included the location, name, contact information, and the ID number in addition to provide clear terms. Moreover, the law has also addressed aspects such as data security issues and advertisement and delivery regulations. The law also anticipated penalty for e-commerce business attitude of wrongdoing with the fines of 1 million Saudi Riyals and restraining Internet access (Alghamdi et al., 2011). Therefore, the attitude and trust in privacy and security also play a main function in the acceptance and implementation of e-commerce. Salisbury et al. (2001) noted that e-commerce security refers to the extent to which people believe that the Web is safe and protected for transmitting insightful information. The privacy and security policy issues are well documented in developed counties, many fraud incidents occurred in Saudi Arabia (Bahaddad et al, 2013). The progress of e-commerce in 2011 has shown that online Internet users specifically in adopting e-commerce in Saudi Arabia and revealed that that the bulk of the user were aged 18-35 and were either dependents or students (Alshahrani, 2016).

Regardless of the growing number of the Internet users, the percentage of the adopting of e-commerce in KSA is still weak in comparison with the global e-

commerce increasing internationally (Makki & Chang, 2015; Alshahrani, 2016). However, this contrasts with the economic development percentage, social media, and using the mobile (Makki & Chang, 2015).

2.3.6.1 Limitation of E-commerce in Saudi Arabia

In spite of the feasible and useful resolutions offered by e-commerce to organizations to cope with the challenges of principally fluctuating situations, studies in developing countries demonstrated either a delay or failure in utilizing e-commerce. Abdulghader et al. (2011) mentioned most of the challenges affecting the e-commerce adopting in the context of Saudi Arabia, including fear of Internet deception, lacking the essential infrastructures and the government back up, initial expenses, lacking information on e-commerce, lacking protected e-payment systems, managerial obstacles, lacking telecommunication infrastructures and weak coordination. Hence, the factors influencing adopting e-commerce could be classified into technical infrastructures managerial organizations, and social-cultural backgrounds (Alyoubi, 2015). Earlier, Kapurubandara and Lawson (2006) divided the obstacles of e-commerce into internal and external ones. These involve the employees' dearth of skills and safety concerns, whereas the external obstacles involve cultural, political, social, legal and regulatory. In addition, the absence of a reliable postal system hinders e-commerce in developing countries (Alyoubi, 2015). In this context, Abid, Rahim, Scheepers (2011) added other obstacles including lacking interest by business partners for participating in the e-business enterprises, insufficient competition by industries, lacking the time for implementing e-business, the high complexity linked with the process of application and the absence of compatibility between both the current as well as future e-business infrastructures. Other factors include the absence of suitable e-commerce in some products produced by SME (Thulani, Tofara, & Langton, 1970) and security issues (Olatokun&Kebonye, 2010). For Lawrence and Tar (2010), besides all these factors, language, trust, and the absence of an inhibitor of e-commerce were also significant reasons. However, the overall state of e-commerce has been moving slowly due to the Internet and e-commerce laws which address the attitude and trust of the quality of the content published on the websites of large businesses (Ater&Orlov, 2015).

On the other side, Saudi Arabia was ranked at the tenth place worldwide with an average daily social media usage of 180 minutes' hours per user (Statista, 2015) and recently, in 2019, the Ministry of communication and information Technology had just released that the average social media has become 260 minutes per day.

As businesses around the world have taken advantage of the power of social media, they started to investigate and adopted the best strategies to incorporate e-commerce into their business models (dos Santos et al, 2017; Enginkaya & Yilmaz, 2014; Rathore et al., 2016). Small businesses in Saudi Arabia have been using social media platforms to conduct most of their e-commerce activities. Due to the growth of e-commerce in Saudi Arabia, this study argues that attitude trust has shown limitations. After detailing the state of e-commerce in Saudi Arabia along with its limitations, a investigate review of WEB 2.0 and social media is currently presented.

2.4 WEB 2.0 and Social Media

In this section, a historical review of the evolution of WEB2.0 and the influence caused to other sectors such as the media and social attributes internationally and in the KSA specifically. The focus, the, will be on the impact on the e commerce.

2.4.1 Definition WEB 2.0 and Social Media

For Musad Alanazi, and Lone (2016), social media are:

“a group of Internet-based applications that build on the ideological and technological foundations of web 2.0 and that allow the creation and exchange of user-generated content. It is a medium for social interaction as a superset beyond social communication enabled by ubiquitously accessible and scalable communication techniques”.

These types of technology embrace a diversity of tools of the network that highlight the social characteristics of the internet as a network for communicating, creative expressions, and collaboration. regarding the term “social media”, this term is habitually interchangeably used along with the “web 2.0” term, “social software”, and User Generated Content (UGC) (Alwagait, Shahzad & Alim, 2014). This study adapted the term of Web 2.0 that refers to the second generation of Internet-based services, tools, and applications which allowed students to generate, publish, share and imitate many types of information on diverse types of social media platforms (Laudon & Traver, 2016).

2.4.2 Evolutions of the Social Media and WEB 2.0

The evolved of internal had create a new generation of the World Wide Web and referred to as Web 2.0 which does not mean that another version of WWW; it is rather, a platform built on and users control all aspects of data that involved a set of principles and practices that tie together (O'Reilly, Paper, & Marx,2012). In the beginning, the web has been developed to attain all information available flowing in one (O'Reilly, Paper, & Marx,2012). Web 2.0 had changed the flow and allowed information to flow in two directions (Fuchs, Höpken& Lexhagen,2014). As mentioned, the definition of Wed still been debated. The first use for the term web 2.0 was to identify a novel means whereby software designers and end-users begin to employ the WWW (Hussain & Ahmad, 2014). Guta and Karolak (2015) defined web 2.0 as a new version of the WWW which includes an alteration from a stilled content to a lively platform. In addition, Alsuraihi, Yaghi and Nassuora (2016) added that web 2.0 consists of a sequence of tools, applications, services. Tracing a study done by O'Reilly's (2012), the web is an architecture of participation that is uninterruptedly updated and changed by several users presenting a user-driven

network and exceeding the possibilities of web 1.0. Web 1.0 and 2.0 technologies are different in several terms such as the cost of a web 2.0 tool is more than the ones related to the tools regarding the resultant web 1.0 (Karasavvidis, 2010). For instance, the blog is an example of a web 2.0 tool that has higher affordances in comparison with the systems of content management (CMS) (Kim, 2008). In addition, wikis, known as a web 2.0 based-technology that has several benefits compared to the negotiated discussions (Shaltoni & West, 2010). In this regard, O'Reilly, Paper, & Marx (2012) claims that consumers “add value” towards the technology, which is definitely designed for the student's participation. The participation of the users distinguishes between the tools and other technologies. Consequently, by means of web 2.0, all the audience are able to create content, thereby making an extra collaborative and interactive practice (Lenartz, 2012).

Therefore, the key characteristic of web 2.0 is that is a “user-driven” and that has cooperative contents delivered by means of openness as well as service and platform sharing (Zhao, Truell, Alexander & Zhao, 2016) the User-Interface Design Characteristics of Fortune 500 B2C E-Commerce Sites and Industry Differences. Delta Pi Epsilon Journal, 48(1). In this context, Shuen (2018) argued that web 2.0 is associated with connecting the effects of the network and users' cooperative intellect to establish an application that allows for the social communication, including feedback, networking as well as conversations. For instance, in Shittu, Ahlan and Osman (2011), Web 2.0 is created with flexibility and modularity allowing for cooperation. Nonetheless, the actual web 2.0 is distinguished from web 1.0 by means of some functions. On another hand, Kaplan and Haenlin (2010) claimed that: “Although web 2.0 does not refer to any specific technical update of the World Wide Web, there is a set of basic functionalities that are necessary for its functioning”

(p.61). The particular Adobe Flash considers as one of these features, which is a widespread tool for adding to web pages' audio/video streams, interactivities, and animations. Another feature is Simple Syndication (RSS) which is a web-feed format used for publishing regularly updated contents, such as a blog entry or a news headline in standardized formats. The third characteristic is Asynchronous JavaScript (AJAX), which is a technique used for recovering the data from the web server asynchronously, thereby enabling updating the web content without interfering with showing the behaviour of all pages (Kaplan & Haenlin, 2010). According to O'Reilly (2012), seven fundamental capabilities of web 2.0 could be applied on the website, software, and applications to identify the qualifications that are the portion of web 2.0, as listed below;

1. "Services, which are not, parcelled software through the cost-effective scalability."
2. "Controlling over unique and the actual hard-to-recreate data source that becomes better-off when they are employed by more individuals."
3. "Having trust in the user and considering them as a co-developer."
4. "Connecting the collective intelligence is better when a big number of people employ such a tool."

Hence, the social web 2.0 is characterized as being the stage of the WWW, whereby learning is considered as a practice community, whereby people are interacting and sharing their interests and learning together and developing rich means. In this context, Users and/or Learners are authorized to examine, generate, and cooperate to achieve the intrinsic need for learning new information (Thalheimer, 2012; Mazza et al., 2015).

5. Leveraging the lengthy tail by means of the customer's self-service.
6. Software with a higher level than single devices.
7. Lightweight interfaces of users, improvements, and businesses prototypes.

Therefore, according to Shang, Wu and Li(2017) claim that the service models of web 2.0 mainly consists of 4 constituents with each constituent contributes to the diverse tasks. These constituent are (i) "Socialization" that enables the user to detect the web data and also join the web communal; (ii) "Externalization" that enables the user to send out data (such as emails, information sharing, and videos and/or audios sharing); (iii) "Combination" that enables the users to employ the social bookmark, share the resources, as well as filter the content of the web; and (iv) "Internalization" that enables the user for reflecting over its content using the strategy implementing, using simulation, as well as sharing the best practices. Web 2.0 technologies include a blog, wikis, social book markings, and the media-sharing facilities (e.g., YouTube). Additionally, a social networking site, a collaborative editing tool, and syndication, as well as a modification technology are also included within the Web 2.0 technology (Donelan, 2016).

The using of web 2.0 apps and tools for learning helps in transforming the industry of the present learning (Herath, & Hewagamage, 2015). This means that social media helped in creating the UseNet that is a universal discussion system that enables Internet users to post a public message (Kaplan & Haenlin, 2010). In the past, specifically, 20 years ago, social media were emerged, whereas Susan Abelson and Bruce established "Open Diary"; a site of the social network that included all online record writers in one social communal. Later, the actual word of "weblog" was firstly used and then shortened as the term "blog". Simultaneously, a blogger converted the

word “weblog” into a “blog”. Then, with the occurrence of high-speed Internet, social networking sites were created including MySpace (2003) and Facebook (2004), thus giving more acceptance of the notion of “social media” in the digital world. “Virtual Worlds” are other tools that is a computer-based virtual environment inhabited by 3-dimensional avatars (Kaplan & Haenlin, 2009). Consequently, “social media are the 21st-century term employed to define several networked tools or technologies that highlight the social issues of the Internet as a channel for communicating, collaborating, and creating expressions (Dabbagh & Reo, 2011).” In this context, social media according to Kaplan and Haenlin (2010) are a group of Internet-based applications that are established on the philosophical and technical basics of web 2.0. Nonetheless, the actual web 2.0, social media, and also social networking have some differences that have not been demonstrated and distinguished.

Lenartz (2013) argued that social media applications were designed according to consumer-generated content, usually with a definite agenda or communication that the inventor plans to develop. Besides, Kaplan and Haenlin (2010) argued that social media are a brand-new layout that depends on social networking as well as another web 2.0 apps and services. On another hand, Kear (2010) defined that social networking is a subcategory of web 2.0, and social media include social network sites. However, Kear (2010) argues that actual social networking has not well-defined; rather, it can be termed as enabling the online connection between the users. Hence, the two terms “social media” and “social networking” are interchangeably used. In this regard, Lenartz (2013) stated that the terms “social networking” and “social media” represent similar issues, and are often used mutually with no rich description. Generally, the term “social media” is mostly used as a wider term that

involves several Web 2.0 utilities, comprising social networking. “Social media” as a term is commonly more proper to describe tools of revealing a communication as an allowance of a traditional media channel. The term “social media” is also more suitable when the purpose of organizations and/or individuals carry an intentional message to the audience. As a result, organizations employ this novel technology to carry out a specific goal, such as communicating a message, linking with a group, sharing messages or developing their organizations. Another definition was issued by Boyd and Ellison (2007) who claimed that social networking is a web-based service that enables the users to carry out three main functions, including:

“(a) constructing a public or semi-public profile within a bounded system, (b) articulating a list of other users with whom they share a connection, and (c) viewing and traversing their list of connections and those made by others within the system” (p.211).

Also, for Boyd and Bilegan(2003), the social networks are “networked publics,” which is space created through online inclusion the networked technology and the imagined community. In this context, she argues that four properties categorize social networks, including searchability, perseverance, reliability, and scalability. Also, Boyd illustrated three dynamics that distinguish the social networks from other tools, such as collapsed contexts, the audiences, collapsed contexts, and the blurring of both private and public. Several websites and also real-time online tools include these are dynamics as well as properties. Further, Qiang et al. (2017) maintained that SNS involve those which enable the “connections among the users, such as Facebook, LinkedIn, and MySpace, such tools are used for a specific function, such as Flickr (photo sharing), Last, FM (music), YouTube (Video sharing), and websites

which enable the users to design their social networks such as Ning”. However, Lenartz (2012) illustrated that the characteristics of SNS are different based on each website. These characteristics enable the users to post messages on other users’ pages, have private message systems that are similar to emails or instant messages, share the photos and videos, blog, have mobile-specific applications, and provide the user with online games.

2.4.3 Social Media Business Impact

Social media are, according to Chaudhry et al. (2014) “*a group of Internet-based applications that build on the ideological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content (UGC)*”. In addition, social media could be “*activities, practices, and behaviours among communities of people who gather online to share information, knowledge, and opinions using conversational media.*” For Al-Saggaf and Simmons, (2015), social media are constituted by two terms; ‘social’ implies the instinctual need which the individuals possess to communicate with other individuals, and ‘media’ include the several methods people employ to conduct communications with others. Hence, the great developments on the internet have thoroughly altered the attitudes and peoples’ behaviours through collecting information and new means of communication (Xanthidis et al., 2016). Two-thirds of the world’s internet users visit an SNS every day (Abokhodair, 2015). Globally, the use of the Internet has been growing exponentially; that is around 40 percent of the use of the Internet from the whole world population. Due to the worldwide availability of the internet, individuals have been given opportunities for using social media, including emails, Twitter and Facebook, thus allowing for the interaction without the need for physical communication (Radwan, 2016). The most ubiquitous means of accessing the internet is via smartphones since these devices can

be obtained easily and are convenient for use (Ahmad, 2016). For instance, in the kingdom of Saudi Arabia, the use of smartphones is widely spread; thereby having the second-highest percentage of using the Smartphone in the world. Besides the huge development of the internet, the platforms of social media platforms, such as Facebook, Twitter, and many others have employed a central stage, in several ways, thereby characterizing the internet's cultural significance.

There are several personal functions offered by social media, these media functions have rapidly become among the most outstanding factors in conducting business in nowadays at several levels, thereby entirely redesigning the methods of conducting the business (Saeed, Gull, & Iqbal, 2017). In general, the contents of the social media are a user-generated, which is more influencing compared to the traditional methods of business marketing and in affecting the customers' attitudes and behaviours (Yamani, 2014). Generally, individuals do not like to be informed of what to purchase; rather, they like to make decisions themselves and obtain relevant information through communicating with their fellow consumers either face-to-face or using online platforms (Abanumy, Al-badi, & Mayhew, 2005).

It seems that social media have resulted in new methods of thinking among the consumers in developing countries, thereby opening advanced opportunities that allow people to learn, identify and interact with the providers of products and services. Consequently, they behave marketers to be aware of the impact used by the social media on the customers' consciousness and realize the friendly relationships between the public and business social media use as well as the business performance (Dimitrios & Violettas, 2014). Nowadays, the developments on the internet have condensed new opportunities for businesses, such as social media

platforms, including LinkedIn and advertising on Google and Facebook (Jdaitawi, 2015). In this regard, many transnational organizations, including Dell and Starbucks, employ the social media tools to achieve business imperatives, such as driving website traffic, enhancing the customer's loyalty, sales, and revenues, as well as strengthening the customer's satisfaction, developing the brand awareness and establishing a brand reputation. Such benefits are not only limited to large companies but also are vital for small businesses (Almaimouni Houghton& Sandhu, 2014).

Based on the findings of some studies, consumers usually prefer interacting with the owners of small businesses more than large corporations (Al-Jabri, Sohail& Ndubisi, 2015). Also, some consumers trust small businesses-providers rather the large corporation (Alruwaili, 2017). In this domain, it seems that social media are extending the public relations to further help mainly small businesses in keeping relationships with the customers by providing direct contact with the target markets. Besides, social media allow businesses to have a discussion with customers to communicate with them and make sure what attracts their interests (Halboub et al., 2017). As a result, social media are not simply a marketing method but also a complete marketing strategy (Al-Maghrebi & Dennis, 2011). Hence, the marketing concentrates on the advantages of pre-selling activities, such as improving the advertising and marketing procedures as well as reducing the marketing costs, whereas the sales imply the actual advantages associated with the sales of products or services, including increasing the market's share, as well as revenues, and other product developments (Alghamdi, Nguyen, Nguyen& Drew, 2012). Therefore, small businesses could be successful when they can market themselves resourcefully and cost-effectively and thereby drop or eradicating marketing and other sales costs. Such opportunities are provided by social media (Al-Saggaf & Simmons, 2015). In

this regard, 66% of small business' owners which have only two or more workers/employees intensely highlight the significant roles of the social media are for their business (Xanthidis et al., 2016) since social media are employed for several goals, including branding, marketing and developing products and services, as well as carrying out market research, that helps in identifying the customers' needs, obtaining referrals (word-of-mouth via like, sharing, and followers on Facebook, Twitter among others) and also in generating the customers' opinions and comment towards the available products/services (Albalawi & Sixsmith, 2017). Hence, the basic goal of social media is to communicate and build relationships with potential customers. In other words, social media ought not to be regarded only as a channel for sales and marketing but also as methods for enhancing brand awareness (Alasem, 2015; Khatib, 2016).

Therefore, it is vital to choose the most appropriate platforms of social media for communicating since social media present a public relations practitioner a great power to enhance the relationship between the customers and the businesses (Al-Shehri, 2013). In this regard, it is essential to identify the areas that should be emphasized by the companies and the way of reaching the greatest probable target groups to develop and sustain the performance of the business (AlGhamd, Nguyen, & Jones, 2013). Hence, it is advised that for smaller start-up, the focus should be on one the platforms of social media then moving to another platform, whereas for other established companies, several ways should be followed to engage with the social community and attract more customers.

2.4.4 Social Media in Saudi Arabia

Recently, in the region of the Middle East, the use of social media by businesses has a substantial scholarly interest. Several studies in this region examined using Facebook and Twitter particularly in the domain of business marketing (Alwagait, Shahzad, and Alim, 2014). These studies have highlighted the effective role of social media as a marketing paradigm to an extreme increase in the use of social media by individuals in these countries (Makki & Chang, 2015). Therefore, several companies in this region have to obtain the potential power of social media for interacting with large numbers of customers (Hussain, Al Nasser, & Hussain, 2014).

Thus, social media constitute a highly topical and relevant field that requires further investigations. Nowadays, each individual in Saudi Arabia, for instance, has one smartphone which could be used to get access to social media platforms (Alabdulkareem, 2015). Therefore, social media are believed to have a great role in attracting Saudis for several reasons. The individuals use Facebook and Twitter for entertaining, communication with their friends and families, and exploring news and trending in the field of the fashion industry (Sylvia et al., 2013). In conclusion, individuals in Saudi Arabia use social media to obtain information for either personal and/or professional purposes.

2.4.5 Popular Social Media Platforms

According to Weller (2016), there are various platforms of social media where business organizations may depend on to satisfy their objectives. However, certain factors must be taken into consideration while designing the marketing campaign. These factors include the nature of the objectives, availability of the human resource, the target audience, and the ability to mobilize information.

However, organizations that rely solely on e-mail marketing may not be productive since online users' have been experiencing e-mail overload. Therefore, Yost (2012) recommends that for effectiveness and relevance social media can serve as complements to e-mail marketing. For achieving good results, organizations must design websites that can connect all these social media and create opportunities, whereby the consumers could be called into the companies' presence on the web. Hence, these social media channels can probably produce such avenues.

In this context, Kim, Sin, and Tsai (2014) asserted that it is essential for brand managers to be familiar with the ways through which social media platforms can help in the improvement of their e-commerce strategies. For instance, LinkedIn, Facebook, and Twitter are often used for developing a relationship and through which a follow up with the customers is also built. In this view, it is essential to identify that the customers' trust is significant in the successful integration of social media technology. Therefore, Bivens and Haimson (2016) stated that organizations must be honest while interacting with their customers and must conduct social media marketing with sincerity since this will help determine the level of trust that the customer will develop.

- **Twitter:** It was launched in 2006 as a social networking platform and has become an important channel for the social media marketing (SMM) because of its microblogs or hashtag tweets features that are up to 140 characters each. The unofficial number of Twitter users could hit or exceed 500 million users around the globe. The notion of a trending topic that is being tweeted or tagged at a higher rate compared to other subjects or events is often referred to as Twitter. Therefore, through trending topics that are aided by Twitter,

many users can obtain the most current information on main incidents around the world. Importantly, hashtags help improve the ability of the users to look for keywords easily as well as retrieve information (Berger & Wild, 2016). Besides, Twitter helps connect business organizations to customers in real and online time. Organizations also use Twitter to quickly disseminate information to people who may be interested in their services and products, requiring real-time market intelligence and feedback. Twitter is also used in building relationships with partners, customers, and influencers. Hence, Twitter offers businesses an easy way to reach an engaged audience. Business organizations, according to Primack et al. (2017), develop a long-term relationship with their clients using a tweeting platform which is capable of improving and delivering marketing message/s and designing electronic word of mouth (eWOM).

- **Facebook.** It was founded in 2004 and has developed to include over 1 billion active monthly users according to available data in December 2017. Even though Twitter and Facebook are designed to be used publicly, Facebook (FB) has been able to attract a large number of users by providing more of a community experience where people interact easily and exchange information (Greenwood, Perrin, & Duggan, 2016). This, therefore, serves as a motivation for customers to choose certain brands among other alternatives. The check-ins are published and associated with the consumers' online social network page(s). Comunello, Mulargia, and Parisi (2016), asserted that Facebook nearby applications help location-based marketing to reach more customers and become popular fast. Besides, employing the status updating,

subscription, and other features associated with Facebook, organizations, and companies can gain information about users' habits, interests, and needs

- **LinkedIn.** This professional social network was established in 2003 and has been able to attract about 200 million users lagging behind Facebook (2004) and Twitter (2006) (Shang, Wu & Li, 2017). The reason behind LinkedIn narrowly focused on professional and business users. The main purpose of LinkedIn, according to Tan, Tan, and Lu (2016), is to drive events and services for business and professional community to network. Importantly, all types of business organizations are served by LinkedIn, which also helps business organizations to interact with one another and also communicate with their customers. LinkedIn operates on the platforms of connections. It does allow people to connect directly with one another employing the direct connection(s).
- **Blogs.** Blogging came into existence in 2004, and since then it has become an online diary for most users (Poell, Abdulla, Rieder, Woltering & Zack, 2016). A blog is often regarded as a tool that organizations use for marketing because it is flexible and has the capacity for interactive activities. Moreover, blogs can reach a large number of users in different ways. Since it is widely used by many organizations in the contemporary world, most followers of the blog get joy by reading and obtaining comprehensive opinions and information from the blog. As a result, Blogs have become an important channel through which customers evaluate products and services of organizations. Blogs allow bloggers to choose, say, and share their opinions with a public or private network without any form of restrictions like

publications and this is possible because bloggers are private individuals who simply voice their opinions about certain services and/or products which they have used before. Their direct experience and the absence of paid endorsement bias result in making them dependable sources of information for would-be customers. It is easy for bloggers to follow one another since blogs allow consumers to share information that can be read by the members of the public without restrictions. To choose the right third-party blog through which organizations can advertise their services as well as products, factors such as credibility in terms of reputation, reach concerning several followers, and relevance in terms of content should be considered.

- **Google+.** It was launched officially in the middle of 2011 and since then it has attracted over 135 million users by the end of 2017. This service has enabled people to exchange and share information through using circles (groups), streaming (newsfeed), hangouts (group video chats), and messenger (chatting) (Klinger & Svensson, 2015). Also, through the platform's inbuilt tools, such as ripples, hashtags, sparks, and stream, organizations can look for trending conversations, listen to customers, and affect the re-sharing actions of users as well as advertise through Google+. It has been emphasized that followers of Google+ are boosting the Google organic search ranking more than the milestone achieved by Facebook or Twitter (Forsström, 2015).
- **Pinterest.** It started in 2010 and has then obtained its popularity. This service enables organizations to create and manage images through which users can generate, save, and bookmark or categorize their images or video (known as pins) by using pinboards or boards. The early objective of Pinterest was to

facilitate the connection of people based on their interests by a platform of inspirational pinboards. Pinterest also allows users to share a pinboard, like pinboards of other users, pin outside the content of other social media channels (e.g., Twitter), and can re-pin pinboards that are created by others to add to their collections. This service started gaining ground in October 2011 among retailing organizations when Pinterest revamped its site to accommodate business accounts because the platform assists in targeting the customers who possess common interests. Importantly, Pinterest.com occupied rank 38 out of 50 websites that “make the web great”(Pittman& Reich, 2016).

- **Instagram:** Instagram is videos and mobile photos taking and sharing the service that has emerged as a new medium so quickly recently (Hu, Manikonda & Kambhampati 2014). It is a platform which assists its users to share the activities of their daily living with friends and colleagues utilizing a sequence of (filter manipulated) photos and videos. Instagram has attracted over 150 million users since its establishment in 2010, whereby around 55 million photos are uploaded daily and more than 16 billion photos are shared so far. The great achievement of Instagram verifies the current Pew report stating that pictures, as well as videos, have been the basic social currency online (Rainie, Brenner, & Purcell 2012).
- **Flickr** (pronounced as "flicker") is a hosting website for images and videos. It was created by Ludicorp in 2004 and possessed by Yahoo in 2005 (Lau, 2010). The website largely utilizes by researchers and bloggers to host images that are embedded in either blogs and/or the social media websites. In

2013, there were 87 million memberships of flicker while more than 3.5million new images uploaded daily. In 2011 alone, more than 6billion images were uploaded on this website. For mobile phone users, Flickr obtains official mobile applications used for varied operating systems, such as iOS and Android and an optimised mobile website (Zhou, Lei, Wang, Fan& Wang, 2015).

- **Tumblr** is a small website used for both blogging and social networking that was established by David Karp in 2007 and was possessed by Oath Inc. Tumblr enables its user to publish multimedia contents to a short-formblog as well as follow blogs of other users. Bloggers have option to privatized their blogs, whereby several features are accessed through a "dashboard" interface (Yang, Gu, & Zhou, 2016).
- **VK(VKontakte;** Russian:ВКонтакте, meaning *In Contact*) is a Russian-based online social media available in many languages; however, it is very popular amongst the Russian-speaking users. This website has several features through which users are able to send public or private messages, generate groups, create a page or incidents, tag images/audio/video, and play games. In 2018, VK had 477 million users. VK is ranked at the 14th position in Alexa's global Top 500 sites(Dailey& Starbird, 2017).
- **Vine** was established in 2012 to host users to share six-second-long looping video clips. Vine is an American small blogging website owned by Twitter in October 2012.Users' videos are published by means of Vine's social networking and can be shared on other services. Vine's app can be also employed to explore the videos uploaded by other users. In December 2015,

Vine had 200 million active users. In December 2017, the co-founder Dom Hofmann has announced working on Vine's successor, V2, that is not affiliated with Twitter (Boyle, Earle, LaBrie, & Ballou, 2017). Table 2.1 illustrates types of and popular social media platforms.

Table 2.1

Types of and Popular Social Media Platforms

Type	Definition	Example(s)
Social Networking	“Content sharing, personal and business information”	Facebook, LinkedIn, Google+
Microblogging	“Blogging (online diaries), mainly text-based that uses hashtags (less than 140characters)”	Twitter, Tumblr
Blogging	“Online diary”	Blogger
Social news	“News rating”	Digg, Stumble Upon
Media	“Content sharing, mainly videos and Photographs”	Pinterest, YouTube, Instagram, Flickr

2.5 Social Commerce

Social commerce is considered a new form of e-commerce that has lately emerged employing the developments of communication and Web 2.0 technology. The introduction and development of Web 2.0, wikis, blogs, social and community networks have resulted in important improvements to the structures of the web (Lai & Turban, 2008). According to some studies, the growth of social networking influences social commerce (Leitner & Grechenig, 2007; Liang & Turban, 2011).

Importantly, many of the technology developments, such as AJAX, RSS or APIs help online shoppers to interact effectively and to connect with other customers on other platforms. This has therefore influenced business models such as customer to customer (C2C) and business to customer (B2C) and resulted in new opportunities to communicate (Park, Lee & Han, 2007).

Social commerce is a new medium that helps to deliver e-commerce through social media and is aided by Web 2.0 (Liang, Choi, & Joppe, 2011), which includes Twitter, Facebook, and Linked in. The popularity of SNSs is mainly for the current transformation (Liang, Choi, & Joppe, 2011; Liang & Turban, 2011; Haar, 2015). This occurrence, therefore, influences new business models that are structured on communities and to bring characteristics of social commerce to e-commerce, to facilitate the design of customer-oriented businesses. This, in essence, helps to add some values for customers as well as helping the organization in improving their marketing strategies (Liang & Turban, 2011).

2.5.1 Evolution of Social Commerce

Besides the popularity and the marketable achievement of SNSs, social commerce appeared in 2005, thus representing an evolving phenomenon (Abed, Dwivedi, & Williams, 2015). In the present study, social commerce is considered a method of commerce mediated by social media in both online and offline situations. Social commerce includes the use of social media which enhances the social transactions and user's assistance to help the activities in the process of trading of products/services. By means of benefiting from the interactive information technology infrastructures, social commerce is classified as a new classification of e-commerce or the birth of a "referral economy" (Alqahtani, Goodwin, & de Vries,

2014). Most studies on social commerce have focused on trade articles, blog posts, industry reports or practitioners' publications, whereas only limited studies have addressed some issues of social commerce rather than on the phenomenon of social commerce. These discussions have presented speculations and reports. Thus, limited information is available on the aspect of social commerce. This social commerce provides several opportunities to the scholars to examine various aspects of the interplay amongst the individuals, management, and information; which are classified within the boundary of IS disciplinary. The findings of these investigations can probably contribute to our understanding of the theoretical issues as well as present prescriptions to achieve positive social commerce activities.

Recently, based on marketing perspectives, Stephen & Toubia (2010) defined social commerce and social shopping as forms of Internet-based "social media" which enable the individuals to contribute to marketing products/services in online markets as well as in communities. As discussed by Hajli & Sims (2015), social commerce is an action whereby people explore shopping opportunities. Empirically, Ezzi (2016) demonstrated that enabling the sellers to communicate with social networks creates significant economic value. The value of the social networks is primarily in having shops available to customers ("virtual shopping mall" created by SNS). Those sellers benefitting mostly from social networks are not essentially those who centered on the network. Rather, they might be those whose accessibility is not supported by the SNSs.

In the digital economy, locating a shop virtually or in reality and waiting for the customers are no longer sufficient. Instead, companies have to be active in creating methods for engaging the customers, building a relationship, and creating the

communities. The social commerce is different from the ordinary e-commerce site in terms of the social elements involved. In other words, sites of social commerce include characteristics, such as customer's rating and review, users' recommendation, and referrals, a social shopping tool and an online community (Alharbi, Kang, & Sohaib, 2016). These characteristics can make trusted environments, whereby the friends and the family members energetically contribute to the contents by providing positive/negative feedback based on their past and present experiences. Therefore, researching and the purchasing cycle are minimized due to the establishments of a single destination (Chen & Tao, 2012). In brief, social commerce is a trusted setting in which consumers adopt purchasing decisions on the basis of advice and recommendations of friends and family rather than unknown strangers. The increasing of the issue of social commerce is resulted from merging Web 2.0 technology, an e-business opportunity, and an online community. The representative features of the social commerce of Web 2.0 social commerce are listed below:

1. "Harnessing collective intelligence - Almost entirely, the competitive benefit of Web 2.0 social commerce site is in the high number of buyers/sellers. The key to the market dominance is the effect of the network by the user's contribution."
2. "An architecture of participation - Web 2.0 social commerce sites leverage algorithmic data management and customer-self-service to reach out to the whole Web to the long tail rather than only the head."
3. "Viral marketing - Web 2.0 social commerce depends on the word-of-mouth marketing that is achieved when the customer promotes a product or a service by either telling other customers about their positive experiences towards the

products/services. Consequently, trademarked communities could create longer-lasting customer relationships.”

4. “Market disruption - A good candidate for a market disruptor could be any company which results in a large profit margin off its customers. Hence, the web 2.0 social commerce is associated with the agreement and creating something new.”

2.5.2 Benefits of Social Commerce

According to Gopinath, Radhakrishnan and Watson (2018), SNS occupies the users more than other sites on the Internet. In addition, Gopinath asserts that contemporary organizations must leverage on social media to increase their customers’ base and enhance the employees’ productivity since the social media could have an impact on the way of people’s communication and executing their daily activities.

Furthermore, Mendez and Mercier (2007) noted that the internet has a different level of convenience which many organizations can take advantage of. For instance, whenever users tag videos, YouTube, pinboards, Pinterest, or Instagram photographs, they assist marketers to choose the keywords to purchase paid advertising campaigns. Vemuri (2010) revealed that organizations could explore social media to their own benefit. Importantly, organizations must know the potential and latest applications of these platforms in order to create buzzword around the company’s online entity. It is therefore essential for organizations to use social media networks to create awareness towards the campaigns of the companies.

In addition, social media could be also employed as an instrument to enhance the relationship between the companies and their customers by increasing “the stickiness of the brand,” whereby the consumers can rapidly recall, favor, and patronize a

brand (Vemuri, 2010). In addition, it is essential for organizations to promote the innovation and this is in line with Vemuri's opinion that states that social media channels are in line with the dream and vision of marketing researcher since the individual users can present new concepts, critiques, and offers recommendations for improving the services and/or products.

Vemuri (2010) also notes that organizations must determine the strategies that match certain media channels. For instance, some channels outperform others for certain campaigns as this will help organizations attract new consumers and retain the old ones. To attract new customers, organizations can adopt contests and giveaways as strategies to engage consumers and create businesses. Vemuri also emphasized the 28 reasons to make use of the platform which could have the potential to be everlasting.

Moreover, Brogan (2010) discussed the benefits related to social media marketing. In this regard, maintaining the customer's relationship and creating a large customer base are the most established topics and the most crucial contribution that social media offer to the marketing efforts. By means of social media, business organizations can have access to tools that can be used to listen to the yearnings and aspirations of their customers. Similarly, they can be used to create more awareness of their brands whereby the rate of patronage and prospecting may be increased. Brogan also argued that through soft-selling known as prospecting of social networks, marketers could gain potential online customers. In addition, through web forums, it is possible for organizations to build or create communities for their products by searching for customers who can promote their brands or products through web forums and other avenues. Hence, Brogan agreed that social media can

serve as weapons through which organizations can turn their customers to evangelists for their services or products.

Furthermore, effective and thorough engagement of clients/audiences can be achieved with social media while a group of fans can be empowered to promote the company's products/services free of charge through their social networks. Since referrals are also essential for organizations, social media also provide an avenue through which organizations can seek for such issues. Retailers in this view always make huge investments in the appropriate marketing approaches in order to be relevant in today's competitive market. Evidence has therefore shown that while most companies have traditionally invested huge money for reaching their audience, social media are important sources through which personal referral objectives can be achieved with little financial investment (Brogan, 2010). It is therefore important for organizations to identify how to use social media marketing.

Krell and Matook (2009) noted that collaboration is a way of accomplishing successful social media marketing. This can be achieved among organizations and between organizations and their clients as this will result in improvements in businesses. Oliver, Rust, and Varki (1998) also argued that social media could be used as a platform through which organizations can collaborate with their customers since it helps or allows instant feedback from the customers.

In addition, Krell and Matook (2009) asserted that innovations are crucial for the success of any business. This type of thinking can be inspired by the social media landscape that is flexible and growing fast. For organizations to easily connect with their customers, establish relationships and request feedback that will help in the future designing of products, venturing into the social media can help in this sense.

In conclusion, organizations must build their internal mechanisms and culture that advocate media. When the culture is built, employees are empowered and this allows them to take initiatives, learn, and be the agents of their companies. Consequently, the company's strategy should include an awareness of the social media marketing issues (Faust & Householder, 2009). This study, therefore, supports the project map for strategy the economic in pursuit of Saudi Vision 2030 by diversifying income resources by promoting economic growth by empowering social commerce entrepreneurs (Anonymous 2016). The next section detailed the scenario of Social Commerce in Saudi Arabia.

2.5.3 Social Commerce in Saudi Arabia

Social Commerce in Saudi Arabia has been developing and widely spread showing the most solid empowering characteristics of e-commerce acceptance (Sheikh et al., 2017). Currently, several companies in Saudi Arabia have their business profiles on social media websites. As of May 2016, the number of monthly active social media memberships in Saudi Arabia was 11 million, the number of monthly active Facebook users was 7.96 million, the number of monthly active Twitter users was 6.37 million, and the number of monthly active Instagram users was 5.41 million. Also, in Saudi Arabia, YouTube became the second most visited website with 2.9 billion views by the end of July 2015, trailing only Google. Before that, in 2012, Google revealed that Saudi Arabia ranked first globally in YouTube views per capita (Yahya & Dahlan, 2015). The latest statistics on YouTube show that Saudis contribute more than 90 million views every day on YouTube. Nevertheless, the issue of fully understood impact on social commerce had been reviewed by Makki and Chang (2015) and Abed, Dwivedi, and Williams (2015). In Saudi Arabia, generally, organizations understand that the full potential of social commerce is a

clear sign of the success of their businesses. To be more detailed, Abed, Dwivedi and Williams (2015) had examined 60 SMEs in Saudi Arabia and found that the business owner has not understood the potential of social commerce for the success of their business and 14 of the 60 had created accounts on all of the following social media platforms; Facebook, Twitter, YouTube, Instagram, and LinkedIn. In addition, this section had provided a clear scenario of literature concerning social commerce and narrow to the state of social commerce in Saudi Arabia. The next section provides the relevant literature on theoretical models.

2.6 Theoretical Models

Theoretically, different theories have been used to understand the underlying reasons that may increase or decrease trust and satisfaction as well as result in either positive or negative attitudes in accessing SNS (Darabi, Macaskill, Reidy, 2017). Hence, some theories have been introduced to understand the underlying causes of this phenomenon (Almarshoud, 2016). Additional research on the acceptance of social commerce and the post-adoption aspect involving Social Support Theory and its integration with the Theory of Planned Behaviour (TPB) is also necessary in developing Arab countries, especially in the Saudi Arabian context, which has the largest online market in the Middle East (Hilbert, Crassard, Charloux & Loreto, 2017).

Based on the Theory of Reasoned Action (TRA), consumers' attitudes towards the social network sites and the advertising information posted on them could affect their intention to purchase. Therefore, trust has been suggested as a predictor of attitude (Kim, Lee, Sung, & Choi, 2016). Hence, if trust has a high level, the user's attitude

will be positive, and the user will probably accept and use the technology (Dermentzi, Papagiannidis, Osorio Toro, & Yannopoulou, 2016).

The use of the Technology Acceptance Model (TAM) to assess social shopping websites, Shen (2012) found that users' acceptance of this form of social commerce was primarily based on the ease of use, usefulness, and trust demonstrated by these websites. Shen's findings are consistent with those demonstrating that the intention of consumers to make purchasing online is influenced by the consumers' perceived ease of use and usefulness of the website and consumers' trust in the online vendor (Lee, 2014). Similarly, Horng, Wu, and Liang (2016) showed that the perceived usefulness of the website influences the intention of consumers to revisit or make frequent purchases from a website. The constructs discussed above shed light on the intention of consumers to engage in social commerce via SNSs. These theories are explained in the next section.

2.6.1 Theory of Reasoned Action

Theory of Reasoned Action (TRA) was originated based on the social psychology theory and has been widely applied in studying individuals' behaviours (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975). TRA model is built on the concept that individuals' performance concerning their behaviour is significantly influenced by their behavioural intention. Also, a person's subjective norm and attitude influence the behavioural intention (as shown in Figure 2.1). According to Fishbein and Ajzen (1975), the behavioural intention is regarded to be a pointer of a person's intention to execute a specific behaviour. Fishbein and Ajzen (1975) in this regard, therefore, asserted that attitude can be described as an individual positive or negative feeling to perform the behaviour. In their model, they defined the subjective norm as the belief

of an individual that other people may influence to perform or not to perform certain behaviour (Fishbein & Ajzen, 1975). This belief is considered an assumption of a person that if behaviour is performed, it will result in certain consequences (Fishbein & Ajzen, 1975). The model also theorizes that the normative belief of an individual has a strong influence on the subjective norm (Fishbein & Ajzen, 1975).

Accordingly, existing studies have proven that TRA is a general model and does not state specific assumptions that can influence the specific behaviour of an individual. As a result of this deficiency, researchers in TRA paradigm must ascertain specific assumptions that are very important while investigating the performance of certain behaviour. However, the underpinning of the TRA model in clarifying the Information Communications and Technology (ICT) is that when new factors that impact a particular intention are included, attitude and/or subjective norm will be indirectly influenced.

This, therefore, implies that the TRA model plays a significant intermediate role in influencing the behavioural intention based on external uncontrolled and controlled interventions (Davis, Bagozzi, & Warshaw, 1989). TRA has further been proven as a model that can predict and explain the behaviour of a human in social psychology as well as in all fields or disciplines (Ajzen & Fishbein, 1980). Several studies have been conducted based on TRA aiming to understand the theory, discovering its limitations and examining its underlying assumptions to create a more robust and extensive model (Bagozzi & Yi, 1981). Generally, the model is conceptualized to explain the human behavioural intention literally (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

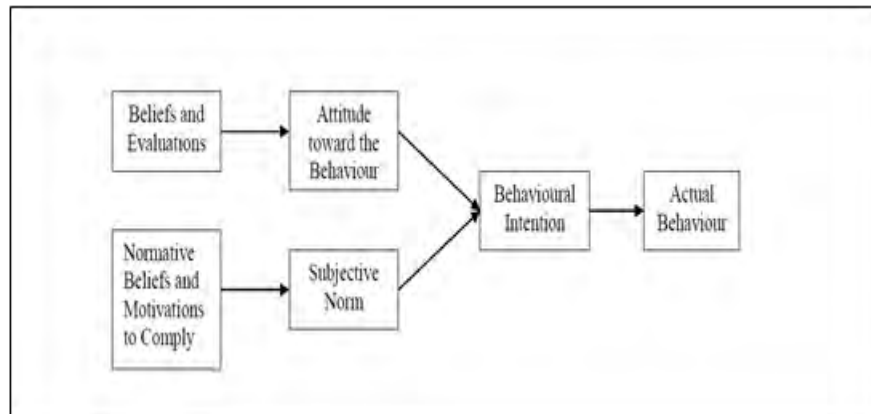


Figure 2.1. Theory of reasoned action.

2.6.2 Theory of Planned Behaviour

Ajzen (1991) derived TPB by extending the Theory of Reason Action. What distinguishes TPB model from the TRA model is that Perceived Behavioural Control was added to assist the individuals in situations, whereby such individuals possess no control over such a particular behaviour (Ajzen, 1991). The supporting assumptions of the TPB model are that the behavioural intention of an individual determines his/her actual behaviour. In this model, subjective norms perceived behavioural control, and attitude can influence the behavioural intention.

Accordingly, attitude implies the perception of an individual's impact on a specified behaviour (Ajzen, 1991). Besides, the subjective norm is regarded as the perspectives of an individual concerning the influence of other people on him/her to perform certain behaviour. Ajzen and Madden (1986) define Perceived Behavioural Control as the available perception of an individual that an available resource or an opportunity that could assist the individual to perform. The TPB model proposes that the individual's behaviour can be predicted and influenced by their perceived behavioural control and behavioural intentions as illustrated in Figure 2.2.

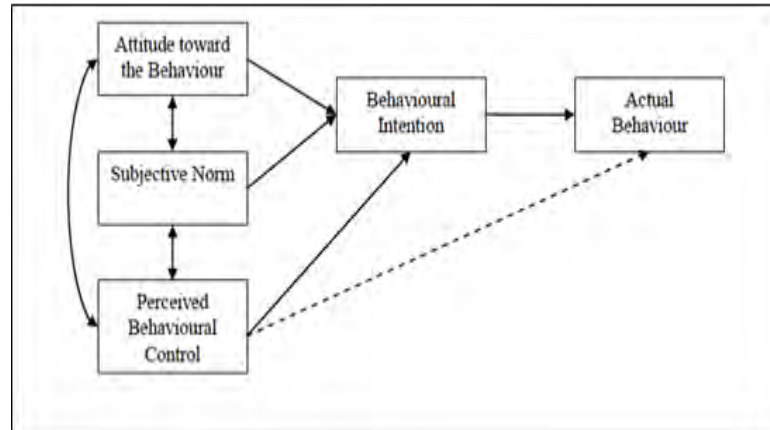


Figure 2.2. Theory of planned behavior.

2.6.3 Technology Acceptance Model (TAM)

TAM is also an extension of the TRA model and was conceptualized to explain the user's acceptance of ICT (Davis, 1989; Davis, Bagozzi & Warshaw, 1989). The essential objective of TAM is to predict and explain if a particular system is either accepted or rejected by means of the determinants bases that impact the users' acceptance of that specific system.

Davis et al. (1989) emphasized that the purpose of TAM is clarifying the influence of the external determinant on attitude, internal beliefs, and behavioural intentions. Davis et al. (1989) produced the TAM model after identifying some elementary variables from past technology acceptance related research, whereas TRA model was used as a theoretical background. The core constructs of TAM are the perceived ease of use and perceived usefulness and are regarded to be highly relevant to the technology acceptance behavioural intentions as illustrated in Figure 2.3. Perceived usefulness refers to the perception of an individual that using a certain technology will help in achieving efficiency in job performance. Perceived ease of use refers to

the extent of believing that using a particular system will be free of effort (Davis et al., 1989).

As in the TRA model, TAM also considers that the behavioural intention is the determinant of technology acceptance and usage. However, the difference between TAM and TRA is that the behavioural intention in TAM is explicitly defined as the attitude of an individual towards utilizing the system and perceived usefulness of the technologies applications (Davis et al., 1989). The attitude-behavioural intention in TAM suggests that most users have the intention to perform a particular behaviour if they had encountered a positive experience regarding the technology. The attitude-behavioural intention in TRA suggests that the relationship is very fundamental (Bagozzi & Yi, 1981). The TAM's perceived usefulness behavioural intention evidently suggests a direct influence. It thus posits that an individual nurse's behavioural intentions to make use of a particular technology as a result of the cognitive assessment of how such technology can enhance job performance (Davis & Yi, 1989).

However, the main weakness of TRA which TAM does not take into consideration is the subjective norm as the determinant of the behavioural intention (Fishbein & Ajzen, 1975). In TAM, the core constructs that determine attitude are the perceived ease of use and perceived usefulness. Perceived usefulness was found to directly influence both attitude and behavioural intention to use a particular technology.

Another weakness is that while conceptualizing TAM, important predictors of technology usage behaviour were not included (Mathieson, Peacock, & Chin, 2001). For instance, any of the TBP variables are not included in the TAM. In this view, Mathieson (1991) suggested that subjective norms and the perceived behavioural

control (stressed from the TPB) might overlap within the TAM's construct because TPB does not emphasis on technology usage behaviour. Mathieson et al. (2001) in this view theorizes that the TPB is not as parsimonious as TAM, thus requiring a unique operative if it is used in any particular study.

The TRA forms the theoretical basis for TAM in establishing the causal relationships between the perceived usefulness and perceived ease of use, attitude, intention to use and also the actual technology adoption behaviour. When compared with TRA, it can be concluded that TAM is slightly comprehensive and can be applied to all technology usage behaviour. Since TAM has been applied widely in the last two decades in various fields of ICT for the prediction of technology usage behaviour, it is therefore found to be highly suitable for this study in modelling the social commerce user's acceptance in Saudi Arabia.

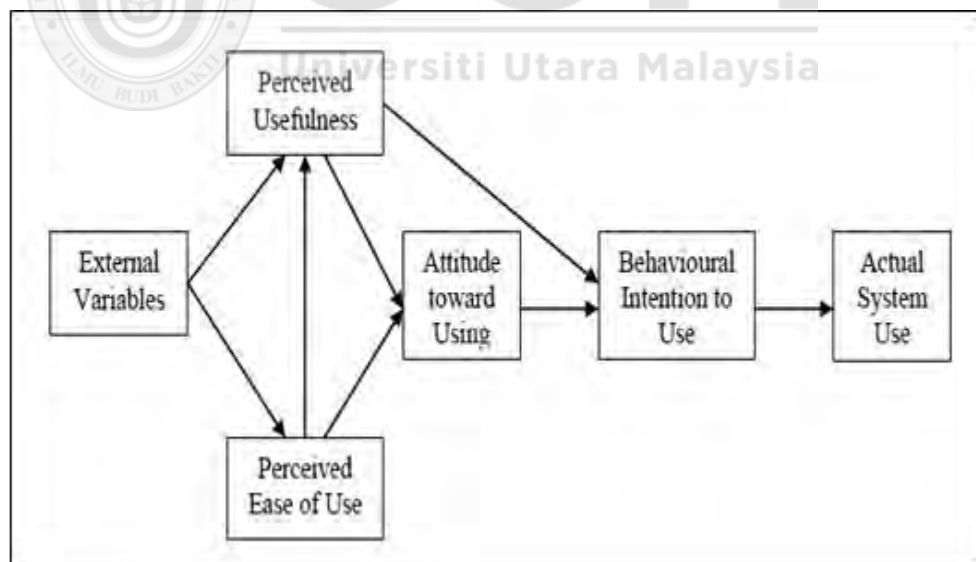


Figure 2.3 Technology acceptance model (Davis & Yi, 1989)

2.7 Factors Affecting Social Commerce Intention

The following sections present the view on the factors that affect social commerce intention.

2.7.1 Social Support

The social support is the experiences of an individual who is being taken care of, responded to, and assisted by fellow networkers in the social community group (House, 1987). Previous studies have argued that social support is capable of generating understanding and warmth for individuals as well as assist individuals in satisfying their needs psychologically (Maslow, 1954). As noted by Liang et al. (2011), even though such support may not all the time directly solve the problems of the individuals, it can assist a person to feel better since it is a kind of enthusiastic feedback. This kind of support makes individuals developing trust and satisfied with people in their social interactions. Therefore, a community that has good social support tends to create a mutual bond and trust (Liang & Turban, 2011).

At present, social support has been recognized as one of the essential tools that help customers achieving their social needs by interacting with one another. When the supportive information and interactions are increasing, customers tend to develop better relationships. Importantly, it is essential to point out that the members on social media platforms enjoy social and informational supports among themselves (Wellman et al., 1996). Experience has equally shown that many individuals join online communities and SNSs in order to enjoy the benefits of social support in terms of information and emotion (Ridings & Gefen 2004). Therefore, consumers can positively endorse a brand through their social communications in social media

which can eventually influence their intentional behaviour (Naylor, Lamberton, & West, 2012).

In the online environment, social supports are regarded as the value-added to the communities and networks. The added value makes social network proactive as well as share their information to support others. Such emotional and informational support helps people adopting SNSs and other social platforms when subscribing to a service or a product.

It is therefore essential to emphasize that this kind of experience and information, which are related by the consumers, help in making purchasing decisions (Park, Lee, & Han, 2007). This decision has also been supported since it has been established that when customers interact and socialize through social media (Lin et al., 2012). In addition, information that is provided by third-party influences the intention to buy (Chen & Xie, 2006). Moreover, emotional and informational supports that are generated through social media can bring about trust, satisfaction, and commitment among the users. Essentially, interaction and participation of consumers in social media have the capacity of generating commitment and which is often metamorphosed to additional trust in the online community (Casaló, Flavián, & Guinalíu, 2008).

Evidence has also shown that people interact on social media and other networks in order to fulfil their social objectives of pointing out their favourite SNS (Cho & Park, 2013). This implies that information supplied through the customer's feedback can be used as a recommender or informant (Park, Lee, & Han, 2007) and can bring about complementary effects (Chen & Xie, 2006). The relationship that is built in

SNSs coupled with the social support results in enforcing trust in the network (Tokuda, 2015) and satisfaction among consumers (Obst & Starfurik, 2010).

The consumers' interconnectivity via social media, like reviews, communities, and recommendations has the capacity of establishing trust in e-commerce. In SNSs, such interaction helps the members accepting or rejecting trust in a service provider. In social media, consumer's socialisation takes place directly through social interactions or indirectly by endorsing a product (Wang & Zhang, 2012). In essence, the consumer's social relationships could lead to social support (Hajli, 2014) by brings about trust (Weisberg, Te'eni, & Arman, 2011). Furthermore, valuable feedback, additional positive comments, and better ratings made the vendor to be trusted at a higher level (Ba & Pavlou, 2002). Previous studies have shown that the quantity and quality of information produced by customers' reviews influence the intention to purchase (Hajli, 2013).

The social support, then, can be regarded as a multidimensional construct whose components vary from one context to another (Huang et al., 2010). For instance, House (1987) demonstrated that social support has four dimensions of emotional, informational, instrumental, and appraisal of them informational and emotional supports are essential even that they are intangible (Liang & Turban, 2011; Mo & Coulson, 2008; Huang et al., 2010). In this regard, the informational support refers to the support that an individual receives as advice, recommendations, or knowledge to tackle their problems. Specifically, emotional support refers to the provision of messages concerning emotional feelings such as understanding, caring, or empathy (House, 1987; Liang & Turban, 2011). Consequently, the information provided by other users could probably strengthen the friendship relationship and trust amongst

the members, thereby increasing the intention to conduct the commercial actions (Liang & Turban, 2011). Hence, an association between social support and the intention to carry out social commerce is obtained.

2.7.2 Perceived Usefulness

The perceived usefulness as one of the constructs of TAM is similar to the belief that technology may help users in enhancing their job performance (Davis, 1989). This construct has been tested and validated by many scholars in the adoption of e-commerce. Perceived usefulness and perceived ease of use are the two core variables of TAM and have been regarded as one of the most successful theories that are used to predict the individual's intention to adopt technology. In this context, there are two core theories which researchers commonly use in testing and predicting an individual's intention to make use of an Information System (IS) (Mathieson, 1991). These two theories are the Theory of Planned Behavior (TPB) (Ajzen, 1991) and TAM (Davis, 1989). Even though perceived usefulness has gained popularity among researchers in terms of its ability to predict the system usage, TAM as a theory emanates from TRA. TRA was originally conceptualized to explain almost any human interactions (Davis, 1989). The idea of TAM is to explain the determinants of the computer acceptance across a broad range of end-user computing technologies and user populations (Davis, 1989). In this regard, several authors believe that perceived usefulness influences the intentions of use towards e-commerce usage (Gefen & Straub, 2000).

TAM has been used in social as well as other fields of study. For instance, Han & Windsor (2011) examined the user's willingness to pay on SNSs. The authors conceptualized a new construct called "perceived value of online connection" instead

of the perceived usefulness. The findings of the study revealed a positive and considerable influence of the user's perceived value of online connection on the readiness of users to pay other members of SNSs (Han & Windsor, 2011). This, therefore, implies that straightforward and useful information on a website can increase the level of online trust, which can eventually increase the intention to use a system (Hajli, 2013). Also, research has equally revealed that when more useful functions such as valuable information and content are embedded in the websites, users will develop more trust (Hajli, 2013).

Earlier studies have empirically proved that the perceived usefulness has a positive influence on e-commerce users' intentions (Gefen & Straub, 2000). It has also been asserted that in SNSs the value that users perceived about online e-connection has some significant and positive influences on their readiness to interact with other networkers (Han & Windsor, 2011). Since perceived usefulness has been found to play significant roles in e-commerce, it is logical to conclude that it will have a positive influence on the social commerce environment. This has been proved by Shdaifat, Obeidallah, and Ghazal, (2016) who found that the more consumers found shopping on SNSs to be useful, the more intention they must buy in SNSs (Ernst, 2015). However, Aboelmaged and Gebba's (2013) findings illustrated that perceived usefulness does not produce trust in IS platform. These contradictory findings show that research in this field is still ongoing as no consensus has been reached among scholars.

2.7.3 Perceived Security

Lack of trust caused by insecurity is a major issue in online social networking (Dwyer, 2007). Security is a principal factor that customers normally consider while

doing online transaction especially with the rising concern over security in SNS (Acquisti & Gross, 2006). Perceived security refers to the degree of belief that people hold about the presence of the security of an SNS. Therefore, subjective security can be argued to be a mirror image of risk similarity (Dewan & Chen, 2005).

Generally, security in social media spaces can be judged by other factors along with technical security measures (Carlos Roca et al., 2009). Kim and Park (2013) maintained that the perception of security is majorly influenced when SNSs system users feel they are in control. According to Norris (1997), the lack of subjective security constitutes the biggest threats and has been one of the frequent reasons for people's refusal to participate in a social media interaction. Ahmad, Markkula and Oivo, (2012) in this view also argued that the intrusion of subjective security creates a barrier to using a procedure.

The TRA model can be used to explain the relationship between website security customer trusts. Basically, when the security is of a high level and the characteristics as provided in the e-commerce websites, trusting intentions that bring about trust behaviour can be generated. Regarding SNS, it can be argued that perspectives towards security by an individual differ from real security. Even though the scientific evaluation of the security can be done through technological solutions, the genuine assessment can be achieved effectively through customers' perceptions since the perception does influence the intention and the trust (Linck, Pousttchi, & Wiedemann, 2006). Perceived security as reported in past studies has a significant effect in the context of mobile and e-commerce context. However, a decade ago, perceived security has been rarely applied to the SNS context (Dwyer, 2007). It is

therefore essential to determine measures of the perceived security and the relationships with trust in the context of SNS.

Evidence has shown that perceived security is often used interchangeably with perceived privacy. Recent debates on privacy issues revolve around a subset of privacy which includes data or electronic privacy. Currently, debates with respect to data privacy continue to raise concerns about security regarding information security and computer security. Hence, the present study defines perceived security as the degree of the capacity of an organization to protect the customer's information against all forms of unlawful access or intrusion, whereas perceived privacy is defined as the capability of individuals to manage their own information thereby revealing their information selectively.

Consequently, the findings of previous studies on the importance of perceived security towards gaining trust, satisfaction and attitude and subsequent intention have been contrasting. For instance, some studies found significant and positive relationships (Arpaci et al., 2015), whereas few other studies found negative, contrasting or insignificant relationships (Baazeem, Benson, & Hand, 2018). Therefore, a necessity arises to conduct the current study since the findings of the previous study are still inconclusive.

In line with the above discussions, Baazeem, Benson, and Hand (2018) further considered those factors that impact the adoption of SNSs by investigating purchase intention, purchase experience, user's victimization, and risk propensity. The results suggest a positive relationship between the perception of security and purchase intention of social networks. However, no association was found between the user's

victimization and perception of security notices/features purchase experience, thereby indicating a gap in this area of research.

2.7.4 Perceived Ease of Use

According to Davis et al. (1989), technology adoption by consumers is influenced by perceived ease of use which makes recent technology easier to adopt than older technology (Selamat, Jaffar, & Ong, 2009). It seems that ease of use in the online environment is regarded as an important predictor of attitude towards online purchasing (Hsu et al., 2014).

This is in line with the outcomes of various researches that website, that requires little physical and mental efforts to operate as well as gives consumers some levels of autonomy while operating on the web (Childers et al., 2001). Rodgers and Thorson (2000) claimed that the structural components, such as type, features, and format, of advertisements in social networks and other media have the power to envisage the quantity of mental effort that may be devoted or required to execute the task of processing ads. Therefore, when the social network advertisements are clear, easily understood and processed, hence, the less mental or cognitive effort is required by consumers to positively react well with this network. Therefore, it can be expected that the more the users anticipate in the effortless use of the SNSs, the more they will probably develop trust and consequently use the site (Chinomona, 2013; Elkaseh, Wong, & Fung 1, 2016). Previous studies have consequently pointed out that the relationship among perceived ease of use, trust, satisfaction, attitude, and intention in SNSs and other IS-related studies is positive (Chinomona, 2013; Elkaseh, Wong, & Fung 1, 2016).

Chinomona's (2013) objective was to categorize the factors that can increase the adoption of mobile social commerce, thereby investigated the perceived ease of use, perceived usefulness, and trust towards the eventual use of the site. After analyzing the data set of 150 with Smart PLS software, the study found that the perceived ease of use among other factors positively and significantly influenced trust. The study discussed the managerial implications, thus recommending further broad studies covering some other developing countries in order to elicit an understanding of proper factors that can be used to predict SNSs.

Furthermore, as SNSs are gaining popularity among teachers and students of the higher institution, Elkaseh, Wong, and Fung (2016) explored those factors that can assist the use of social networking media for the purposes of teaching and also learning. Having identified the benefits of the SNS to offer opportunities to create, share, and interact between students and teachers, the authors conducted their studies on students and teachers in four higher institutions of learning in Libya using TAM core variables of both; perceived ease of use and perceived ease of use along with behaviour intention. The study further employed Structural Equation Modelling to measure the analytical power of their model. It was discovered that perceived ease of use is the key factor that predicts student's and teachers' behavioural meaning to use social networking. However, the outcomes of the study revealed that perceived ease is not a significant predictor unlike the findings of other studies. Hence, inconsistencies in the findings of previous studies necessitate conducting the present study.

2.7.5 Perceived Privacy

The issue of privacy in online SNS depends on the level of detectability of the information that is delivered, the possible receivers, and the uses which the information will be subjected to (Dwyer, 2007). Most research in the field of Information Systems (IS) has maintained that privacy issues, as well as concerns of users, are one of the essential issues in the contemporary technology-based environment (Miyazaki & Fernandez, 2001). Generally, privacy is an old concept and has been defined as the individual's ability to manage the terms through which their private information is obtained and used (Metzger, 2004).

Besides, the extent to which SNS users perceive that the SNS site is protected will go a long way to influence the level of trust that is developed by the users. Generally, the content of SNS such as privacy statement and seal will significantly influence the perceptions of users regarding the protection of SNS site (Shih et al., 2008). Hence, studies suggest that when the perception towards the website privacy is enhanced through the site characteristics such as seals and privacy statements, the level of trust for the organization will increase. For instance, Hoffman et al. (1999) and Falk, and Hagsten (2015) revealed that when an organization makes the process of collecting information be transparent, consumers' perception about security and trust will increase.

Ernst (2015) discovered that some previous studies argued that the perceived privacy risk has no impact on the actual system use of SNSs and has largely ignored the likely indirect links between actual system usage and perceived privacy. In another study, Shin (2010) discovered that perceived security moderates the relationship

between perceived privacy and trust. This reinforces the need to investigate the effect of privacy on the social commerce intention.

Zhou (2015) suggests that the social network sites should not only attract users but also be able to retain and facilitate the continuance usage. The outcomes of the study revealed that service quality and system quality influence trust which eventually influences the privacy concern and flow of experience, whereas trust, the flow of experience, and privacy determine the continuance usage.

In another study, Chen and Shen (2015) investigated how the protection of privacy in SNS influences upon the intention of users to continue using particular site. Considering self-disclosure, profile visibility, and friending, on the sites which have not been ignored by the earlier studies, the outcomes of the study indicate an inconsistency towards adopting strategies of privacy protection, friending and a disconnect from limiting profile visibility and self-disclosure. Privacy is given more concerns as it makes users of SNS limit the visibility of their profiles as well as put them off from growing their network.

Based on the inconsistencies in the findings of previous studies about the importance of privacy, the need to further investigate the variable to elicit further understanding of the concept is very crucial.

2.7.6 Trust

Trust is often regarded as a central point in various economic activities. The inability to regulate a social environment through rules and regulations make people resort to trusting as a minimizer of social complication (Luhmann, 1979). This is mostly observed in the online arena or platform as a result of a lack of effective rule on the

opportunistic behaviours of some online service providers. Therefore, trust is mostly regarded as the heart of e-commerce (Keen et al., 2004) that will ensure success in both the short and long run (Wang & Emurian, 2005). Prior social commerce researches have focused on important experiences of trust (Lu, Hirschheim, & Schwarz, 2015) including the influences of functionality (such as ease of use, usability, and perceived usefulness), whereas little attention has been paid to social factors that engender trust in SNS (Kim & Park, 2013). Generally, in SNS, trust is built by the interaction between users and the besetment environment. Therefore, the social context is an important platform. However, previous studies seem to have neglected those factors that can be used to predict trust (Lu, Fan & Zhou, 2016).

Such a situation predicts social commerce intention difficult; especially trust is regarded as a multidimensional construct (Gefen & Straub, 2000) or a unidimensional variable (Akhlaq & Ahmed, 2013). Trust has also been conceptualized in diverse ways. For instance, McKnight, Choudhury, and Kacmar (2002) tried to resolve the confusion that surrounds the concept of trust by segregating beliefs from intention using TRA (Fishbein & Ajzen, 1975). McKnight et al. (2002) essentially characterised trust into two wide classifications; (i) trusting beliefs and intentions, and (ii) hypothesised it as a set of definite beliefs which include the benevolence, the integrity, and the ability. Trust in social commerce is therefore regarded as the main concept in this research and needs further investigation and is treated as unidimensional.

In most social and economic transactions in the contemporary online context, trust is therefore always a central issue as a result of uncertainties that are inherent in all

these platforms (Pavlou, 2003). In other words, trust occupies a central point especially in e-commerce, whereby risks are perceived to be high (Mutz, 2005).

Previous scholars have researched this area extensively (Pavlou, 2003; Gefen, Karahanna, & Straub, 2003; Mutz, 2005) since trust occupies a prominent position in the e-commerce implementation process and plays a significant part in e-commerce (Hajli, 2015). With the high rate of proliferation of social technology tools and the interconnectivity of societies across the globe, there is a requisite for a high level of security and trust which will make the parties involved in the transactions perceive less risk (Shanmugam et al., 2106).

The findings of these previous studies revealed that most people want to reduce their level of social uncertainty and risk (Gefen & Straub, 2000). It has also been debated that if products and services being offered by e-commerce are described accurately, customers will develop more trust in the e-commerce website (Yang, Lin, Chandlrees, & Chao, 2009).

This can be made possible through social technologies like information sharing and customers' reviews on the platforms of communities and communities. For example, when a member of an online community who is well regarded makes a certain recommendation to a vendor through adequate feedback, others will develop a great level of trust in the process (Lu, Zhao, & Wang 2010). Therefore, trust has been defined from various levels since diverse dimensions are involved. In e-commerce literature especially, credibility and benevolence are regarded as two different types of trust (Ba & Pavlou, 2002).

Credibility-based trust, which often relies on reputable information because it is impersonal, is seen as the perception that the other party, who is involved in a

transaction can rely on it (Ba & Pavlou, 2002). As for benevolence, it is mainly concerned with continuous seller-buyer relationships (Ba & Pavlou, 2002). Apart from this, three dimensions of trust have also been recognized, including integrity, ability, and benevolence (Gefen, 2002). Ability is associated with the skills that the trusted party has, integrity talks about honesty and promptness of the e-vendor in attending to issues, whereas benevolence is linked with the intention of vendors to execute their functions effectively for their consumers (Gefen, 2002; Gefen & Straub, 2000). In the contemporary business environment especially with the presence of the internet that allows people to interact socially and form relationships, trust has become an important instrument that tends to bind people together.

In this view, social trust occupies an important place in e-commerce since it helps in reducing business interactions “transaction cost” (Mutz, 2005). It also helps in reducing the affinity of monitoring other parties’ transactions because it forms the basis of judging a system as being dependable (Mutz, 2005). The information that is obtained from a commercial website differs from the information that other customers provide.

The type of information being provided directly by the customers is quite different from the information the website provides since the former is regarded to be trustworthy (Hajli, 2013). Therefore, for online trust to be endorsed, some credible mechanisms must be put in place as this will help differentiate genuine sellers among others (Ba & Pavlou, 2002).

In this perspective, therefore, SCCs provide ratings, commendations, and recommendations. These concepts give sellers the motives to be truthful. The recent interactions of customers on social commerce and social platforms seem to have a

significant impact on users' behaviour. Scientists in this regard, therefore, approve that social accomplishments in SNSs will rise the intention to buy (Han & Windsor, 2011).

2.7.7 Satisfaction

Satisfaction is defined as the feeling of conviction that ascends from actual performance concerning the expected performance (Hernon & Whitman, 2001). Further, e-satisfaction simply refers to the level of customer's contentment in the online environment, and it is regarded as a form of the long-term construct which is often subjective by e-service prospects expectations and also the quality perceptions of customers (Chang, 2013).

Szymanski and Hise (2000) studied e-satisfaction as a total construct representing the cumulative effect that related to a set of discrete experiences correlated with the service provider over a epoch of time. In the context of information technology, e-satisfaction refers to the comfort of users for the positive attitude towards the use of a website or a computer application (Lowry et al., 2016).

Also, it has been asserted that continuance intention is positively determined by satisfaction to web-based learning, e-commerce service, and e-service (Bhattacharjee, 2000; Liao et al., 2006). In information systems such as electronic commerce sites, continuance intention is related to satisfaction, whereby a high customers' satisfaction will foster a long-term relationship between the service provider and their customers (Chiu, Hsieh, Kao, & Lee, 2007).

Therefore, online communication may be used by an individual as a means through which negative moods can be alleviated which implies that individuals with a low

life satisfaction may be more likely to excessively use SNS (Caplan, 2006). This is evident as internet addiction is getting increased signifying that a substantial number of people is getting dissatisfied with their life across the nations (Li & Cheng, 2014). Manchiraju, Sadachar and Ridgway (2017) in a study on Turkish university students also discovered that life challenges which are related to self-esteem, loneliness, and life satisfaction explained 38% of the total variance in Internet addiction. This was also supported by a study conducted by Wang & Zhang (2013) among 10,988 Chinese adolescents, whereby it was discovered that increased symptoms of excessive Internet usage were related to low life satisfaction, decreased self-esteem, and enhanced depression. Empirical evidence has equally shown that life satisfaction is positively related to SNS usage intentions (de Oliveira, Huertas, & Lin, 2016).

2.7.8 Attitude

Based on the TRA, behavioural intention determines the performance of behaviour, whereas attitude is the precursor of behavioural intention and is mutually caused by the person's attitude as well as the subjective norm (Ajzen & Fishbein, 1980). In this view, the best antecedent of behavioural intention is the intellectual illustration of a person's readiness for performing certain behaviour. TRA conceptualizes attitude as either the positive or negative perception of the individuals towards the performance of the target behaviour, whereas the subjective norms are considered as the beliefs of the individuals towards the influence of others on him/her to either perform or abstain from conducting certain behaviour. Hence, the individual's attitude towards the behaviour is influenced by these beliefs and evaluations. Since TRA has been widely applied in emerging technologies, it is expected that it will be suitably applied to the social networking context because of its general causalities. Evidence in past studies has shown a positive relationship between attitude and intention (Hsu,

Chuang & Hsu, 2014). Also, the attitude of the individual towards information sharing, therefore, is closely linked with their intention for sharing online information (Fishbein et al., 1975).

2.7.9 Social Commerce Intention

The intention of social commerce is regarded as a way to measure the probable actions of the consumer. In social commerce, customers are exposed to different technological functions or characteristics in the course of having a shopping experience. Since it is difficult to measure the actual behaviour, extant studies use intention as a surrogate to the actual behaviour since it has been proven as a valid predictor of the actual behavior (Bansal, McDougall, Dikolli& Sedatole, 2004). Therefore, social commerce intention is used in this study to measure the intention of social commerce respondents.

TRA implies that the behaviour intention of the individuals is linked with their definite behaviours. As a result, a positive relationship was stated between the intention and the behaviours in the IS discipline (Venkatesh, Jemal, & Samani, 2017). In the SNSs context, individuals are more probably willing to share their information when having a larger intention for sharing the information on SNSs websites (Hajli, 2014). Therefore, the previous section had provided previous literature relevant to this study. The next section discusses the development of the theoretical framework.

2.8 Conceptual Framework

The theoretical and conceptual framework explains the path of research in terms of theoretical constructs. The two frameworks aim at constructing findings in more meaningful and acceptance to the theoretical and research fields (Kivunja, 2018). It

Distinguishes between Theory, Theoretical Framework, and Conceptual Framework: A Systematic Review of Lessons from the Field. *International Journal of Higher Education*, 7(6), 44-53. The theoretical framework is the guide of research based on existing theory and reflects the corresponding hypotheses (Osanloo & Grant, 2016). The conceptual framework, on the side, is the structure the is developed by a researcher to explain further the phenomena studied (Camp, 2001). Based on the theoretical evidence and theoretical gaps discussed, the present study employs TRA, TPB, and TAM to establish the conceptual framework for this study. TRA and TBP are relevant in terms of a persons' performance in a particular behaviour which is highly influenced by their behavioural intention to conduct a particular behaviour, whereas TAM is relevant into explaining and predicting if a certain technology is either approved or refused by means of the determinants that can impact the acceptance of the users of that specific technology. This conceptual framework shows how social support and attitudinal belief factors influence the users' attitude and satisfaction and how these factors lead the users' social commerce intention. The conceptual in Figure 2.4 posits that the independent variables, namely information support, emotion support, ease of use, usefulness, perceived security, and perceived privacy have significant direct effects on trust; meanwhile trust has a direct effect on satisfaction and attitude. Further, attitude and satisfaction affect the dependent variable represented by social commerce.

Considering the framework of this study, although scholars in the information system research over the past two decades have therefore made considerable efforts by building on the TAM to support the importance of perceived ease of use, and perceived usefulness on Information Technology (IT) acceptance, their findings were inconclusive. In addition, previous works (Akhlaq & Ahmed, 2013; Gefen & Straub,

2003; Hajli, 2013) have highlighted the role of consumers' trust in encouraging online activities in SNSs. Accordingly, online purchase intentions are jointly determined by consumers' perceived ease of use, perceived usefulness, and trust in the online vendor (Davis, 1989; Malaga, 2014). Recognizing the role and importance of consumer's trust in online purchase decisions, this study adds trust to the dual perspectives of TAM (i.e., perceived ease of use and perceived usefulness) to model the behavioural intention of social commerce users. Besides, this study also considers the importance of social support dimensions (informational and emotional support) (Hajli, 2014) to predict trust towards the social commerce intention. In this regard, George and Kumar (2014) and Amin et al., (2014) found that satisfaction is an important variable that determines the attitude towards the intention in various IS studies. Since previous studies have shown that most customers who patronize SNSs tend to look for ways of raising the level of their satisfaction in life endeavours, this study thereby incorporates satisfaction as one of the important variables. The uniqueness of the conceptual framework of this study is that it is the first study that holistically tests the combination of the variables in the context of Saudi Arabia with the overall objective of determining those factors that can be used to predict the intention to adopt the social commerce. This framework is conceptualized to fill the gap in the literature and in line with the recommendations of previous researchers who suggested the need to examine the social commercial intentions.

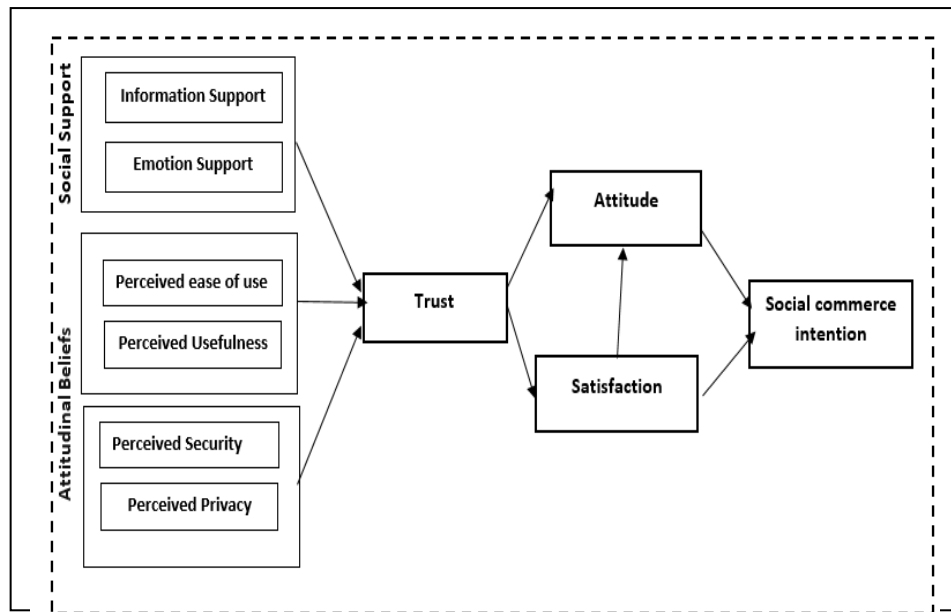


Figure 2.4. Theoretical framework

2.9 Research Framework and Hypothesis Formulation

Figure 2.5 illustrate the conceptual framework along with the hypothesis and subsections explain each factor and relations.

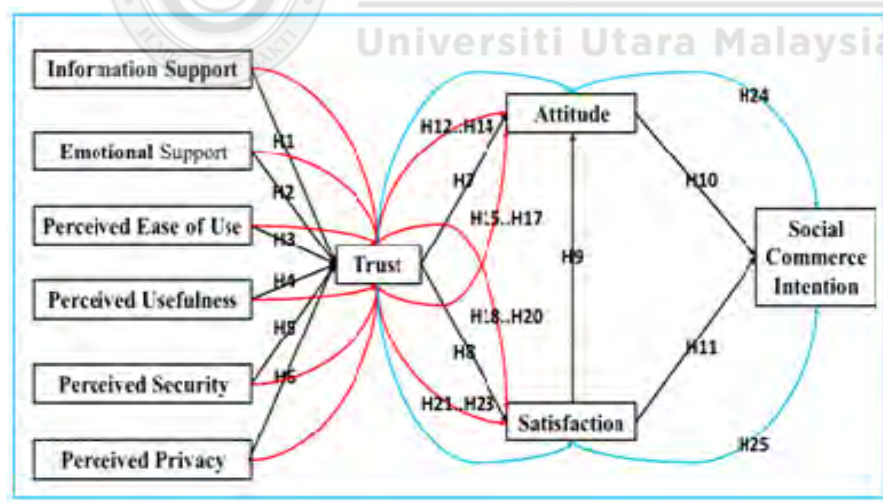


Figure 2.5. Conceptual framework

2.9.1 Linkages between Informational Support, Emotional Support and Trust.

Informational support is regarded as the provision of messages in terms of advice, recommendations, or knowledge that could assist the members of the social community in solving their problems (Baethge, Klier, & Klier, 2016). The informational support is one of the dimensions of social support which at large could bring in understanding to the members of the community since such support is channeled towards satisfying the psychological needs of the members (Maslow, 1954). When such support is received, it does generate enthusiastic feedback causing relaxation and trust that could lead to the continuous intention of using commercial social media.

Moreover, when members of the community feel that they are supported socially in terms of the information shared, they will reciprocate by sharing their own information and recommendations (Hidayatulloh, 2018). In this regard, the frequency of information sharing was found to enhance trust (Hidayatulloh, 2018). Furthermore, emotional support is regarded as the provision of messages that involve emotional concerns, such as empathy, caring, or understanding (House, 1987; Taylor et al., 2004).

It has been argued by Social Exchange Theory and supported by other literature when individuals perceived that they are emotionally supported, they would reciprocate by developing some levels of trust and which could also lead satisfaction and attitude (Blau, 2017; Kim, 2012). Since the online community is a social networking platform, it would, therefore, be natural for members to support one another emotionally. Therefore, if a user is supported by other users in this platform, the recipient of such support may feel obligated to reciprocate (Cheshire, 2007;

Amro, Ariffin, & Norsiah, 2018). The responding stimulus resulting from the observation of emotional support leads the users to share the knowledge on the products, concerns, and empathy with other users in SNS (Liang & Turban, 2011). Hence, the following hypotheses are hypothesized:

H1. There is a positive relationship between information support and trust towards social network sites among university students in Saudi Arabia.

H2. There is a positive relationship between emotional support and trust towards social network sites among university students in Saudi Arabia.

2.9.2 Association between Perceived Ease of Use, Trust, and Perceived Usefulness

Perceived usefulness represents the degree that the members of a social networking community believe that SNS will enhance their social networking on the net. Davis et al. (1989) highlighted that the users will tend to utilize the sites if the sites are useful in fulfilling the networking performances. In addition, Bhattacharjee (2000) suggested that an individual will possibly keep using the social site if the site was found helpful in contact with the other community members. For example, the networkers accomplishing the network task of obtaining definite data in a practical technique will have more solid intents towards the site of social commerce (Babin et al., 2001). In addition, perceived usefulness, as Safa, and Von Solms (2016) argued, impacts significantly the customer's loyalty intention.

Besides, it was found that perceived usefulness is an antecedent of trust (Liebanas-cabanillas et al, 2013). In other words, when the users consider a website as useful, these users will possibly have trust in such a site, believing that the providers of such sites will present sufficient information to the site to address the community

members' needs (Carlos et al., 2009). In general, trust is defined as a collection of beliefs that involve the 'benevolence, competence, and integrity of the SNSs' provider'' (Carlos et al., 2009). "Benevolence" is based on the assumption that trust will not be exploited by the trustee. It is for "competence" emphasizes that the trustee is able to behave based on the expectations, whereas "integrity" is a solid belief in the service's providers in their interactions with their customers (Liebanas-cabanillas et al., 2013). In this context, studies have approved the association between trust and perceived usefulness in varied online contexts (Akhlaq & Ahmed, 2103; Kim, 2013).

Perceived ease of use is defined as the belief by those social networking users that socializing by means of the SNSs does not need efforts. This is supported by Davis et al. (1989) who asserted that enhancements in the ease of use could probably lead to increasing the performances.

Studies conducted on the social commerce have demonstrated that both trust and perceived ease of use are positively associated since trust in the website makes the networking easier to be performed (Lu, Fan, & Zhou, 2016). In addition, Fogg et al (2003) highlighted that perceived ease of use is an antecedent of perceived credibility thus revealing the reliability of the website. The usability regulates trust by involving it in electronic services (Machado& Ribas, 2010). Consequently, a user-friendly SNS is going to be considered as more dependable, thereby generating higher trust when requiring limited physical and mental efforts to conduct a procedure. Consequently, the following hypotheses are hypothesized:

H3: There is a positive relationship between perceived Ease of use and trust towards social network sites among university students in Saudi Arabia.

H4: There is a positive relationship between perceived usefulness and trust towards social network sites among university students in Saudi Arabia.

2.9.3 Link between Perceived Privacy, Trust, and Perceived Security

Perceived security can be defined as the users' notions that their private and personal information is not disclosed and/or manipulated by any unauthorized entities (Chellappa & Pavlou, 2002). Quix, Schoop and Jeusfeld (2002) realized that security is a factor that can impact the customer's acceptance in the UK. Security in the e-commerce or the social commerce is any kind of threat which creates the condition, circumstance, or event that can lead to economic hardship to data or network resources in the form of disclosure, destruction, modification of data, fraud, and abuse (Kalakota & Whinston, 1997). In this context, Chellappa and Pavlou (2002) and Flavian and Guinaliu (2006) discovered that trust is positively influenced by the perceived security of the SNS.

Perceived privacy is the likelihood that SSNs will collect personal data of individuals and use them improperly (Bhuvanam, 2015). This is a growing trend that has become a critical issue among customers who foster the feeling that the information they are supplying online is being compromised and used for unintended purposes. Generally, in an online environment, most users are unwilling to supply personal data when it is requested by the sites since such information may be intercepted and used inappropriately. Accordingly, most social commerce networkers are often hesitant to release their financial or personal information to organizations since they perceive that these organizations could make a trade or divulge the information to other companies without being authorized (Lim, 2003).

Consequently, George (2002) argued that perceived privacy is a cause of negative attitudes towards internet purchasing. Other studies on the contrary, however, found that perceived privacy has a positive relationship with the attitude towards online shopping (O'Cass & Fenech, 2003). In addition, Liao and Cheung (2002) and Ranganathan and Ganapathy (2002) similarly revealed that perceived privacy among other constructs has a greater influence on the consumer's intention. Palanisamy and Mukerji (2014) also demonstrated that perceived privacy influences trust, whereas trust eventually influences intention with respect to the handling of personal data in an online transaction. Likewise, Mukherjee and Nath (2007) found that the privacy characteristics of the web as one of the key precursors of trust positively impact the behavioural intention of customers. In this view, the influence of privacy on users' intention in online transactions has been supported by previous studies (Liao & Cheung, 2002; Poon, 2008). Hence, the following hypotheses were hypothesized:

H5: There is a positive relationship between Perceive security and trust towards social network sites among university students in Saudi Arabia.

H6: There is a positive relationship between Perceived Privacy and trust towards social network sites among university students in Saudi Arabia.

2.9.4 Linkages between Trust, Satisfaction and Attitude

In studies on consumer's behaviour, discussions have addressed the causal-relationships of both trust and satisfaction, thereby suggesting that trust is the antecedent of satisfaction in the exchanging relationships (Armstrong & Yee, 2001). According to Ratnasingham (1998) and Kim (2013), when trust affects satisfaction, it will lead to loyalty in electronic commerce. However, Kim, Kim, and Hwang (2009) argued that trust, directly and indirectly, affects the decision of the consumer's

purchase and results in long-term influences on the e-loyalty of the customer by means of satisfaction.

On top of that, it was found that trust has impacted the attitude towards the behaviours in e-commerce, and this will probably influence social commerce by means of the SNS. Since trust is regarded as the ability of the service of the provider or members of the community to cope with certain obligations without taking undue advantage of the trust (Noteberg, Christiaanse, & Wallage (2003). Several previous studies conducted in this field showed that trust in online social activities can alter the individuals' attitude towards the issue of transactions on SNSs (Han & Windsor, 2011). Hence, the following hypotheses are suggested:

H7: There is a positive relationship between trust and attitude towards social network sites among university students in Saudi Arabia.

H8: There is a relationship between trust and satisfaction towards social network sites among university students in Saudi Arabia.

2.9.5 Link between Satisfaction and Attitude

Satisfaction is associated with the service provider's abilities to cope with the customers' expectations related to the product/service performances. When these expectations are addressed, the customer will feel satisfied; however, if the expectations have not been met, it will result in dissatisfaction (Mohammad, & Alhamadani, 2011). In the online contexts, according to Eid (2011), e-satisfaction has been found to be an antecedent of loyalty (Chen et al., 2015). Yusliza and Ramayah (2012) and Carlson, O'Cass, Ahrholdt (2015) also illustrated that the consumers' satisfaction towards a website has significantly and positively affected

the attitude of the users towards the sites. Hence, the following hypothesis is hypothesized:

H9: There is relationship between satisfaction and attitude towards social network sites among university student in Saudi Arabia.

2.9.6 Link between satisfaction, social commerce intention, and attitude

Briefly, social commerce with respect to SNS has been extensively studied since it involves the interaction among online users. Literature has clarified that satisfaction may strengthen the intention of using the site (Fan, Miao, & Wu, 2013). Understanding the consumers' purposes and intentions to use the service on the site has been a significant aspect for marketers because the consumers' attitude is associated with the insights (Gursoy, Del Chiappa, & Zhang, 2018).

In the traditional platforms, the behavioural intention is explained as the possibility that a user will participate in a certain behaviour (Ajzen & Fishbein, 1980). This intention was found to be affected by the satisfaction level in both online as well as traditional settings (Ajzen & Fishbein, 1980). In this regard, a logical assumption of feeling satisfied with the services offered could result in developing a positive attitude towards social commerce, thereby increasing the possibility of having the intention of using the site (Sun, Kim, & Sun 2018). Based on these discussions, the following hypotheses were hypothesized:

H10: There is a positive relationship between attitudes and social commercial intentions towards social network sites among university student in Saudi Arabia.

H11: There is a positive relationship between satisfaction and social commercial intentions towards social network sites among university student in Saudi Arabia.

2.9.7 Trust as a Mediator

Previous studies have consistently revealed that trust has been proven as a key factor in the understanding of social systems (Chancey, Bliss, ichtey, & Proaps, 2015). Hence, when members of a community feel that they are supported socially in terms of the information shared, they will reciprocate by sharing their own commercial information and recommendations as well (Tabak & Hendy, 2016). In this regard, the frequency of information sharing has been found to enhance trust (Aminullah et al., 2019). Therefore, trust can enhance information sharing and emotional support (Aminullah et al., 2019).

Therefore, a need arises to establish a significant connection between trust and informational support, emotional support, perceived ease of use, perceived usefulness, perceived security, and perceived privacy (Osaremen, 2019). Accordingly, the following hypotheses have been formulated:

H12: There is a positive relationship of trust that mediating between informational support and attitude.

H13 There is a positive relationship of trust that mediating among emotional support and attitude.

H14: There is a positive relationship among trust that mediating among perceived ease of use and attitude.

H15: There is a positive relationship among trust that mediating among perceived usefulness and attitude.

H16: There is a positive relationship of trust that mediating among perceived security and attitude.

H17: There is a positive relationship of trust that mediating among perceived privacy and attitude.

H18: There is a positive relationship of trust that mediating among informational support and satisfaction.

H19: There is a positive relationship of trust that mediating among emotional support and satisfaction.

H20: There is a positive relationship of trust that mediating among perceived ease of use and satisfaction.

H21: There is a positive relationship of trust that mediating among perceived usefulness and satisfaction.

H23: There is a positive relationship of trust that mediating among perceived security and satisfaction.

2.9.8 Attitude as a Mediator

Attitude for Ajzen (1991) is the degree of having either a favourable or unfavourable evaluations or approval of users' behaviour. This means that the attitude towards the behaviour may take the form of either 'like' (favourable) or 'dislike' (unfavourable). Most social psychologists employ cognitive or information-processing approaches for explaining the formation of attitude (Okazaki, 2005). Obviously, the attitude has been proven to enhance both trust and social commerce intention in several studies (Russell, & Rasolofoarison, 2017; Im, Bhat, & Lee, 2015). Hence, the following hypothesis is formed:

H24: There is a relationship of attitude that mediating among trust and social commerce intention.

2.9.9 Satisfaction as a Mediator

The reason for using satisfaction as a mediator is attributed to the Theory of Equity in the social exchange here several interactions involved in generating two-sided duties (Yee et al., 2008). This exchange can produce a high-quality relationship amongst the involved stakeholders (Cropanzano & Mitchell, 2005). According to Cropanzano, Rupp, and Byrne (2003) in social exchanges, equity is established on the assumption that most individuals anticipate that social justice or equity can prevail in the interpersonal transactions by yielding positive joint relationships. In the context of social exchange theory, providing good working conditions and offering advantages to satisfy the employees will motivate them to be committed and perform more effort towards their performance (Clark & Flynn, 2005), thus resulting in improving the quality of the service (Yee et al., 2008). By extending the abovementioned reason, the present study examined satisfaction as a mediator in the relationships between trust and social commerce intention. Accordingly, the following hypothesis is formulated.

H25: There is a positive relationship of satisfaction that mediating the among trust and social commerce intention.

2.10 Chapter Summary

Chapter 2 had critically reviewed the literature on informational support, emotional support, and perceived ease of use, perceived usefulness, perceived privacy, perceived security, trust, attitude, satisfaction, social network sites, and social commerce intentions. Empirical studies on the mediating effects of trust, attitude, and satisfaction were also discussed. The chapter has also presented the research framework, and the research hypotheses tested in the study. Next Chapter describes

the methodology and the method for data collection and data analysis procedures to achieve the objectives of the present study.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology of this study. In other words, Chapter Three discusses the research design, population of the study, the process of sampling, and data collection procedures. The chapter concludes by explaining the statistical application and the descriptive technique used in the study.

3.2 Research Design

The aim of the research represents the basis for selecting the research design. Essentially, the research design consists of four issues, including the research questions, identifying the relevant data, the data collection procedures, and the analysis process of the results. Hence, the research methodology, purposes, approach, the strategy, and the research instruments will be discussed. The research process of this study is organized into three stages: preliminary planning, development of the research design and implementation (see Figure 3.1 below)

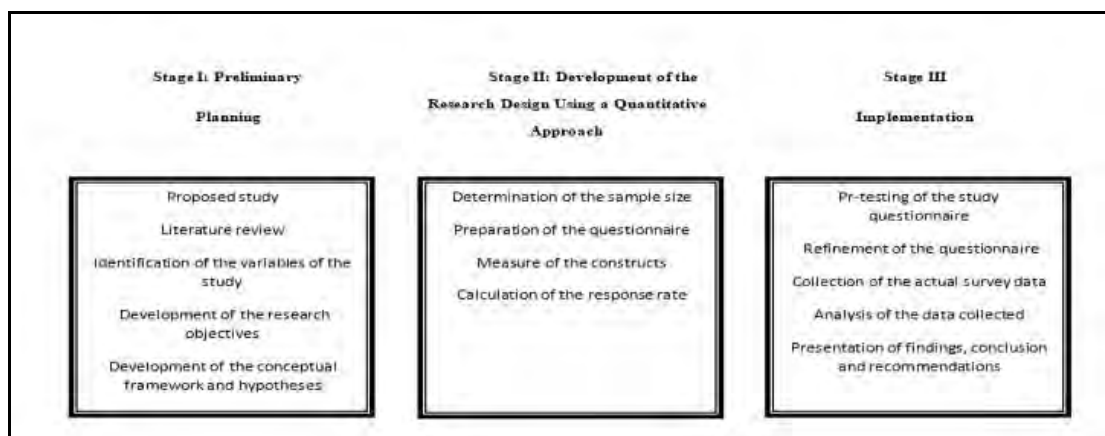


Figure 3.1. Research diagram for the study

3.3 Research Purpose

According to Yin (2011), the research purposes imply the goals that should be addressed by the research and the application of the findings. According to Saunders (2011), research can be classified into three types. First, exploratory research clarifies a naturally vague problem. Second, descriptive research illustrates a phenomenon and functions as a helpful prerequisite or a continuum of investigative research. Thirdly, deductive research relies on proposing hypotheses. In this study, explanatory research was used where the relationship that exists among the variables can be clarified.

3.4 Research Approach

The quantitative approach was utilized in the present study. This type of research is defined as “experiential research in that the researcher discovers relationships utilizing numeric data” (Fraenkel, Wallen, & Hyun, 1993). Sekaran and Bougie (2013) considers the quantitative research as an examination towards a social or human issue based on testing a theory that is collected of certain variables and are measured with numbers and examined with statistical steps to determine whether or not the predictive generalization of the theory is true. The quantitative study is typically conducted for with clear and tested hypotheses. Therefore, this approach is appropriate for describing the goals of the present study. Moreover, the quantitative research enhances the credibility of this study with respect to the research interpretations and findings.

3.5 Research Strategy

It is important to establish an effective research strategy in order to assess both the established model and the hypotheses. For Saunders and Lewis (2012), several points

should be considered when selecting the most applicable strategy, such as the research questions, the research purposes, the duration of conducting the study, the knowledge of the researcher, and the available resources. In the selection stage, the objectives of the study, involving testing the developed hypotheses, have to be considered first because of its help in the descriptions of the correlations between the variables of the study. Hence, the present study is classified as a survey since it examined the relationships between the variables of the study (Saunders & Lewis, 2012). In addition, this method can be used to investigate the phenomena within a broad extent (Pinsonneault & Kraemer, 1993). That is, surveys are employed to lead to a numerical value resulting from a large number of respondents, thus enhancing the generalization of the findings (Khan, 2014).

3.6 Data Collection Methods

One of the important components of the research design is data collection methods (Sekaran & Bougie, 2013). For the present study, data were collected through questionnaire which is useful because of the ability to collect much data for use in examining the relationships between two or more variables (Miller & Salkind, 2002).

Since the questionnaire is a common instrument that is often used in the survey, using it requires each respondent to answer some sets of pre-designed questions (De Vaus, 2002). Questionnaires are regularly employed for explanatory and descriptive research (Saunders & Lewis, 2012); therefore, this method is suited for the purpose of the present study.

An introduction letter that specifies the purpose of the study and a copy of the questionnaire was given to the management office of the universities to be surveyed before data collection (see Appendix A). The purpose was to obtain a permission

from the authority of the universities to carry out the research in their respective universities.

3.7 Measurement

The instruments in the study were adapted from literature and were modified slightly for the purpose of ensuring contextual consistency. The questionnaire comprises ten elements in addition to demographic information. Each instrument is described in the following section. Information support was measured using three-item scales from Hajli (2018). This set of items was adjusted to suit the setting of the study and measure information support from other users on SNS. The emotional support dimension was measured through four items adapted from Hajli (2018). Emotional support measures the relationships and ties among members who provide the emotional aid. The perceived ease of use dimension measures the usage of SNSs tools by the respondents and consists of six items. This dimension was adapted from Gefen et al. (2003). The perceived usefulness dimension monitors the usage of SNS tools by the respondents. This dimension was adapted from those proposed by Davis (1989), Kwon and Wen (2015), and Venkatesh et al. (2003). The perception of consumers in Saudi Arabia regarding the security of transaction of e-commerce was adapted from Kolsaker and Payne (2002). The perceived privacy measures the consumers' capacity to influence other people. The construct was adapted from Park and Kim, 2007: Kelly and Erickson 2005) with 5 items.

The trust dimension towards the online service providers of SNS is measured through five items (Lin, 2007). The dimension of attitude toward shopping on SNS was measured using five items adapted from Kim (2014). The satisfaction dimension

refers to the satisfaction of Saudi consumers towards the services provided on SNS and was measured through four items (Hajli, et al., 2011).

The social commerce intention assesses the users' readiness to share their experiences, ask for information, advise other members prior to purchasing a certain product or service, and recommend a product or a service to other members of the SNSs. This measure is determined by the five items adapted from Hajli et al. (2011) and Liang and Turban (2011). For all these items, a five-point Likert scale ranging from 1= Strongly Disagree to 5= Strongly Agree was used to measure responses.

Nevertheless, according to Sudha and Baboo (2011) the Likert scale is a psychometric scale used to elicit respondents' opinions through, questionnaire surveys, regarding a specific level of agreement to a measurement statement. Similarly, Wolfer (2007) claimed that the Likert scale is used to measure respondents 'opinions on a five-point rating system for each specific question or statement of a questionnaire. In this research Likert scale has been used because it is suitable for this type of researches which is meant to take respondents' opinions and attitudes toward social commerce. According to Garland(1991} Likert scale is commonly used in business researches.

Table 3.1

Measurement construct

Variables	Items	Reference(s)
Information support	3	Hajli, Ho & Li (2017)
Emotional support	4	Hajli, Ho & Li (2017)
Perceived ease of use	6	Gefen et al., (2003)
Perceived usefulness	4	Davis (1989), Kwon and Wen (2010), and Venkatesh et al. (2003)
Perception of security of transaction	4	Dong-Her et al. (2004), Kolsaker and Payne (2002)
Perceived privacy	5	Goodwin 1(991): Kim &Park 2013; Kelly and Erickson (2005)
Trust	5	(Lin, (2007)
Attitude	5	(Olney et al, (1991)
Satisfaction	4	(Hajli, et al., 2011; Spreng et al., (1996)
Social commerce intention	5	Hajli et al. (2011); Liang and Turban (2011).

3.8 Target Population and Sample

As a matter of fact, Saudi youth life style has been noticeably changed; therefore according to (Opoku, 2012) it is the major reason behind the social media increasing interactions, bearing in mind that over 75% of Saudi population is under 30 years old. Therefore, it is undeniable that youth people in Saudi Arabia form a powerful force that controls its future in social media. Additionally, hundreds of thousands of

Saudi new generations speak English and can communicate using it to globalise with their peers around the world. Until recently, Saudi young people did not have too many resources of entertainment; therefore, online activities are increasing significantly recently among them as a great and a unique appeal to their curiosity and openness to the world.

The study population included experienced users in both social media and e-commerce. However, social media users and e-commerce customers are distributed widely. Hence, the population selection among Saudi youth is large.

To identify a suitable population, this study is narrowed down to a small-scale group that focuses on university students in the country. This segment is chosen because most young students have accessed and have been influenced by the social media (Eid, Mustafa, & Ibrahim Al-Jabri, 2016).

In fact, there are strong reasons behind choosing university students as the subject of this study; In The latest statistics released in 2018 by Saudi Communications and Information Technology Commission (CITC) showed that young people in the age group of 20-24 years are the largest group of social media users with 98.70 percent, Therefore studying students university who represent perfectly this segment of people can reveal a significant information and a clearer image about the social commerce attitudes and intention among Saudi people in general. Similarly, The Organisation for Economic Co-operation and Development (OECD) (1998) stated that online customers are young and educated which makes university students the best representative group when it comes to studying online commerce users and future.

The researcher has decided to choose these universities for a number of reasons. The Communications and Information Technology Commission revealed, its comprehensive analytical study of the communications and information technology services market in Saudi Arabia for the use of social media, which showed that the percentage of using social networks in the Kingdom reached 91.7% of individuals, where the age group (20-24) came as the largest age group using social networks with a percentage of 98.70%. Therefore, the sampling frame of university students is readily available. Previous studies had proved simple random sampling is appropriate because of its simplicity, and its reduced cost in collecting data.

The population of this study is the students of five Saudi universities. All of these universities are located in Riyadh, the capital of Saudi Arabia. These universities forms 0.31 of the number of Saudi universities in Riyadh which makes the data elicited from them representative and reliable. In addition to that these universities were purposely chosen because of their outstanding efforts and practice in using technology offering powerful Digital Subscriber Line (DSL) and wireless (WI-FI) coverage infrastructure on campus. These facilities offered their students give them a great internet usage and full access to social media activates including social commerce.

To sum up, this study selected such respondents given that most of the students in Saudi Arabian universities who possess the primary knowledge of the topic of the research. Therefore, the sample population for the present study was derived from five universities with good technological facilities as mentioned above. These universities are listed below in Table (3.2).

Table 3.2

Distribution of Universities in the Kingdom of Saudi Arabia

Name of Institutions	Population
Saudi Electronic University	16620
Dar al-uloom university	7500
Shakra University	19,328
Arab open University	14455
King Saud University	28000
Grand Total	86903

Source: obtained from the websites of the respective universities.

3.9 Sampling Technique

A register of all the elements of the population could not be obtained; therefore, the present study utilized a non-probability sampling technique to identify the respondents. According to Oates (2005), this technique is simple and useful because it does not have enough information concerning the research population. The basic tenet of the non-probability is that the selected member of the population has distinctive features that are different from others in the entire population. Under this method, the convenience sampling method was employed according to the guidelines of Saunders et al. (2011).

3.9.1 Sample Size

Sampling is performed because information cannot be obtained from all the individuals in the population. This process requires data to be collected from an

adequate number of respondents in the population, which makes the findings generalized to the entire population (Hair et al., 2010). Different approaches were developed to calculate the sample size based on the number of members in the population. It is especially important to determine the most appropriate sample size for a research survey (Barlett, Kotrlik, & Higgins, 2001). Determined and suitable sample size is required in order to reduce the overall rate of the sample mistakes. Consequently, Krejcie and Morgan's (1970) sample size determination criteria was adapted in the present study because it takes into consideration the level of confidence and precision for ensuring that sampling size error is drastically minimized.

Therefore, the present study involved a prior analysis for Krejcie and Morgan's (1970) sample size criteria for determining the sample size since it considers the side by side sureness and accuracy to reduce the sample mistake. Earlier, it was discussed that 86903 students are studying in the 5 institutions of the kingdom of Saudi Arabia (See Table 3.1 above). Referring to Krejcie and Morgan, (1970), a sample size of 384 is sufficient to represent the population (See Krejcie and Morgan table appendix-B). It is also important to reduce the low rates of responses from uncooperative respondents, and therefore, the response rate of 384 was increased by 40% as suggested by Salkind and Rainwater (2003). Therefore, adding the percentage of 40% to 384, gives $384 \times 0.4 = 154$ (Total 538). Finally, a sample size of 538 was decided to account for uncooperative respondents and unusable questionnaires. Eventually, the distributed questionnaire is summarized in Table 3.3, using (total students in universities ÷ Total students in all universities) x 538.

Table 3.3

Distribution of Questionnaires in Universities in KSA

S/No	University	Population	Proportionate	Percentage %
1	Saudi Electronic University	16,620	102	19%
2	Arab open University	15455	96	18%
3	Shakra University	19,328	120	22%
4	Dar Al-uloom University	7500	47	9 %
5	King saud University	28000	173	32%
Grand Total		86903	538	100%

For example, the total number of students in Saudi Electronic University is 16,620, and this number is divided by 86903 and multiplied by 538 to arrive at the number of subjects in the sample (i.e. $16620 \div 86903 \times 538 = 102$).

3.10 Pretesting the Instruments

Before conducting the actual survey, an initial questionnaire was drafted for the purpose of pretesting by asking experts to read and go through and see if there is any ambiguity that might not have been noted. For achieving the desired goal of the study, three experts, a professor, an associate professor, and a senior lecturer in Shakra University and Arab open University examined the survey instrument to ensure its face validity they approved the questioner with no significant comments based on instructions in Redline, Dillman, & Carley-Baxter, & Greecy, (1999) and Yaghmale (2003).

3.11 Pilot Test

A pilot study was conducted before the real study to make sure of the validity and reliability of the measures (Flynn, Sakakibara, Schroeder, Bates, & Flynn, 1990). A PLS path modelling (Wold, 1985) using smart PLS 3.2.6 software (Horvat, Sharma, & Bobek, 2015) was employed to ensure achieving the internal consistency, reliability, and discriminate validity of the constructs. Particularly, PLS Algorithm (Lindgren, Geladi, Rännar, & Wold, 1994) was calculated to obtain the composite reliability coefficients as well as the Average Variance Extracted (AVE). Regarding the composite reliability coefficient, Hair (2011) stated that it ought to be 0.7 or even more. In the same vein, Saeed, & Sinnappan, (2011) proposed that the AVE score should be either 0.5 or greater, thus emphasizing that achieving adequate discriminated validity requires the square root of the AVE to be higher than the correlation among the latent constructs. A total of 50 questionnaires in Arab open University were given to the respondents and only 30 questionnaires were returned and used for the study in which the response rate is 60%. It is also important to note that the 30 students are not considered in the actual study. The reliability of the pilot study is summarized in Table 3.4.

Table 3.4

Summary of the Pilot Test's Result

Latent Variables	No of Items	Cronbach Alpha
Informational Support	3	0.922
Emotional Support	4	0.882
Perceived Ease of Use	6	0.895
Perceived Usefulness	4	0.804
Perceived Security	4	0.955
Perceived privacy	5	0.822
Trust	5	0.942
Attitude	5	0.880
Satisfaction	4	0.904
Social Commerce Intention	5	0.804

The results in Table 3.4 indicate that the Cronbach's alpha for the latent variables are all greater than 0.70. This explains that all the dimensions achieve consistent internal reliability (threshold=0.70). Consequently, the instruments were valid and reliable to collect the data.

3.12 Data Collection Procedure

Written permissions were obtained from the management of the 5 universities (See Table 3.1 above). This study collected the data between January and October 2017.

The highest form of assurance was given to the respondents stating that all the information given is handled with utmost confidentiality and respect at all times during and after the period of the study. The respondents were given 30 minutes to complete the questionnaire. Each engagement lasted for not more than 30 to 40 minutes.

This study distributed the questionnaire by hand and two enumerators helped to collect data. They were brief the steps of collecting the data and also ensuring that the questionnaire been answered by the respondents, this study managed to guarantee a high response rate, reduce bias, and establish rapport with the respondents (Dobbs, Oppenheim, & Thompson, 2011). In addition, in order to remove any possible doubt on the part of the respondents, the study provided the necessary information that the respondents need. Therefore, the questionnaires were filled in and completed within the shortest possible time (Sekaran & Bougie, 2013).

3.13 Technique of Data Analysis and Hypothesis Testing

Data collected through the survey were analyzed using SPSS (Version 23) program for windows and Smart-PLS. SPSS 23 was used for the purpose of conducting a descriptive statistics analysis. First, the data were screened, examined, and validated for data entry. Then, the Smart-PLS software was used to run the tests required for hypotheses testing. The decision for selecting Smart-PLS was made based on the recommendations of Wold (1985) and Ringle et al. (2013) who stated that if the model is predictive in nature than PLS-SEM using Smart-PLS is the most preferred technique to use. Since this study is predictive therefore PLS-SEM was utilized for testing the hypotheses. This study adopted the PLS-SEM due to certain reason of whereby the data produces a single specific determinate of the observation that called

the concepts being measured.

In addition, PLS-SEM estimations of the coefficients in prediction of objectives and explains the variance (prediction of the constructs). PLS-SEM method relies on pre-specified networks of relationships between constructs as well as between constructs and their measures (Mateos-Aparicio, 2011). In term of the statistical, PLS-SEM algorithm have important features associated with the characteristics of the data and the model used where by the sample sizes and complex models and makes no assumptions about the underlying data (Cassel, Hackl, & Westlund, 1999). Contrary to the maximum likelihood-based Covariance Based Structural Modeling (CB-SEM) which requires normally distributed data and regression using sum scores, which assumes normally distributed residuals, PLS-SEM makes no distributional assumption (i.e., it is non-parametric). In addition, it's reflective and formative measurement models as well as the single-item constructs with no identification problems. This study also benefited from the high level of the efficiency in the parameter estimations, which are demonstrated in the method's greater statistical power than that of CB-SEM. A greater statistical influence implies that PLS-SEM likely result in a specific relationship that is significant. The very same holds for regression based on sum scores, which lags behind PLS-SEM in terms of statistical power (Goodhue, Lewis, & Thompson, (2012).

3.14 Data Screening

Importantly, before the primary analyses were carried out, data were examined in order to ascertain data entry accuracy, outliers, and distributional properties. The task of screening data is important before conducting a multivariate analysis simply because it helps this study in recognising the main rules that guide the use of

multivariate techniques for data examination (Saidu Badara & Saidin, 2014). Hence, data screening was conducted by examining the basic descriptive statistics and frequency distribution.

Preliminary screening of the data made this study more familiar with the data. Having the data entered into the package, they were coded. Then, the following preliminary data analyses were conducted: 1. Missing data were identified, 2. Outliers were assessed 3. Normality test was conducted, and 4. Multicollinearity was tested (Collins, Joseph, & Bielaczyc, 2009).

3.15 Chapter Summary

In conclusion, Chapter Three explains the research method adopted in the present study to achieve the research objectives of the study. Chapter Three also describes the determination of the sample, the selections of the respondents, and the developments of the questionnaire, the research materials, the survey procedures, and the several analyses that were adopted. Next, Chapter Four presents the results of the study.

CHAPTER FOUR

RESULTS AND FINDINGS

4.1 Introduction

Chapter Four provides meaningful research findings and results by using the PLS-SEM Path modelling. This chapter comprises the following sections: preliminary data analysis and data cleaning, results of the descriptive for all latent variables, outlier's detection, non-response bias and common method bias test. The procedure is inclusive of reliability and validity, which also contains the results of the hypothesized relationships test. Eventually, the research findings were obtained based on data retrieved from the respondents who are university students in Saudi Arabia. In addition, details of the characteristics of the samples are also presented. The results of reliability and validity of scales were assessed and presented in the form of a measurement model as well. Finally, the results of the Complimentary PLS-SEM analysis for the tested hypothesis, coefficient determination, effect size and predictive relevance are also examined and presented.

4.2 Response Rate

For the purpose of the present study, 538 questionnaires were distributed to the university students in Saudi Arabia, in order to achieve favourable or high rates of responses.

At the end of the process, the outcome produced 371 returned questionnaires out of 538. This resulted in a response rate of about 68 %, which is considered acceptable based on the definition of response rate (Jobber, 1989). Out of these 371 questionnaires, 11 questionnaires were unusable simply because they were neither completed nor properly filled by the respondents. This study, therefore, proceeded to

use 360 questionnaires for further analysis. Thus, it achieved 68 %, response rate validity. For the present study, 68 %, is adequate for conducting the analysis of the study as advocated by Sekaran (2003) who stated that a response rate of 30% can be considered acceptable for analysis. Table 4.1 illustrates the responses rate of the questionnaires.

Table 4.1

The Responses Rates of the Questionnaires

Response	Frequency/ Rate
Distributed questionnaires	538
Returned questionnaires	371
Questionnaires returned/excluded	11
Returned/useable questionnaires	360
Valid responses rates	68%

4.3 Data Screening and Preliminary Analysis

In conducting the multivariate analysis, the data should be screened first because it does help identify any violations of any of the key assumptions for the applications of multivariate data analysis (Hair et al., 2007). In addition, conducting appropriate data screening also helps understand and predict the behaviour of the data to be used for the analysis.

4.3.1 Missing Value Analysis

The original SPSS dataset highlighted 20,160 data points, whereas 7 were missed randomly during the process of data analysis which accounted for 0.34%. The social

commerce intention and attitude contained 3 missing values; satisfaction contained 2 missing values. Similarly, trust contained 2 missing values. Other variables contained no missing value. Even though no acceptable percentage of missing value in a data set was regarded as the most statistically valid for analysis, this study unanimously concluded that the missing rate of 5% or lesser is considered as non-significant (Tabachnick & Fidell, 2007). The mean substitution approach is generally preferred by this study, and the most preferred means of replacing missing values that provided the total percentage of missing data in the total set is lesser than 5% (Tabachnick & Fidell, 2007). Therefore, the present study considered replacing the values using the means substitution approach as shown in Table 4.2 (See Appendix B for SPSS outputs).

Table 4.2
Number and Percentage of Missing Values

“Latent variables”	“Number of Missing Values”
Social Commerce Intention	1
Attitude	2
Satisfaction	2
Trust	2
Total	7 out of 16,200 data points
Percentage	0.0004%

4.3.2 Assessment of Outliers

Outlier detection is especially a key factor in a regression test. It is considered as an observation that appears to be inconsistent with the remainder of the data since the presence of outliers constitutes a serious threat that could lead to unreliable and undependable results (Verardi & Croux, 2008). The approach for effective detection of outliers firstly is to tabulate the frequency tables for all variables using minimum and maximum statistics. For the purpose of this study, no value was discovered to be outside the range after doing an initial frequency analysis. The data used in this analysis was subjected to further check by processing the data for univariate outlier detection using standardized values with a cut-off mark of ± 3.29 ($p < .001$) as recommended by Tabachnick and Fidell(2007). After conducting the check for univariate outliers using the above-mentioned approach, no case of a potential outlier was detected. Similarly, a multivariate outliers test was conducted using Mahala Nobis distance (D2). By reporting the 45 observed variables, the suggested threshold was 44.99 ($P= 0.001$), whereby no multivariate outlier was detected because the highest value of Mahala Nobis is 31, which is lesser than the threshold of 44.99.

4.3.3 Normality Test

Studies have suggested that a normality test is performed on the data before performing the analysis since a highly skewed or kurtosis inflicted data can expand the bootstrapped standard error estimates, which can grossly undervalue the statistical importance of the path coefficients (Hair, Sarstedt, Ringle and Mena, 2012; Ringle, Sarstedt, & Straub, 2012).

Given this development, this study used a graphical method in the detection of abnormality in the gathered data (Tabachnick & Fidell, 2007). It was further

suggested by Field (2009) that if a sample size is greater than 200, it is better to focus on the graphical distribution of the data rather than concentrating on the values of skewness and kurtosis statistics. Based on the suggestion of Field (2009), the present study adopted a histogram, and normal probability plots were examined in order to ensure that the normality assumptions are not violated. Figure 4.1 shows that the collected data are closed to a normal curve.

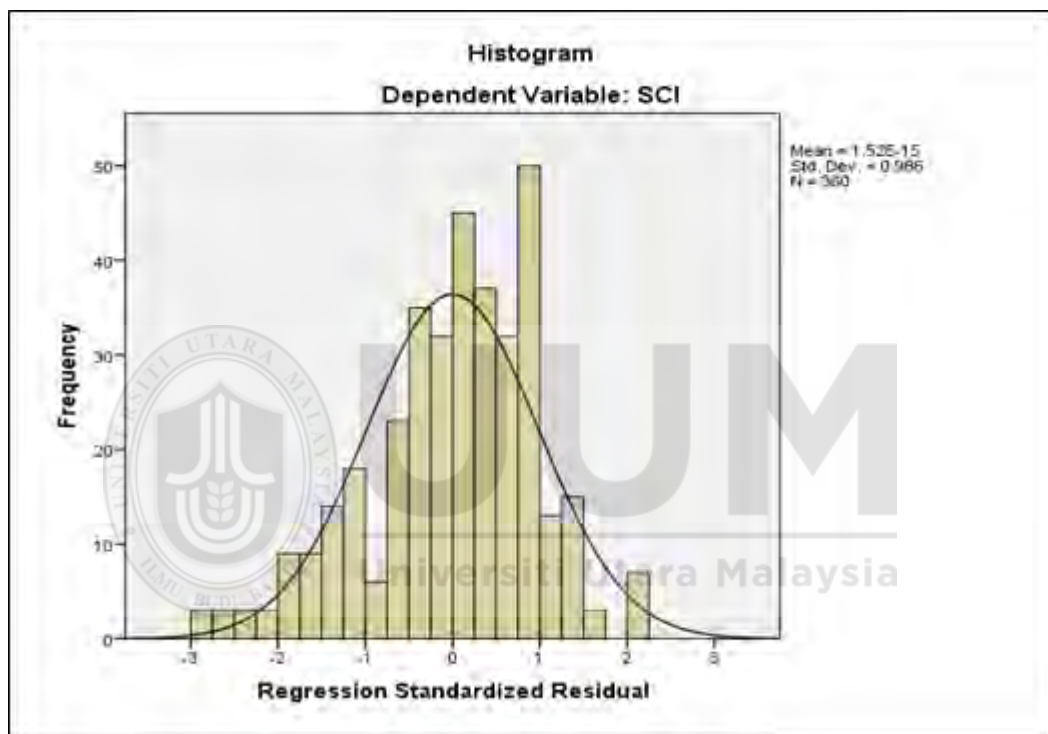


Figure 4.1. Normality and normal probability plots.

4.3.4 Multicollinearity Test

Multicollinearity is defined as “a context in which the relationship between exogenous latent constructs are highly correlated or become too high. When the collinearity becomes too high among exogenous latent constructs, it can potentially distort the estimates of regression coefficients and their statistical significance tests (Hair, Black, Babin, Anderson, & Tatham, 2006).

Two methods were suggested in the present study for the detection of multicollinearity (Peng & Lai, 2012). The first method is the correlation matrix of the exogenous latent constructs that was examined. The suggested threshold that indicates multicollinearity between exogenous latent constructs is 0.09 or greater (Hair *et al.* 2010). The correlation matrix of all exogenous latent variables is demonstrated in Table 4.3.

Table 4.3

Correlation Matrix of the Exogenous Latent Construct

No	"Latent Construct"	1	2	3	4	5	6	7	8	9
1	Attitude	1								
2	Satisfaction	0.412	1							
3	Trust	0.487	0.367	1						
4	Informational Support	0.140	0.401	0.394	1					
5	Emotional Support	0.386	0.317	0.546	0.367	1				
6	Perceived Ease of Use	0.160	0.307	0.442	0.491	0.523	1			
7	Perceived Use	0.503	0.243	0.385	0.114	0.344	0.239	1		
8	Perceived Security	0.449	0.159	0.388	0.268	0.383	0.311	0.544	1	
9	Perceived privacy	0.134	0.369	0.321	0.605	0.343	0.474	0.084	0.336	1
		0.059	0.212	0.277	0.547	0.277	0.473	0.145	0.320	0.745

Note: Correlation is significant at 0.01 Level (2-tailed)

Table 4.3 above shows the correlation between the exogenous latent constructs. It seems that all the constructs are within the acceptable threshold of 0.90. This means that the exogenous latent constructs are not highly correlated.

The second consideration for examining and checking the correlation among the exogenous latent constructs are variance inflated factor (VIF), tolerance value, and condition index in order to detect the multicollinearity issues. Hair, Ringle and Sarstedt (2011) emphasize that collinearity becomes an issue only if the value of VIF is greater than 5, tolerance is greater than 0.20, and the condition index is greater than 0.30. Referring to the details in Table 4.4, it seems that the issue of multicollinearity does not exist among exogenous latent construct given the threshold prescribed by scholars.



Table 4.4

Tolerance and Variance Inflation Factors (VIF)

"Latent Constructs"	"Collinearity Statistics"		"Condition Index"
	Tolerance	VIF	
Attitude	.704	1.420	12.911
Satisfaction	.578	1.729	13.741
Trust	.523	1.911	16.898
Informational Support	.562	1.780	18.313
Emotional Support	.548	1.825	19.817
Perceived Ease of Use	.605	1.652	20.556
Perceive Use	.573	1.744	21.557
Perceive Security	.333	3.001	25.608
Perceive Privacy	.377	2.652	27.961

4.4 Non-Response Bias

Armstrong and Overton (1977) suggested that for the purpose of estimating non-response bias, a time trend exploration approach involves making a comparison between early and late respondents (i.e. non-response bias). In this regard, the authors argued that there is a common element sharing between late respondents and non-respondents. In the same vein, Wright (2004) suggested that a minimum response rate of 50% should be achieved to minimise the issue of non-response bias.

The data of this study were collected through questionnaires after had been distributed on the participants of this study in five universities as mentioned earlier in (3.7 population and sample) section. However, it was important to determine non-response bias especially that many respondents responded late after many reminders and visits. That spanned the period of data collection for 10 months from January till October 2017.

Nevertheless, in the present study, the respondents are classified in two different groups; one group involved the respondents who responded before the reminders which sent in May 2017 (early respondents) and the second group involved those resounded to the questionnaire after being reminded in May 2017. (Late respondents). The majority of the respondents were 260 which represents (72%) of them responded after the reminders sent in May 2017, whereas the remaining 100 respondents forming (27%) of them responded after the reminders.

Specifically, an independent sample t-test was conducted to detect any possible non-response bias on the main study variables, i.e. attitude, satisfaction, trust, information support, emotional support, perceived ease of use, perceive usefulness, perceived security, and perceived privacy. Results of the t-tests are detailed in Table 4.5. The results of the independent sample t-test shown in Table 4.5 revealed that the main 10 variables are all greater than 0.05 significance level of Levene's test for equality of variance. This is in line with the suggestions of Field (2009), which shows that the supposition of identical changes between early and late respondents has not been disrupted. Therefore, non-response bias can be argued as not a major concern in the present study.

Table 4.5

The Result of Independent-Samples T-Test for Non-Response Bias

Variables	Group	N	Mean	SD	Levene's Test for Equality of Variance	
					F	Sig
Social Commerce Intention	Early	260	3.8408	.71349	1.833	.177
	Late	100	3.7740	.75192		
Attitude	Early	260	3.3708	.85996	.531	.467
	Late	100	3.2420	.90667		
Satisfaction	Early	260	3.6731	.91841	.441	.507
	Late	100	3.9675	.81158		
Trust	Early	260	3.0408	.77352	.955	.329
	Late	100	3.1040	.72334		
Informational support	Early	260	3.3205	.98805	2.946	0.97
	Late	100	3.6633	.81580		
Emotional Support	Early	260	3.2490	.90885	.191	.663
	Late	100	3.3100	.92804		
Perceived Ease of Use	Early	260	3.8795	.85412	2.621	.106
	Late	100	3.9933	.72587		
Perceived Usefulness	Early	260	3.6692	.93630	1.483	.224
	Late	100	3.8700	.77074		
Perceived Support	Early	260	2.7798	.97573	.113	.737
	Late	100	2.8900	.98365		

Perceived privacy	Early	260	3.2531	.90513	3.263	0.72
	Late	100	3.2120	.96602		

4.5 Common Method Variance Test

The common method variance test is defined as “variance that is attributable to the measurement method rather than to the construct of interest” (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003, p.879). Most scholars agree that the common method variance is a major concern for scholars using self-report surveys (Lindell & Whitney, 2001; Spector, 2006).

The present study adopted several methods to minimize the negative consequences of the effect of the common method variance (CMV) (Podsakoff, MacKenzie, & Podsakoff, 2012; Viswanathan & Kayande, 2012). First, the respondents were informed that there is no fixed rule concerning answering the questions in the questionnaire; there is no outright or wrong answer. In addition, the respondents were given assurance that the answers provided would be handled confidentially. This was achieved by ensuring that vague or unclear concepts were not used in the questionnaire. Accordingly, Harman’s single factor test proposed by Podsakoff and Organ (1986) for the purpose of examining the common method variance was adopted. Following this procedure, all the items in the present study were subjected to a principal component factor analysis. The result of the analysis yielded ten factors, explaining a cumulative of 73.52% of the variance, with the largest factor explaining 27.069% of the total variance, which is less than 50%. This result indicated that there is not a single element that can explain most of the covariance in the predictor and the criterion variables (Podsakoff et al., 2012). Consequently, it is suggested that the most mutual method variance bias is not a main concern. Hence, it

is improbable that it expands the relationships between the variables in the present study.

4.6 Demographic Profile of the Respondents

The demographic features of the respondents, including gender, age, educational qualification, and the marital status are presented in Table 4.6.



Table 4.6

Demographic Characteristics of the Respondents (N=360)

Demographic Characteristics		Frequency	Percentage
Gender	Male	185	51.4%
	Female	175	48.6%
Age	Below 20 Years Old	57	15.8%
	21-25 Years Old	220	61.1%
	26-30 Years Old	48	13.3%
	31-35 Years Old	17	4.7%
	41-45 Years old	3	.8%
	More than 46 Years old	6	1.7%
	Bachelor's Degree	310	86.1%
Education	Master's Degree	12	3.3%
	Others	38	10.6%
Marital Status	Single	305	84.7%
	Married	55	15.3%

As noticed in Table 4.6 above, the majority of the respondents 185 (51.4%) are males, whereas the remaining 75 (48.6%) are females. This percentage is consistent with previous studies. For instance, Boshoff, Van Wyk, Hoole, Owen (2002) study involved a majority of male students (55%) compared to their female counterparts (45%). Regarding the age group, 61.1% of the respondents are between 21 and 25

years old. Another group that was 15.8% was below 20 years, whereas another group formed 13.3%, specifically those who were between 26- and 30 years old, and another group constituted 8.9% for other age groups. 86.% of the respondents (310 people) are doing bachelor's degrees, where as only 3.3% of the respondents are doing master's degrees. Another 10.6% of the respondents hold other qualifications. In addition, most of the respondents are still young and single (305 (84.7%)).

In fact dividing the respondents by using demographics has many significance for instance it allows companies to target the most important sector of customers and helps them to determine their potential markets of their products or services.

4.7 Descriptive Analysis of the Latent Constructs

The descriptive statistics for the latent variables were presented, particularly the mean and the standard deviations. All these latent variables employed in the present study were measured using a five-point scale, whereby 1 implies strongly disagree to 5 which implies Strongly Agree. Aligning with the suggestions of Musa (2016) three levels of the score, as follows: 2.33 and lesser were considered low scores, between 2.33 and 3.67 were regarded a moderate level, and 3.67 and greater were considered a high level.

Table 4.7

Descriptive Statistics for the Latent Variables

Latent Construct	Number of Observations	Mean	Standard Deviation
Social Commerce Intention	360	3.8222	.72393
Attitude	360	3.3350	.87382
Satisfaction	360	3.7549	.89867
Trust	360	3.0583	.75944
Informational Support	360	3.4157	.95472
Emotional Support	360	3.2660	.91333
Perceived Ease of Use	360	3.9111	.82111
Perceived Usefulness	360	3.7250	.89688
Perceived Support	360	2.8104	.97782
Perceived Privacy	360	3.2417	.92127

Table 4.7 above displays the mean for the latent variables, which is distributed from 2.8104 to 3.9111. The mean and standard deviation for Social commerce intention is 3.8222 and 0.72393, respectively. This suggests that the respondents displayed a moderate level of intention. The mean score for attitude is 3.3350 with a standard deviation of 0.87382, which suggests that the respondents displayed a positive attitude. Further, the results showed a moderate score for satisfaction (mean= 3.7549, standard deviation= 0.89867), a high score of trust (mean= 3.0583, SD=0.75944), a high score for both information support and emotional support (mean and SD=

3.4157/0.95472 and 3.2660/0.91333), respectively. Next is the descriptive statistics of perceived ease of use as well as the perceived usefulness (mean and SD= 3.9111/0.82111 and 3.7250/0.89688). As for perceived support, its (mean and SD was 2.8104 and 0.97782, whereas the perceived privacy had a mean and SD scores of 3.2417 and 0.92127.

To sum up, the average mean of all the variables is between 3.0583 and 3.9111 while the standard deviation ranged between 0.72393 and 0.97782. Therefore, we find that the maximum mean of responses was (3.9111) while the minimum mean of responses was (2.8104), as reported in Table 4.7 above, which means that all of the responses were moderate and high level according to Musa (2016) classification. Therefore, the responses level is acceptable and valid responses with no low scores according to the same classification.

4.8 Assessment of PLS-SEM Path Model Results

The present study adopted two-way procedures for the evaluation of PLS-SEM, which is consistent with the suggestion of Henseler, Ringle and Sinkovics (2009). They are (1) the assessments of the measurements model and (2) the assessments of the structural model, as in Figure 4.2 (Hair et al., 2014; Henseler et al., 2010).

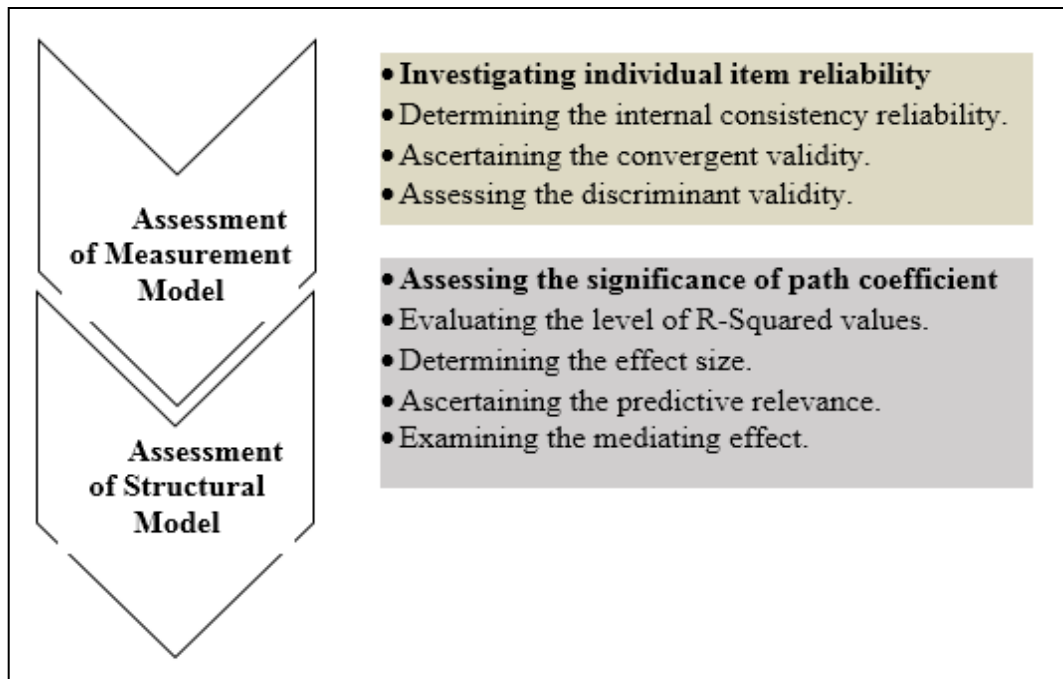
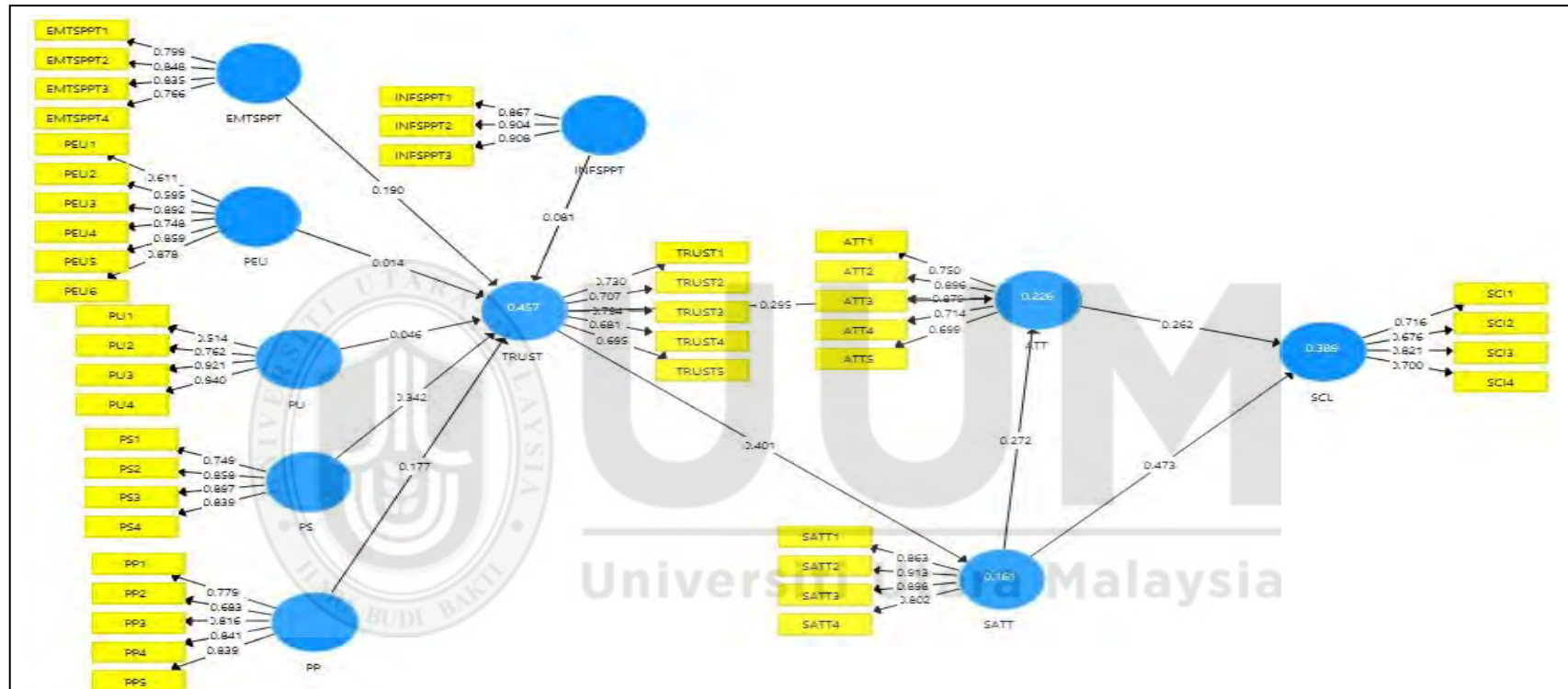


figure 4.2. Two-way procedure of PLS path model assessment
Source: (Heseler et al., 2010)



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4.9 Assessment of Measurement Model

Figure 4.3. Assessment of measurement model Model

4.9.1 Individual Item Reliability

The process of examining the individual items reliability is obtained by assessing the outer loadings of each variable's measurement (Hair et al., 2012). The adequate threshold for accepting the retained items is to have a loading of between 0.40 and 0.70 (Hairs et al., 2014). In the present study, out of 45 items, only SCI5 was deleted because the loadings of the item were below the acceptable benchmark of 0.40. Therefore, in the model, only 44 items were retained since they all have loadings between 0.522 and 0.797 (See Table 4.8 as well as Appendix C).

4.9.2 Internal Consistency Reliability

This is defined as the extent to which the items on a specific (sub) scale measure the same concept (Sun et al., 2007). The estimators that are commonly used for measuring the internal consistency reliability are the Cronbach's alpha coefficient and composite reliability coefficient. (Peterson & Kim, 2013). For the present study, the composite reliability coefficient was chosen in order to ascertain the internal consistency reliability of the measures. There are two reasons for using the composite reliability coefficient in the present study. First, it helps give an unbiased estimates regarding the reliability of the items used in the study, which is better than Cronbach's alpha coefficient because Cronbach's alpha only takes into consideration all the items of the construct that contribute equally to it without looking at the full impact of each loading (Götz, Liehr- Gobbels, & Kraft, 2010).

Second, it can lead to a situation in which the scales reliability can be either overestimated or underestimated. Moreover, composite reliability can perform the dual function of absorbing indicators of different loadings as well as considering them as Cronbach's alpha (this means that an internal consistency reliability value of

0.70 is considered satisfactory for a model, whereas any value below 0.60 is considered lack of reliability).

Table 4.8

Loadings, Composite Reliability and Average Variance Extracted

Construct	Items	Loadings	Cronbach's Alpha	Composite Reliability	AVE
Attitude	ATT1	0.750	0.848	0.893	0.620
	ATT2	0.896			
	ATT 3	0.879			
	ATT 4	0.714			
	ATT5	0.699			
Emotional Support	EMTSPPT 1	0.348	0.829	0.886	0.660
	EMTSPPT 2	0.270			
	EMTSPPT 3	0.197			
	EMTSPPT 4	0.221			
Information Support	INFSPPT 1	0.300	0.874	0.922	0.797
	INFSPPT 2	0.282			
	INFSPPT 3	0.305			
Perceived Ease of Use	PEU 1	0.164	0.891	0.897	0.599
	PEU 2	0.225			

	PEU 3	0.228			
	PEU 4	0.176			
	PEU 5	0.249			
	PEU 6	0.213			
Perceived Privacy	PP 1	0.127	0.855	0.895	0.631
	PP2	0.041			
	PP3	0.081			
	PP4	0.265			
	PP5	0.289			
Perceived Security	PS1	0.266	0.857	0.903	0.701
	PS2	0.271			
	PS3	0.363			
	PS4	0.323			
Perceived Usefulness	PU1	0.016	0.848	0.874	0.644
	PU2	0.156			
	PU3	0.198			
	PU4	0.211			
Satisfaction	SATT1	0.343	0.893	0.926	0.757
	SATT2	0.389			

	SATT3	0.333			
	SATT4	0.283			
Social Commerce Intention	SCI 1	0.334	0.713	0.820	0.534
	SCI2	0.326			
	SCI3	0.309			
	SCI4	0.340			
	SCI5	0.001			
Trust	Trust 1	0.393	0.771	0.845	0.522
	Trust 2	0.260			
	Trust 3	0.218			
	Trust 4	0.236			
	Trust 5	0.334			

In Table 4.8, it is noticed that the composite reliability coefficient of each latent construct is between 0.820 to 0.926. This means that each of the values has exceeded the acceptable threshold of 0.70, which means that there is internal reliability for the measurements that are used in the present study (Hair et al., 2011).

4.9.3 Convergent Reliability

Convergent validity is defined as the “extent to which individual items truly represent the intended latent construct and indeed correlate with other measures of the same construct (Hair et al., 2012). The use of Average Variance Extracted (AVE) as a tool for evaluating each latent construct was advocated by Fornell and Larcker

(1981). The convergent validity is normally achieved if the AVE of each construct is greater than 0.5. In line with Wu et al. (1988), the AVE of the present study is higher than the acceptable threshold for each loading (>0.5), thereby indicating that each construct has achieved sufficient convergent validity.

4.9.4 Discriminant Validity

This concept implies “the extent to which a particular latent construct is different from another latent construct” (Duarte & Raposo, 2010). Discriminant validity is achieved by adopting the criterion established by Wu et al. (1998) by comparing the indicator’s loadings with other reflective indicators in the cross-loadings tables. The rule of thumb for evaluating the discriminant validity suggested by Fornell and Larcker (1981) is that the AVE must be 0.5 or greater. They further suggested that the particular square root of the AVE ought to be greater than the correlations among the latent constructs.

In Table 4.8 above, the values of the AVE recorded are within the range of 0.522 and 0.797 which shows that they are within acceptable limits. Table 4.8 above also shows the compared correlations among the latent constructs if comparisons are made with the square roots of AVE.

Regarding the discriminant validity, studies reported that Fornell-Larcker’s (1981) method of reporting discriminant validity is no longer a reliable instrument for the detection of the discriminant validity (Henseler et al., 2010). The alternative approach, which is preferred and regarded as more potent and reliable, is the Heterotrait-Monotrait ratio of correlations. They maintained that the superior performance of the Heterotrait-Monotrait (HTMT) ratio could be seen in the Monte Carlo simulation study as illustrated in Table 4.9.

Table 4.9

Heterotrait-Monotrait (HTMT) Ratio

	ATT	EMTSP PT	INFSPPT	PEU	PP	PS	PU	SATT	SCL	TRT
ATT										
EMTSPPT	0.372									
INFSPPT	0.369	0.626								
PEU	0.285	0.291	0.391							
PP	0.240	0.559	0.322	0.195						
PS	0.428	0.561	0.396	0.132	0.869					
PU	0.211	0.381	0.437	0.392	0.392	0.403				
SATT	0.427	0.526	0.615	0.317	0.317	0.367	0.422			
SCL	0.567	0.298	0.464	0.140	0.140	0.211	0.521	0.672		
TRUST	0.487	0.612	0.439	0.678	0.678	0.745	0.364	0.474	0.233	

The acceptable threshold for accepting the HTMT criterion is the HTMT value of 0.90 (Gold, Malhotra & Segars, 2001). For the present study, Table 4.10 shows all the values for the discriminant validity which are ascertained because all the indicators show that the loadings are greater than cross-loadings, thereby indicating enough validity for a further analysis.

Table 4.10

Cross Loadings

	ATT	EMTSPPT	INFSPPT	PEU	PP	PS	PU	SATT	SCL	TRUST
ATT1	0.750	0.176	0.071	0.029	0.148	0.236	0.018	0.126	0.320	0.226
ATT2	0.896	0.283	0.260	0.242	0.166	0.303	0.151	0.351	0.456	0.325
ATT3	0.879	0.222	0.231	0.162	0.200	0.320	0.165	0.262	0.344	0.295
ATT4	0.714	0.308	0.347	0.234	0.133	0.187	0.253	0.441	0.346	0.281
ATT5	0.699	0.261	0.344	0.266	0.232	0.402	0.241	0.298	0.274	0.449
EMTSPPT1	0.348	0.799	0.601	0.247	0.331	0.381	0.326	0.513	0.364	0.459
EMTSPPT2	0.270	0.848	0.528	0.308	0.384	0.372	0.334	0.451	0.237	0.412
EMTSPPT3	0.197	0.835	0.322	0.172	0.450	0.456	0.310	0.244	0.058	0.408
EMTSPPT4	0.221	0.766	0.302	0.202	0.391	0.327	0.297	0.264	0.086	0.341
INFSPPT1	0.300	0.403	0.867	0.389	0.232	0.283	0.449	0.504	0.449	0.311
INFSPPT2	0.282	0.492	0.904	0.324	0.167	0.265	0.302	0.493	0.353	0.300
INFSPPT3	0.305	0.568	0.908	0.278	0.321	0.355	0.352	0.458	0.262	0.383
PEU1	0.164	0.083	0.247	0.611	0.064	0.066	0.483	0.214	0.361	0.002
PEU2	0.225	0.141	0.183	0.595	0.002	-0.068	0.366	0.243	0.410	-0.047
PEU3	0.228	0.207	0.348	0.892	0.103	0.047	0.395	0.373	0.373	0.167
PEU4	0.176	0.234	0.249	0.748	0.150	0.125	0.274	0.333	0.372	0.121

PEU5	0.249	0.304	0.318	0.859	0.199	0.098	0.452	0.333	0.471	0.158
PEU6	0.213	0.227	0.300	0.878	0.141	0.108	0.397	0.437	0.285	0.152
PP1	0.127	0.450	0.201	0.106	0.779	0.655	0.250	0.310	0.007	0.447
PP2	0.041	0.277	0.287	0.191	0.683	0.473	0.358	0.181	0.070	0.281
PP3	0.081	0.323	0.199	0.165	0.816	0.526	0.342	0.162	0.056	0.412
PP4	0.265	0.421	0.172	0.118	0.841	0.661	0.252	0.185	0.076	0.555
PP5	0.289	0.386	0.279	0.178	0.839	0.649	0.324	0.254	0.105	0.491
PS1	0.266	0.385	0.368	0.159	0.517	0.749	0.439	0.298	0.221	0.429
PS2	0.271	0.356	0.213	0.113	0.703	0.858	0.372	0.263	0.099	0.506
PS3	0.363	0.451	0.302	0.129	0.677	0.897	0.396	0.255	0.117	0.576
PS4	0.323	0.397	0.277	0.015	0.625	0.839	0.219	0.257	0.134	0.536
PU1	- 0.016	0.041	0.188	0.371	0.073	0.017	0.514	0.157	0.285	-0.018
PU2	0.156	0.234	0.269	0.404	0.166	0.208	0.762	0.317	0.362	0.153
PU3	0.198	0.359	0.366	0.370	0.387	0.428	0.921	0.376	0.343	0.353
PU4	0.211	0.386	0.415	0.437	0.349	0.391	0.940	0.416	0.367	0.377
SATT1	0.343	0.328	0.500	0.320	0.271	0.284	0.294	0.863	0.490	0.349
SATT2	0.389	0.450	0.505	0.476	0.249	0.262	0.381	0.913	0.613	0.380
SATT3	0.333	0.442	0.410	0.381	0.184	0.315	0.390	0.898	0.470	0.368

SATT4	0.283	0.390	0.468	0.324	0.261	0.243	0.436	0.802	0.399	0.290
SCI1	0.334	0.309	0.431	0.326	0.176	0.201	0.357	0.562	0.716	0.267
SCI2	0.326	0.060	0.219	0.171	-0.022	0.079	0.191	0.330	0.676	0.031
SCI3	0.309	0.185	0.292	0.426	0.023	0.031	0.312	0.438	0.821	0.124
SCI4	0.340	0.078	0.108	0.302	0.002	0.156	0.252	0.267	0.700	0.068
TRUST1	0.393	0.430	0.285	0.157	0.378	0.487	0.321	0.265	0.137	0.730
TRUST2	0.260	0.328	0.403	0.202	0.272	0.343	0.316	0.362	0.197	0.707
TRUST3	0.218	0.408	0.362	0.232	0.403	0.441	0.272	0.393	0.150	0.794
TRUST4	0.236	0.241	0.040	0.083	0.482	0.406	0.134	0.166	0.077	0.681
TRUST5	0.334	0.377	0.227	0.019	0.523	0.525	0.262	0.247	0.117	0.695

4.10 Assessment of Significance of the Structural Model

After the process of identifying the measurements, the present study determined the structural model. Hence, the standard bootstrapping procedures as well as a number of bootstrap samples were applied and 360 cases for assessing the path coefficient (Hair et al., 2011, 2012. Henseler et. al., 2009). Figure 4.4 shows the estimates for the full structural model, which includes the mediating variable.

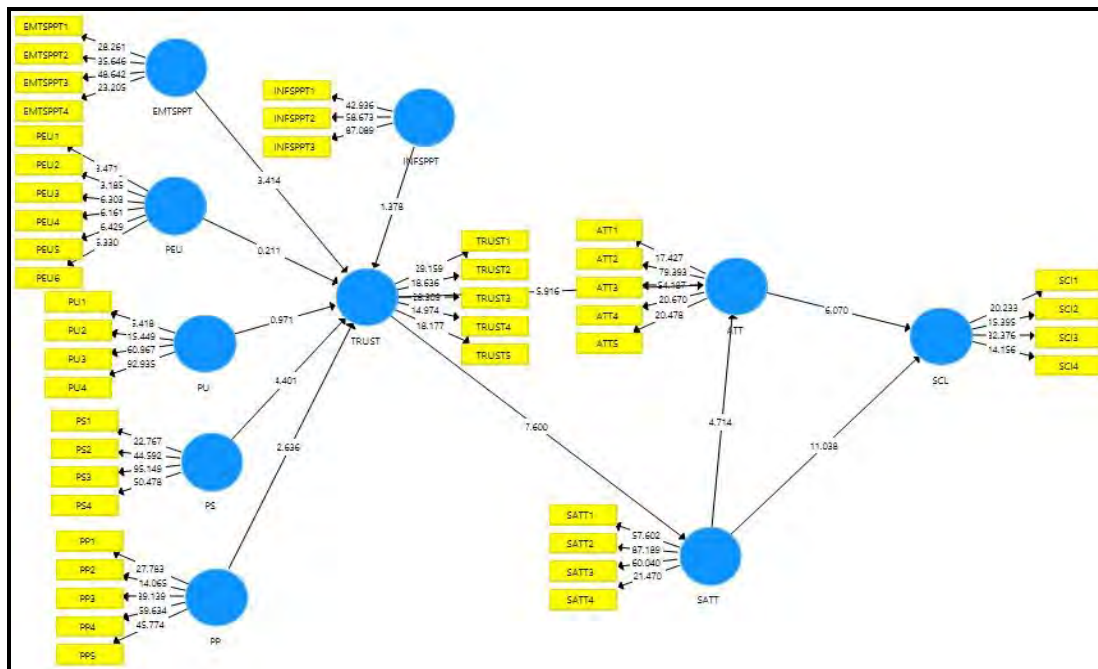


Figure 4.4 Structural model with mediation (full model)

In the present study, Hypothesis 1 predicts that the information support positively relates to trust. The results in (Table 4.11, Figure 4.4) show an insignificant result between the information support and trust ($\beta = 0.081$, $t = 1.378$, $p < 0.169$).

Hypothesis 2 predicts that the emotional support positively relates to trust. Results in (Table 4.11, figure 4.4) indicate that the emotional support has a significant relationship with trust ($\beta = 0.190$, $t = 3.414$, $p < 0.833$). Results for hypothesis 3 reveal that the perceived ease of use positively relates to trust, thus proving to be insignificant ($\beta = 0.014$, $t = 0.211$, $p < 0.332$). Regarding Hypothesis 4, which states that the perceived usefulness positively relates to trust, the result is also insignificant ($\beta = 0.046$, $t = 0.971$, $p < 0.332$).

In hypothesis 5, the perceived security is predicted as positively related to trust, and the result is significant ($\beta = 0.342$, $t = 4.401$, $p < 0.000$). Hypothesis 6 predicts that the perceived privacy positively relates to trust, and the results show that it is significant

($\beta=0.177$, $t=2.636$, $p<0.009$). Hypothesis 7 predicts that trust positively relates to attitude, and the result is significant ($\beta= 0.295$, $t=5.916$, $p<0.000$). Hypothesis 8 also predicts that trust positively relates to satisfaction, and the result is equally significant ($\beta= 0.401$, $t=7.600$, $p<0.000$). Regarding hypothesis 9, it predicts that satisfaction positively relates to attitude, and the result is significant ($\beta= 0.272$, $t=4.714$, $p<0.000$). Hypothesis 10 predicts that attitude positively relates to the social commerce intention, which is proven to be significant ($\beta=0.262$, $t=6.070$, $p<0.000$). Hypothesis 11 also predicts that satisfaction positively relates to social commerce intention, which is also proven to be significant ($\beta= 0.473$, $t=11.038$, $p<0.000$).



Table 4.11

Structural Model Assessment with Mediator (Full Model)

Hypothesis	Relationship	Beta	SE	T-Value	Findings
H1	Informational Support ~Trust	0.081	0.059	1.378	Not Supported
H2	Emotional Support ~Trust	0.190	0.056	3.414	Supported
H3	Perceived Ease of Use~ Trust	0.014	0.065	0.211	Not Supported
H4	Perceived Usefulness~ Trust	0.046	0.048	0.971	Not Supported
H5	Perceived Security ~ Trust	0.342	0.078	4.401	Supported
H6	Perceived Privacy ~ Trust	0.177	0.067	2.636	Supported
H7	Trust~ Attitude	0.295	0.050	5.916	Supported
H8	Trust ~Satisfaction	0.401	0.056	7.600	Supported
H9	Satisfaction~ Attitude	0.272	0.058	4.714	Supported
H10	Attitude ~Social Commerce Intention	0.262	0.043	6.070	Supported
H11	Satisfaction ~Social Commerce Intention	0.473	0.043	11.038	Supported

4.10.1 Assessment of the Variance Explained in the Endogenous Variable

The *R*- squared value is another criterion for evaluation when using the PLS-SEM technique. It is also referred to as the coefficient of determination (Hair et al., 2011, 2012; Henseler et al., 2009). The *R* squared value represents the proportion of variation in the dependent variable that can be explained by the independent variable (Elliot & Woodward, 2007; Hair et al., 2010, 2006). Scholars have proposed some

benchmarks as the acceptable threshold for *R*-square. As an example, Falk and Miller (1992) proposed an *R*-square value of 0.10 in PLS-SEM for consideration and acceptance, whereas Chin (1998) advocated that 0.67, 0.33, and 0.19 are substantial, moderate, and weak, respectively. The *R*-squared result for the present study is presented in Table 4.12.

Table 4.12

Variance Explained in the Endogenous Variable

Latent Variable	Variable Explained(R ²)
Social Commerce Intention	0.38%

As shown above, the model explains 38% of the total variance in social commerce intention. This means that the nine sets of exogenous variables (i.e. information support, emotional support, perceived ease of use, perceived usefulness, perceived security, perceived privacy, trust, satisfaction, and attitude) collectively explained 38% of the variance of the social commerce intention. Following the suggestion of Wu et al. (1998), the endogenous latent variable can be considered moderate.

4.10.2 Assessment of Effect Size (F^2)

Chin (1988) describes the effect size as the relative effect of a specific exogenous latent variable on the endogenous latent variables(s) by the rate of changes in the *R*-square. It is achieved by checking the increase in the *R*-square of the latent variable to its connected path in relation to the latent variables proportion of the unexplained variance. Based on the following studies, the effect size can be calculated using the formula below (Ringle, Sarstedt, & Straub, 2012).

$$F^2 = \frac{R_{included}^2 - R_{excluded}^2}{1 - R^2}$$

The accepted values for f^2 are 0.02, 0.15 and 0.35 as weak, moderate, and strong respectively (Cohen, 1998). In this regard, Table 4.13 displays the effect sizes of the respective latent variables in the structural model of the present study.

Table 4.13

Effect Size of the Latent Variables on Cohen's (1998) Recommendation

R-Squared	F-Squared	Effect Size
"Attitude"	0.095	Large
"Emotional Support"	0.035	Strong
"Informational Support"	0.007	Small
"Perceived Ease of Use"	0.000	Small
"Perceived Privacy"	0.023	Small
"Perceived Support"	0.082	Large
"Perceived Usefulness"	0.002	Small
"Satisfaction"	0.080	Large
"Trust"	0.095	Large

Table 4.13 shows the effect size of the following variables: attitude, emotional support, and information support, perceived ease of use, perceived privacy, perceived support, perceived usefulness, satisfaction, and trust with values 0.095, 0.035, 0.007, 0.00, 0.023, 0.082, 0.002, 0.080 and 0.095, respectively. Based on

Cohen (2012) recommendation, the results for the effect size suggest that they are large, moderate, small, small, small, large, small, large and large accordingly.

4.10.3 Assessment of Predictive Relevance

Stone (1974) suggested that the test of predictive relevance is usually used in place of the goodness-of-fit in PLS-SEM. Therefore, the present study applied the Stone-Geisser test of the predictive relevance of research model using the blindfolding procedures (Duarte & Raposo, 2010). Specifically, a cross-validated redundancy measure (Q^2) was applied in the present study for assessing the predictive relevance of the research model (Wu et al. 2010; Ringle, Sarstedt, & Straub, 2012; Stone, 1974). The Q^2 is a criterion used by researchers to measure and predict how well a model predicts the data of the omitted cases (Wu et al., 1988; Hair et al., 2014). The threshold for accepting a research model with Q^2 is 0 or greater. Thus, it is assumed that the model has a predictive relevance. For the present study, the results are demonstrated in Table 4.14.

Table 4.14

Construct Cross-Validated Redundancy

	SSO	SSE	Q ² (=1-SSE/SSO)
ATT	1,800.000	1,575.702	0.125
EMTSPPT	1,440.000	1,440.000	
INFSPPT	1,080.000	1,080.000	
PEU	2,160.000	2,160.000	
PP	1,800.000	1,800.000	
PS	1,440.000	1,440.000	
SATT	1,440.000	1,275.953	0.114
SCL	1,440.000	1,173.573	0.185
TRUST	1,800.000	1,406.848	0.218

Referring to Table 4.14, the cross-validation redundancy measures Q^2 for all endogenous latent variables are greater than zero. This suggests that the predictive relevance of the model is sufficient (Henseler et al., 2009).

4.11 Hypothesis Testing for Mediation Relationships

Referring to Table 4.15, the second model specifically analyses the relationships represented by H₁₂: Trust is mediating the relationship between informational support and attitude. H₁₃: Trust is mediating the relationship between emotional support and attitude. H₁₄: Trust is mediating the relationship between perceived ease of use and attitude. H₁₅: Trust is mediating the relationship between perceived

usefulness and attitude. H₁₆: Trust is mediating the relationship between perceived security and attitude. H₁₇: Trust is mediating the relationship between perceived privacy and attitude. H₁₈: Trust is mediating the relationship between informational support and satisfaction. H₁₉: Trust is mediating the relationship between emotional support and satisfaction. H₂₀: Trust is mediating the relationship between perceived ease of use and satisfaction. H₂₁: Trust is mediating the relationship between perceived usefulness and satisfaction. H₂₂: Trust is mediating the relationship between perceived security and satisfaction. H₂₃: Trust is mediating the relationship between perceived privacy and satisfaction. H₂₄: Attitude is mediating the relationship between trust and social commerce intention. H₂₅: Satisfaction is mediating the relationship between trust and social commerce intention.

For testing the hypothesized mediating relationships mentioned above, the general recommendation for conducting a mediation analysis by the following studies was adopted (Baron & Kenny, 1986; Preacher & Hayes, 2004, 2008). Besides, other specific suggestions on the use of PLS-SEM mediation analysis were also adopted (Hair et al., 2014). This also included bootstrapping the sample distribution of the indirect effect that is considered one of the greatest appropriate procedures for PLS-SEM (Hair et al., 2014). However, a mediating effect can only take place when a relationship exists between the third latent variables and two other latent constructs that have direct relationships (Hairs et al., 2014). Given these developments, the present study followed Hair's et al. (2014) guidelines for the mediator analysis in PLS-SEM. Particularly, Hair et al., (2014) suggest that the following empirical test must be conducted:

1. Testing for a direct significant relationship.

2. Testing for indirect relationships through a mediator (i.e. *path a and b*).
3. Testing of the extent of the direct effect that does absorb using variance accounted for (VAF).

Table 4.15

Indirect Effects of Mediation Test

Hypotheses	Relationship		B	S.E	T	P	Decision
H ₁₂	Informational →Trust→ Attitude	Support	0.024	0.018	1.327	0.185	Not “Supported”
H ₁₃	Emotional Support→ Attitude	Trust →	0.056	0.018	3.186	0.002	“Supported”
H ₁₄	Perceived Ease of Use→ →Attitude	Trust	0.004	0.019	0.216	0.829	Not “Supported”
H ₁₅	Perceived Usefulness→ Attitude	Trust→	0.014	0.014	0.951	0.342	Not “Supported”
H ₁₆	Perceived Security→ Attitude	Trust→	0.101	0.033	3.047	0.002	“Supported”
H ₁₇	Perceived privacy→ Attitude	Trust→	0.052	0.019	2.776	0.006	“Supported”
H ₁₈	Informational Trust→ Satisfaction	Support→	0.033	0.025	1.290	0.198	Not “Supported”
H ₁₉	Emotional Support→ Satisfaction	Trust→	0.076	0.024	3.122	0.002	“Supported”
H ₂₀	Perceived Ease of Use → Trust→ Satisfaction		0.006	0.026	0.215	0.830	“Not Supported”
H ₂₁	Perceived Usefulness→ Satisfaction	Trust→	0.019	0.019	0.954	0.340	Not “Supported”
H ₂₂	Perceived Security→	Trust→	0.137	0.037	3.762	0.000	“Supported”

Satisfaction								
H₂₃	Perceived Privacy→ Satisfaction	Trust→	0.071	0.028	2.516	0.012	“Supported”	
H₂₄	Trust → Commerce Intention	Attitude→ Social	0.026	0.009	2.984	0.003	“Supported”	
H₂₅	Trust → Commerce Intention	Satisfaction→ Social	0.065	0.019	3.458	0.000	“Supported”	

It is therefore evidenced based on Table 4.15 that trust is mediating the relationship between the emotional support and the attitude ($\beta = 0.056$, $t=3.186$, $p<0.002$), between perceived privacy and attitude ($\beta =0.052$, $t=2.776$, $p<0.006$), between emotional support and satisfaction ($\beta =0.076$, $t=3.122$, $p<0.002$), between perceived security and satisfaction ($\beta =0.137$, $t=3.762$, $P<0.000$), between perceived privacy and satisfaction($\beta =0.071$, $t=2.516$, $p<0.012$), and between perceived security and attitude ($\beta =0.101$, $t=3.047$, $p<0.002$). Attitude also serves as a mediator in the relationship between trust and social commerce intention ($\beta =0.026$, $t=2.984$, $p<0.003$), whereas satisfaction is mediating the relationship between trust and the intention of the social commerce ($\beta =0.065$, $t=3.458$, $P<0.000$). The results revealed that the hypotheses 13, 16, 17, 19, 22, 23, 24, and 25 are supported.

However, trust did not mediate the relationships between information support and attitude ($\beta =0.024$, $t=1.327$, $p=<0.187$), between perceived ease of use and attitude ($\beta =0.004$, $t=0.216$, $p=0.829$), between perceived usefulness and attitude ($\beta =0.014$, $t=0.951$, $p<0.342$), between information support and satisfaction ($\beta =0.033$, $t=1.290$, $p<0.198$), between perceived ease of use and satisfaction ($\beta =0.006$, $t=0.215$, $p<0.830$), and between perceived usefulness and satisfaction ($\beta =0.019$, $t=0.954$, $p<0.340$).In short, hypotheses 12, 14, 15, 18, 20 and 21 were not supported.

4.12 Summary of the Chapter

Chapter Four introduced the rationalisation for introducing PLS path modelling to test the theoretical model. After the assessment of the significance of the path coefficient, the crucial conclusion of the study was carried out. Self-report methods provided substantial backing for the mediating effects of trust on the relationships between informational support, emotional support, and perceived ease of use, perceived usefulness, perceived privacy, and attitude. Similarly, the mediating effect of trust on the relationships between informational support, emotional support, and perceived ease of use, perceived usefulness, perceived privacy and satisfaction was also tested. Finally, the mediating role of both satisfaction and attitude was tested on the social commerce intention. Particularly, the path coefficients revealed a significant positive relationship between (1) Emotional support, (2) Perceived Security, (3) perceived privacy, (4) Attitude, (5) Satisfaction, and (6) Social Commerce intention.

Next, Chapter Five discusses the findings as well as the implications, limitations, suggestions for further research directions and conclusions.

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.1 Introduction

Chapter Five discusses the main research findings associated with the theoretical perspectives and previous studies. Hence, Chapter Five involves recapitulating the findings of the present study, the discussions of the findings in the light of the underpinning theories. Theoretical, methodological and practical implications as well as the limitations of the study and suggestions for future research directions are included in this chapter.

5.2 Recapitulation of the Findings

The main objective of this study was to examine the mediating roles of trust, attitude, and satisfaction on the relationships between information support, emotional support, and perceived ease of use, perceived usefulness, perceived privacy, perceived security and .Similarly, the mediating effect of trust on the relationships between informational support, emotional support, and perceived ease of use, perceived usefulness, perceived privacy, perceived security and satisfaction was also tested. Finally, the mediating role of both attitude and satisfaction was tested on the social commerce in SNS as a platform among universities students in Saudi Arabia.

The present study succeeded in advancing the current understanding of the key determinants of the social commerce intention by providing answers to the following research questions.

1. What are the antecedent factors that influence the Saudi university students' trust in social commerce?

2. How does the Saudi university students' trust in the social commerce influence their satisfaction and attitude towards it?
3. How does the Saudi university students' satisfaction in social commerce influence their attitude towards it?
4. How do Saudi university students' satisfaction and attitude influence their intention to use social commerce?

Regarding the direct relationships between the exogenous latent variables and the endogenous variables, the results of the present study revealed that out of 11 hypotheses, 8 were reinforced. The result of the PLS path model demonstrated that the emotional support positively relates to trust, perceived security positively relates to trust, perceived privacy positively relates to trust, trust positively relates to attitude, trust positively relates to satisfaction, satisfaction positively relates to attitude, attitude positively relates to social commerce intention. Satisfaction was also found to be positively related to the social commerce intention. In contrast, the informational support was found to not significant to trust. At the same time, perceived ease of use was not significantly related to trust as well perceived usefulness was also not significantly related to trust.

With respect to trust, attitude and satisfaction as a mediator on the relationship between exogenous latent variables and endogenous latent variables, the results provided empirical support for 8 hypotheses. Specifically, trust was found to mediate the relationship between emotional support and attitude, between perceived security and attitude, between perceived privacy and attitude, between emotional support and satisfaction, between perceived security and satisfaction, and between perceived privacy and satisfaction. In addition, attitude is mediating the relationships

between trust and social commerce intention, and satisfaction is mediating the relationships between trust and social commerce intention.

However, it was proven that trust does not mediate the relationship between informational support and attitude, between the perceived ease of use and attitude, between perceived usefulness and attitude, between information support and satisfaction, between perceived ease of use and satisfaction, and between perceived usefulness and satisfaction.”

5.3 Discussion

This section discusses the findings on the association revealed between emotional support, informational support, perceived ease of use, perceived usefulness, perceived security, perceived privacy, trust, attitude, satisfaction, and the social commerce intention within the context of the university students in Saudi Arabia. It also discusses the mediating influence of trust, satisfaction, and attitude on the association between informational support, emotional support, perceived ease of use, perceived usefulness, perceived security, perceived privacy and attitude, satisfaction, and the social commerce intention.

5.3.1 The Influence of Informational Support on Trust

The first objective of the present study was to examine the relationship between trust and social commerce intention among university students in Saudi Arabia. In order to achieve this objective, hypothesis one mentioned that informational support positively relates to trust was tested using PLS path modelling. Contrary to the predicted hypothesis, the relationship between informational support and trust was proven to be not significant. Therefore, hypothesis one was not supported. Informational support refers to the support that an individual receives in the form of

advice, recommendations or knowledge that could assist them in tackling their problems (Huang, 2010). First, the results showed that a social factor such as informational support may not have played an incredibly significant role in facilitating the use of SNS as a platform of social commerce among university students in Saudi Arabia. This indicates that the more support received informational the more trust of Saudi university students' use and interface with social network sites. It seems that the social support in this study is one of the social factors involved in establishing a robust interface with SNS. One of the possible reasons for the lack of support for this hypothesis (Hypothesis 1) is the social support (informational support) simply because the informational support among social network members has not been able to make university students feel closer to one another and be more comfortable in exchanging information concerning SNS. In other words, a supportive climate has not encouraged the users of SNS among university students in Saudi Arabia to feel supported and absorb a sense of belonging. Another possible reason for the negative relationship may be because most university students in Saudi Arabian universities join a social networking web site with the aim of interacting with friends and family members comfortably and conveniently. In other words, without any supportive climate, the motivation for a continuance use and information sharing among Saudi university students would be decreased. The lack of informational support in the context of Saudi Arabia can be also probably traced back to the poor image of SNS among social commerce which carries a social and religious stigma associated with their use, Therefore, information support for the use of SNS platform among university students in Saudi Arabia is likely to be largely dependent on the support they receive from their families or religious authorities, particularly their family and friends. This is consistent with the

previous findings about SNS and Social commerce success (Alqahtani,2016).However, this finding is not supported by the theory.

5.3.2 The Influence of Emotional Support on Trust

The second objective of the present study was to investigate whether trust leads to higher customers' satisfaction and attitude in the social commerce context. This objective aimed at testing the hypothesis, which states that the emotional support positively relates to trust. The findings of the study revealed a significant positive relationship between emotional support and trust. Therefore, hypothesis two was supported. A significant and positive relationship showed that the emotional support which is one of the dimensions of social support helps increase the trust of social commerce in SNS platforms among university students in Saudi Arabia. Emotional support refers to the provision of messages concerning the emotional feeling, such as understanding, caring or empathy (Oh, Lauckner, Boehmer, Fewins-Bliss, & Li, 2013). The results showed that trust, encouraged by emotional support, significantly affected the interaction with SNS among university students in Saudi Arabia. When students are emotionally supported, it tends to encourage trust in SNS by their peers, and also by trusting in the SNS itself, they are more likely to intensify activities and interaction through SNS. This confirms the related hypothesis and answers the second research question.

5.3.3 The Influence of Perceived Ease of Use on Trust

Regarding hypothesis 3, contrary to the predicted hypothesis, the PLS path modelling results indicated that the perceived ease of use was found to be negatively associated with trust. Hence, the hypothesis (hypothesis 3) was not supported. The findings indicated that the plausible reason for the negative result and lack of

association between perceived ease of use implies sense conceptually; the users are encouraged to employ an application mainly because of the functions offered to them, and secondly because of the easiness or difficulty in performing those functions, and as a result, it they do not have trust in the system. For example, users often tend to cope with some difficulties of use in a system to be able to make purchases and transaction that offers critically the required functionality. In spite of the discouraging roles resulted from the adoption of a useful system, no amount of trust can replace ease of use or compensate for a system that is useful in performing the required task therefore ease of use purpose is defeated. In the context of this study, university students in Saudi Arabia probably do not have trust in their interface with SNS due to their inabilities to buy and sell and also promote business transactions simply because they have experienced that the systems are not functioning properly or there are difficulties towards ease of use applicability of social commerce of SNS. As a result, trust is the commodity that suffers in this association. This is in line with the study of (Amin, Rezaei, & Abolghasemi, 2014).

In addition, perceived ease of use had a negative impact on trust of social commerce towards SNS platforms because most of the students perceived that SNS are not easy to access. Moreover, the procedure is not easy to understand, interface and interact with the applications to find a platform to compare and benchmark the applications. Hence, the result of the present study supported Technology Acceptance Model (TAM) by Davis (1989) which states that perceived ease of use has a direct influence on trust and SNS. The influence of perceived ease of use on trust is not significant implies that although students perceive SNS as easy to use, it does not influence students' trust in SNS use in the context of social commerce intention.

5.3.4 The Influence of Perceived Usefulness on Trust

Perceived usefulness is defined as the belief that users of a technology believe that the technology will help them enhance their job performance (Davis, 1989). Perceived usefulness has been tested and validated by many scholars in the adoption of SNS platforms towards social commerce intention.

Through Hypothesis 4, an insignificant relationship between perceived usefulness and trust was found. This result suggests that the perceived usefulness does not have an impact on initial trust in SNS platforms for achieving social commerce intention by university students in Saudi Arabia. It further suggests that SNSs need to concentrate on the quality of the platforms that are provided for students. One of the reasons university students who constitute the users of SNS make regular and effective use of the SNS is because it is not complicated and not difficult to use. In other words, a site that is useful and easy to use can lead to an increase in trust for developing social commerce intention which is not the case from the result of this hypothesis.

This result is contrary to previous studies (Horst, Kuttschreuter, & Gutteling, 2007) which absorbed perceived usefulness as the basic predictor construct for trust because it enhances the role of value and the usability of technology in attracting the customer's satisfaction and loyalty among the university students in Saudi Arabia.

5.3.5 The Influence of Perceived Security on Trust

Perceived security refers to the degree of people's belief towards the presence of security of a particular SNS. Therefore, subjective security can be said to be a mirror image of risk similarity (Teh & Ahmed, 2012).

Based on hypothesis 5, a positive significant relationship between perceived security and trust was found; such finding is consistent with the Theory of Planned Behaviour that stipulates that the behavioral intention of an individual determines his/her actual behaviour (Ajzen, 1991). In other words, perceived security by university students in Saudi Arabia towards social commerce intention among SNS leads to trust in the platforms. This result is consistent with findings of previous research.

For instance, Damghanian, Zarei, and Siahsharani Kojuri (2016) discussed that perceived security control of SNS platforms strongly influences the initial trust among university students in Saudi Arabia. If the university students are less concerned with the unauthorized use or illegal access to their personal accounts or log-ins by third parties, they will have greater trust in SNS platforms, thus leading to a higher intention to interact with them. Hence, the present study indicated that perceived security is one of the main effective factors for interaction with SNS platforms by students during transactions which may include buying and selling and other related dealings. Also, while making use of SNS, students could probably worry about factors, such as hackers' access to their personal information, lack of required accuracy, having old security systems, and so on. Therefore, the higher the perceived security by students is, the more the students have trust towards SNS platforms and show greater interest towards social commerce intention.

This is in line with previous studies (Ho, Ocasio-Velázquez, & Booth, 2017; Sicari, Rizzardi, Grieco, & Coen-Porisini, 2015; Cho, Chan, & Adali, 2015; Schmid, Ramiah, & Hewstone, 2014). Also, the positive effect of trust on SNS platforms proven in the present study agrees with the findings in previous studies (Sicari et al., 2015; Neama & Alaskar, 2016). This implies that if the students think that SNS platforms have the necessary security protections for conducting effective SNS operations and consider what is best for the end users, students' trust will increase towards developing social commerce intention. In addition, if SNS platforms show commitments and ethics and perform accordingly, the more the students' trust would be towards them.

5.3.6 The Influence of Perceived Privacy on Trust

Perceived privacy refers to an individual's ability to control the terms by which his/her personal information is acquired and used (Bonsón Ponte, Carvajal-Trujillo, & Escobar-Rodríguez, 2015; Wang & Lin, 2017). Transactions on the internet are mainly associated with the privacy aspects, such as obtaining, distribution or non-authorized use of the personal information (Chang, Wong, & Lee, 2015). New technologies' growing capacity for information processing, as well as their complexity have made privacy increasingly an important issue.

Based on hypothesis 6, a significant positive relationship between perceived privacy and trust was found and this finding is consistent with the Theory of Planned Behaviour that stipulates that the behavioral intention of an individual determines his/her actual behaviour (Ajzen, 1991). This result suggests that students' perception of privacy is influenced by trust. In other words, perceived privacy has a significant

influence on trust of the university students in Saudi Arabia towards developing social commerce intention.

Consequently, the present study develops the perceived privacy construct as one of the chief determinants of trust in SNS acceptance. Two significant predictors reflect current SNS trends: (1) students have concerns with the vulnerability of SNS privacy breaches when they use SNS and (2) perceived privacy directly affects trust in SNS.

The present study discusses that perceived privacy has a direct and significant relationship with trust, which supports H6. Privacy is a fundamental concern of university students in Saudi Arabia in the context of this research who tend to interact with SNS. These results show that the individual user finds social media sites trustworthy and secure. Also, whenever the students believe that their data are confidential, their perceptions platform reflect that the social media platform as more reliable. Clearly, the perception of privacy has a powerful influence on trust. That is, perceived privacy enhances the social ties by reducing online information privacy concerns; this is an important finding for social media platforms since it suggests that developing a well- structured privacy policy will enhance the user's interactions on the platform. Thus, these policies could help social media sites maintain their popularity in the long run. The findings from the study are congruent with these studies (Shin, 2010; Carlos Roca, José García, & José de la Vega, 2009).

5.3.7 Influence of Trust on Attitude

Mayer, Davis, and Schoorman (1995) associate trust to

the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action

important to the trustor, irrespective of the ability to monitor or control that other party (p. 712).

For face to face, trust is a critical determinant of sharing information and developing new relationships (van den Heuvel, Schalk, & van Assen, 2015). Trust is also important for successful SNS interactions (Filkowski, Anderson, & Haas, 2016). For Van den Heuvel, Schalk, and van Assen (2015), attitude is conceptualized as a person's positive or negative perception towards the performance of a target behaviour.

As a result, the present study hypothesized that trust positively relates to attitude. That is, the findings revealed a significant positive relationship between trust and attitude. In other words, trust was found to be important in predicting the attitudes of SNS users towards developing positive social commerce intentions. To attract the participation of university students in Saudi Arabia in the SNS, the SNS providers need to develop strategies to cultivate trust that will guarantee positive attitudes toward the use of SNS. The results indicated that providing user-friendly and useful websites to university students in Saudi Arabia is an important precondition for generating trust thus leading to positive attitudes. The changes in attitudes occur rapidly because of the influence of trust. In this regard, Singh, Tay, and Sankaran (2017) mentioned that many theories and programs have been developed to produce positive attitudes, such as the direct influence of trust (e.g. improving people's motivations, abilities, memories or mood states). Although attitudes can change more quickly, continuous efforts should be also given to maintain the attitude, which is temporary, unstable, and malleable (Al-Hujran, Al-Debei, Chatfield, & Migdadi, 2015). The motivations, skills, experience, and trust levels influence the

development and the maintenance of the attitude. Therefore, maintenance and change of attitude ,which are influenced by trust, should be considered as a complementary tool to traditional application techniques that can be used to improve university students in Saudi Arabia's acceptance of SNS (Myeong, Kwon, & Seo, 2014). This result is similar to results from previous researches who studied the role of trust of attitude (Salam, Iyer, Palvia, & Singh, 2005; Shin, 2013).

5.3.8 Influence of Trust on Satisfaction.

Satisfaction is defined as the feeling of contentment, which arises from actual performance with respect to the expected performance (Hernon & Whitman, 2001). The findings in the present study hypothesized that trust positively relates to satisfaction. Interestingly, the findings revealed a significant positive relationship between trust and satisfaction.

In addition, the present study hypothesized that trust is significant and positively related to satisfaction (Hypothesis 8). In other words, the findings revealed a positive and significant relationship between trust and satisfaction.

The findings of the study supported the premise that in Saudi Arabian culture, university students' interaction with SNS as well as requisite trust in it are very important determinants of their satisfaction towards using SNS platforms for achieving social commerce objectives. These results are in line with Amin, Rezaei, & Abolghasemi, (2014)who found positive relationships between trust and satisfaction.

The present study showed that the university students' satisfaction in Saudi Arabia is a direct antecedent of their trust in SNS. This result is in line with the finding of

previous studies, which stated that a high level of students' trust in SNS will lead to a greater satisfaction (Yahya & Dahlan, 2015). The study also showed that SNS trust is a strong determinant of student's satisfaction. This implies that trust could be considered as an independent constituent or a concept of the SNSs in the Saudi cultural context. This is in line with the Theory of Planned Behaviour, which stipulates that the behavioral intention of an individual determines his/her actual behaviour (Ajzen, 1991).

5.3.9 Influence of Satisfaction on Attitude.

Similarly, this study also hypothesized that satisfaction is significant and positively related to attitude (Hypothesis 9). That is, the findings revealed a positive and significant relationship between satisfaction and attitude. Based on the findings of the present study, the attitude and satisfaction have a direct, significant influence on SNS platforms, thus implying that satisfaction is an essential variable for guaranteeing SNS success. In return, attitude reinforces satisfaction with SNS use. Therefore, university student's satisfaction towards the use of SNS can be achieved if the students have a favourable attitude towards SNS for the sake of achieving social commerce intentions. The attitudinal disposition of the students is compensated for by the benefits and satisfaction provided by SNS use. Consequently, the present study concludes that students' access to SNS is to establish social links with their friends/relatives/acquaintances, amuse themselves, have fun, and follow a fashion or achieve a social status. It is propelled by the degree of satisfaction reinforced by attitude. These gratifications stemming from using reinforce the individual's attitudes towards SNS use. This consideration must be taken into account when considering the attitudinal disposition and satisfaction of the university students in Saudi Arabia. Consequently, this result is similar to the

findings of Garbarino and Johnson, (1999) who revealed that satisfaction plays a significant role in explaining the reinforcement of attitude by university students inside the Saudi Arabia country. This indicates that university students' behavioural intention is determined by their actual behaviour (Ajzen, 1991).

5.3.10 The Influence of Attitude on Social Commerce Intention.

The social commerce generally refers to the conveyance of e-commerce activities and communications through the social media situation, mostly in social networks by the use of "Web 2.0" software. Hence, the social commerce can be reflected a subcategory of e-commerce that includes using social media for assessing in e-commerce communications events, and activities. It also supports social connections and user's content assistances. In essence, it is a mixture of commercial and social activities (Hajli, Wang, Tajvidi, & Hajli, 2017).

The present study also hypothesized that attitude is significant and positively related to the social commerce intention (Hypothesis 10). The findings revealed a positive and significant relationship between attitude and social commerce intention. Therefore, identifying the key constructs that influence the attitude towards the social commerce intention helps further understands the university students' willingness to join those SNS. However, this claim is not to suggest that the actual SNS membership depends entirely on attitudes toward such sites or intentions toward joining. Attitude only plays a part in gauging intentions, whereas actual SNS and other user-generated site membership depends on several variables, including the nature of the site, topical relevance, the strength and nature of the user's relationship with other members.

It appears that the university students' social commerce intention to interact with SNS platforms in Saudi Arabia are predicted by an attitude towards those sites, which is influenced by beliefs about the benefits of such interaction. In this study, the importance of attitude has an influence on social commerce intention. In addition to the suggestion posited in the past (Ng et al., 2013) the results in the present study empirically demonstrated the importance of considering the effects of attitude on the social commerce intention within the context of the university students in the kingdom of Saudi Arabia.

Moreover, the present study showed that attitude has a greater influence on social commerce intentions of students who are highly engaged with the social commerce initiatives. This effect is consistent with the results reported by (Ng et al., 2013), that focused on the influence of attitude on the social commerce intention.

5.3.11 Influence of Satisfaction on Social Commerce Intention.

In the present study, it was also hypothesized that satisfaction is significant and positively related to the social commerce intention (Hypothesis 11). The findings revealed a positive and significant relationship between satisfaction and social commerce intention. Therefore, identifying the key constructs that influence satisfaction towards the social commerce intention provides more clarification on the university students' willingness to make effective use of SNS towards building social commerce intention.

Hence, improving the relationship quality through satisfaction influences the social commerce intention and makes SNS a viable platform for Saudi Arabia university student's interaction with SNS. This can predict the behaviour of the students in this social commerce era, which is a contribution by the present study. This suggest that

satisfaction increases as students feel in control of the SNS platforms for making purchases and transaction related interfaces. It also shows that the university students can interact with the SNS platforms easily as well as are able to concentrate on the specific tasks they would like to engage in. This finding shows that the present study provided an insight into the factors impacting satisfaction on social commerce intention. Such findings basically provide supports for recognizing the importance of the student's satisfaction with SNS and the level of interaction that is necessary for SNS satisfaction.

This result is in link with the findings of earlier studies in the area of SNS platforms and university students in Saudi Arabia, thereby showing that students' satisfaction with SNS platforms leads to greater social commerce intention (Lu, Fan, & Zhou, 2016). The findings also showed that satisfaction in SNS platforms is a factor of students's social commerce intention thus implying that satisfaction is a self-determining paradigm or concept of SNS in the Saudi culture. This is congruent with the Theory of Planned Behaviour, which stipulates that the behavioural intention of an individual determines his/her actual behaviour (Ajzen, 1991).

5.3.12 Mediating Effect of Trust on the Relationship between Informational Support and Attitude

Hypothesis 12 is formulated in order to answer the question on whether trust is mediating the relationships between informational support and attitude within the context of the university students in the kingdom of Saudi Arabia. The results revealed a different fact. That is, it is proven that trust does mediate the relationship between informational support and attitude. Therefore hypothesis 12 is not supported. One possible explanation for the lack of significant mediation effect of

trust on the relationship between informational support and attitude may be attributed to the reason that university students in Saudi Arabia probably do not have sufficient informational support that can lead to trust in interacting for achieving social commerce intention with SNS simply because some previous interactions have only predicted negative attitudes (Lien, & Cao, 2014).

5.3.13 Mediating Effect of Trust on the Relationship between Emotional Support and Attitude

The hypothesis 13 is formulated to answer the question on whether trust is mediating the relationships between attitude and emotional support within the context of the university students in the kingdom of Saudi Arabia. Using PLS-SEM, the result proved that trust is mediating the relationships between emotional support and attitude, and this supports the conditions of mediation as stipulated by Hayes (2009), Hair et al. (2010), and Baron and Kenny (1986). The result showed that hypothesis H13 is accepted and supported. This revealed that trust influences emotional support thus enhancing the attitude. This finding helps fill the gap in literature with regard to the role of trust as a mediator in the relationship between emotional support and attitude, specifically in the Saudi Arabian context.

The finding indicated that trust enhances the emotional support of students in Saudi Arabian universities. This showed that students of Saudi Arabian universities enjoy emotional support by invoking trust. Hence, it can be argued that Saudi Arabian student's trust plays an important role through which emotional support can help shape the attitude of university students towards the social commerce intention.

The findings showed a mediated relationship of the role of emotional support on attitude, whereby trust serves as a channel in enhancing the relationships between

attitude and the emotional support. In the context of the present study, when students of Saudi Arabian universities receive emotional support towards the interaction in SNS platforms, they also intensify trust in influencing positive attitudes towards boosting greater social commerce intention. This is because the effect of emotional support is not only caused by attitude but also resulted by the mediated influence of trust.

This is supported by the Theory of Planned Behaviour in the sense that the main contribution and postulation of the theory is that the behavioural intention of an individual determines his/her actual behaviour. In this model, the behavioural intention is influenced by attitude, subjective norms, and perceived behavioural control (Ajzen, 1991).

Previously, Holland, Cooper, and Sheehan (2016) confirmed that attitude is a determining factor of trust among Saudi Arabian students. Previous studies further affirmed that emotional support and attitude are largely influenced by trust (Zainal, Harun, & Lily, 2017; Jung, Kim, & Kim, 2014). This is consistent with the Theory of Planned Behaviour, whereby it was found that the emotional support significantly influences attitude through trust. The findings revealed that trust is a mechanism through which emotional support influences positive attitudes among students of Saudi Arabia universities. Therefore, the existence of trust serves as a way through which emotional support influences the positive attitudes of university student's social commerce intentions.

5.3.14 Mediating Effect of Trust on the Relationship between Perceived Ease of Use and Attitude

Hypothesis 14 is formulated to answer the questions regarding the mediating role of trust between the attitude and the perceived ease of use among university students in the kingdom of Saudi Arabia. The results revealed that trust does not mediate the relationship between perceived ease of use and attitude. Therefore, hypothesis 14 is not supported. One possible explanation for the lack of significant mediation effect on the relationship between perceived ease of use and attitude may be attributed to the fact that university students in Saudi found difficulty in using social network sites easily in purchasing or financial transactions. Therefore, they do not have sufficient trust, thus probably leading to the display of unpredictable negative attitudes on the part of the students towards SNS platforms as well as weak social commerce intention.

The findings also showed that trust is a weak factor of the perceived ease of use and attitude. In other words, trust can be argued as an independent constituent or a concept of the SNSs social commerce intention in the Saudi cultural context. However, this finding is in contrast with the findings of (Eid, 2011). Consequently, the weak association between the perceived ease of use and attitude could be attributed to trust, which depends on the perceived ease of use. This might be considered by the students of Saudi universities as typical and a standard constituent of acceptable SNS platforms. Regardless of how much university students trust SNS Platform; this will not affect their intention to keep interacting with it.

It seems that trust is an important element for successful and effective tools for maintaining SNS platforms. In this regard, the findings showed that to have trust in

SNS platforms, students of Saudi Arabian universities should be affected by the user's interface quality and the information provided related to the product/service, order customization, and personalized Web pages by SNS platforms. This result is in agreement with the result of previous studies, stating that trust is not mediating the relationship between the perceived ease of use and attitude (Wu, Zhao, Zhu, Tan, & Zheng, 2011).

5.3.15 Mediating Effect of Trust on the Relationship between Perceived Usefulness and Attitude

Hypothesis (H15) answers the questions related to the trust's role in mediating the relationship between perceived usefulness and attitude among university students in Saudi Arabia. Apparently, the findings illustrated that the relationship between the perceived usefulness and attitude is not mediated by trust. Therefore, hypothesis 15 is not supported. A plausible explanation for the lack of a significant mediating influence on the relationship between perceived usefulness and attitude may be because university students in Saudi Arabia do not usefulness in their interaction with SNS and thus hampering their social commerce intentions.

The finding in the present study showed that SNS has not made students' work and life in Saudi Arabia easier especially when making purchasing decisions. In addition, the findings showed that the students are probably not allowed to have easy acquisition of the required information and, more generally, perceive it as useful. Therefore, the interaction with SNS platforms should be easy and proficient. To enhance trust, users have to be honest in using SNS. In addition, mobile SNS providers might not care much towards the social media concerns of the students. Rather, SNS providers are more concerned with their interest and

profit motives only. Nowadays, both online and mobile transactions are associated together. Therefore, to carry out their online transactions, the customers have to provide their hand phone numbers. This issue clarifies and determines the essential effect of trust on the SNS platforms. The significance of trust was emphasized in both electronic and mobile commerce due to the spatial and temporal separations between the buyers and sellers and the necessity to provide confidential personal information, including the credit card details to the seller (Al-Husein & Sadi, 2015). Importantly, the relationship between trust, perceived usefulness, and attitude is supposed to be the opposite. Therefore, trust could be employed for predicting the attitude of the university students in their use of SNS and as well as for achieving social commerce intentions. The finding is in line with the findings of the previous studies. In short, the usefulness of the services provided by SNS is dependent on students' trust and attitude (Amin et al., 2014).

5.3.16 Mediating Effect of Trust on the Relationship between Perceived Security and Attitude

Hypothesis 16 is formed to answer the questions related to the mediating role of trust mediates between perceived security and attitude among university students in Saudi Arabia. The results demonstrated that trust mediates the relationships. This supports the conditions of mediation as stipulated by Hayes (2009), Hair et al. (2010), and Baron and Kenny (1986). Hence, the results showed that hypothesis 16 is accepted and supported. In other words, trust influences perceived security to enhance attitude. This finding fills the gap related to trust's role as mediating the relationship between perceived security and attitude, specifically in the Saudi Arabian context.

The findings in the present study revealed that the perceptions of security by students of Saudi Arabian universities towards SNS platforms does facilitate trust, thereby leading to strong positive attitudes towards SNS, which is consistent with the findings of previous research. For example, Riquelme and Román (2014) found that perceived security of the SNS strongly influences trust in the SNS. If the students in Saudi Arabian universities would become less concerned and have less fear about the possibilities of unauthorized use or illegal access to their personal and financial data by third parties, they will have greater trust and develop better attitudes towards SNS. Consequently, this will result in a higher social commerce intention. Thus, SNS platform providers should improve their web security features in order to enhance the trust of university students as well as achieve more positive attitudes towards SNS platforms.

This mediation result is supported by the Theory of Planned Behaviour in the sense that the main contribution and postulation of the theory is confirmed. The underpinning assumptions of the Theory of Planned Behaviour model is that behavioural intention of an individual determines his/her actual behaviour. In this model, the behavioural intention is influenced by attitude, subjective norms, and perceived behavioural control (Ajzen, 1991).

Safa and Von Solms (2016) confirmed that the attitude is a determining factor of trust among students of Saudi Arabian universities towards SNS platforms. The literature further affirms that perceived security and attitude are largely influenced by trust deployed by student's social commerce intention in SNS (Zainal, Harun, & Lily, 2017; Jung, Kim, & Kim, 2014). This is consistent with the Theory of Planned Behaviour, whereby it was found that perceived security significantly influences

attitude through trust. The findings revealed that trust is a mechanism through which perceived security influences positive attitudes among students of Saudi Arabia universities. Therefore, the existence of trust serves as a way through which perceived security influences the positive attitudes of university students towards the social commerce intentions.

5.3.17 Mediating Effect of Trust on the Relationship between Perceived Privacy and Attitude

Hypothesis 17 is formulated to answer the research questions regarding the mediating role of trust between perceived privacy and attitude among university students in Saudi Arabia. The results based on PLS coefficient path model revealed that trust is mediating the relationships between perceived privacy and the attitude. This supports the conditions of mediation as stipulated by Hayes (2009), Hair et al. (2010) and Baron and Kenny (1986). Hence, hypothesis 17 is accepted and supported. This shows that perceived privacy is influenced by trust to enhance attitude. As a result, this finding enriches the literature with regard to the role of trust as a mediator in the relationship between perceived privacy and attitude, specifically in the context of students at Saudi Arabian universities.

This finding also shows the impact of perceived privacy on trust and attitude towards SNS platforms. The results indicate that a user's privacy concern positively influences trust and attitude towards SNS; the positive effects of perceived privacy on students' attitude towards SNS could be further sustained by building trust over the use of SNS platforms. In essence, trust building and creating a favourable attitude could lessen the negative impacts of privacy concerns and increase the possibilities of social commerce intentions towards using SNS platforms.

Apparently, attitude and trust are found to be significantly predicting social commerce intention in SNS. Also, protecting privacy of the users could enhance trust, attitude and intention since perceived privacy or unwillingness to provide personal search information only aids in forming distrust and unfavourable attitude towards SNS. This eventually curtails the future intention of using SNS for finding online information. Users would also consider the trust beliefs based on their past usage for developing a good or bad attitude towards SNS. In brief, attitude plays a significant role in the intention of using SNS.

This mediation result is supported by the Theory of Planned Behaviour because it confirms the main contribution and assertions of the theory. The main assumptions of Theory of Planned Behaviour model are that behavioural intention of an individual determines his/her actual behaviour. In this model, the behavioural intention is influenced by attitude, subjective norms, and perceived behavioural control (Ajzen, 1991).

In this regard, Joinson, Reips, Buchanan and Schofield (2010); Kehr, Kowatsch, Wentzel, Fleisch (2015), Alder, Noel, Ambrose (2006) and Shin (2010) found that perceived privacy is a determining factor of trust among Saudi Arabian students towards SNS platforms. The literature further affirmed that perceived privacy and attitude are largely influenced by trust deployed by student's social commerce intention in SNS (Allothman, Robertson, & Michaelson, 2017). This is consistent with the Theory of Planned Behaviour, whereby it was found that perceived privacy significantly influences the attitude through trust. The findings illustrated that trust is a mechanism through which perceived privacy influences positive attitudes among students of Saudi Arabian universities which can boost their SNS initiatives and

believes. Therefore, the existence of trust serves as a way through which perceived privacy influences the positive attitudes of university student's social commerce intentions.

5.3.18 Mediating Effect of Trust on the Relationship between Informational Support and Satisfaction

Hypothesis 18 is formed to answer research questions related to the possible mediating role of trust between informational support and attitude satisfaction. Apparently, the results demonstrated that trust does not mediate the relationship between informational support and satisfaction. Therefore hypothesis 18 is not supported. A plausible explanation for the lack of significant mediation effect on the relationship between informational support and satisfaction may be because university students in Saudi Arabia do not find it useful when making purchasing decisions via SNS and as a result, they have no favourable attitude and disposition towards SNS platforms.

The finding also showed that satisfaction has a direct ancestor of the informational support in the SNS platforms. This result also agrees with the previous findings, which proved that low levels of informational support leads to a lower satisfaction (Utz & Breuer, 2017). The study also illustrated that SNS trust is a weak determinant of satisfaction, thereby implying that trust in SNS platforms is an independent construct or concept of student's satisfaction in the Saudi cultural context. However, this finding does not support the results of Alosaimi et al. (2016). An explanation of the weak relationship and the lack of mediation between trust, informational support, and satisfaction is attributed to trust as dependent on informational support and satisfaction might not be considered by students of Saudi universities as a basic

element of an acceptable social commerce intention. Regardless of the amount of trust the students have towards SNS, this might affect the individual's intention to continue performing business and extended relationship towards a robust social commerce intention. In this regard, it can be reported that informational support and satisfaction are significant for embarking successful SNSs. That is, the result showed that for Saudi university students to be more satisfied with SNS, they need to be impressed with sufficient information. The identified weak relationship and lack of mediation between trust, informational support, and satisfaction of students in Saudi universities corroborates the findings of Harasemiw, Newall, Shooshtari, Mackenzie, and Menec (2017) who pointed out a similar result related to Canadian online B2C customers.

5.3.19 Mediating Effect of Trust on the Relationship between Emotional Support and Satisfaction

Hypothesis 19 is formed to investigate whether trust is mediating the relationships between emotional support and satisfaction in the context of the social commerce. The findings revealed that trust mediates the relationship between emotional support and satisfaction. Therefore, hypothesis 19 is supported. The results of the mediation test revealed that to increase trust towards SNS platforms among university students in Saudi Arabia, emotional support is required, thereby leading to satisfaction. Emotional support refers to the provision of messages concerning emotional feeling, such as understanding, caring or empathy (Liang & Turban, 2011). The results showed that trust enhances emotional support, thus significantly affecting satisfaction levels in interaction with SNS. In other words, when students are emotionally supported, it will result in encouraging trust in SNS by their peers thereby guaranteeing satisfaction and improved social commerce intention.

The findings of the present study is consistent with Agnihotri, Dingus, Hu, and Krush (2016) who confirmed that trust is a determining factor when mediating the relationship between emotional support and satisfaction among students of Saudi Arabian universities. Reviewing past studies confirmed that emotional support and satisfaction are largely affected by students' trust in SNS (Lönnqvist & Große Deters, 2016; Bazarova, Choi, Schwanda Sosik, Cosley, & Whitlock, 2015). Hence, this finding is in congruence with the Theory of Planned Behaviour, which suggests that trust and emotional support significantly influence satisfaction. The findings have further shown that trust is a mechanism through which emotional support influences satisfaction through the mediating role of trust among students of Saudi Arabia universities. Therefore, the existence of trust serves as a way through which emotional support can lead to the satisfaction of university students in Saudi Arabia.

The findings also provided support for the Theory of Planned Behaviour, which stipulates that the behavioural intention of an individual determines his/her actual behaviour (Ajzen, 1991).

5.3.20 Mediating Effect of Trust on the Relationship between Perceived Ease of Use and Satisfaction

Hypothesis 20 is formed to answer the research questions on whether trust mediates the relationships between the perceived ease of use and satisfaction within the context of university students in the kingdom of Saudi Arabia. Surprisingly, the results revealed that trust does not mediate the relationship. Therefore, hypothesis 20 is not supported. A possible explanation for the lack of significant mediation effect on the relationship may be because that university students in Saudi Arabia evaluate costs and benefits of using the systems if they found that the SNS is not easy to use

and could be trusted for the general reliability of the technology and its correct functioning especially if the technology is not widely used (Amin, Rezaei & Abolghasemi, 2014). Similarly, the students might not realize the benefits of the SNS in relation to its educational facility such as downloading lecture materials at anytime and anywhere. It is also possible that teachers might not have been aware that their students do not know about all the facilities, such as receiving immediate feedback to correct misunderstood materials. Adequate explanations should be made in order to explain to the students the usefulness of the SNS, such as downloading lecture materials at any time. This could imply that universities executives, instructors, and software vendors might not have been offering easy-to-use and trusted SNS applications for the students. Consequently this might have negative effect on student's social commerce intention.

5.3.21 Mediating Effect of Trust on the relationship between Perceived Usefulness and Satisfaction

With respect to hypothesis 21, it answers the research questions on whether trust mediates the relationship between perceived usefulness and satisfaction among university students in Saudi Arabia. The result proved that trust could not mediate the relationship between perceived usefulness and satisfaction. Thus, hypothesis 21 is not supported. The possible reason for this may be because perceived usefulness does not appear to have a strong impact on students' satisfaction. This goes to say that the students may not be finding the usefulness of SNS when making purchasing decisions as well as other interface abilities. This also may have severe impact on their social commerce intention. Consequently, the results of the present study agree with the findings conducted earlier (Hong, Cao, & Wang, 2017; Hsiao, Chang, & Tang, 2016; Lacka & Chong, 2016). Hence, end users are likely to be more satisfied

with SNS if they believe that using the system will increase their performance and productivity, which doesn't seem to be the case regarding this hypothesis (Shin, Lee, & Yang, 2017).

5.3.22 Mediating Effect of Trust on the Relationship between Perceived Security and Satisfaction

Hypothesis 22 is formed to answer the research question regarding whether trust mediates the relationship between perceived security and satisfaction among university students in Saudi Arabia. The results based on PLS co-efficient path modelling show that trust is mediating the relationships between the perceived security and the satisfaction, and this supports the conditions of mediation as stipulated by Hayes (2009), Hair et al. (2010) and Baron and Kenny (1986). Accordingly, hypothesis (H22) is accepted and supported. This shows that trust influences perceived security to enhance satisfaction. This finding helps fill the gap in literature regarding the roles played by trust mediating the relationships between perceived security and satisfaction, specifically in the context of Saudi Arabia.

The findings imply that the perception of security among students in Saudi Arabian universities towards SNS platforms does facilitate trust, thereby leading to a higher satisfaction towards SNS, and this is consistent with previous research. This shows that the level of security risk as perceived by students of Saudi Arabian universities is a pertinent criterion for trust, and thus, security and trust are vital for the improvement of SNS in Saudi Arabia. Also, perceived security and trust have influences on satisfaction indirectly since trust has a complete mediating role between the perceived security risk, perceived privacy, and satisfaction. The trust in relation to security as perceived by the students is found to significantly influence

trust, thus leading to a higher satisfaction. This implies that students of Saudi universities perceive SNSs as credible when providing a greater level of security reliability in the process of interaction. This consequently limits the consumers' concerns regarding the privacy security and assists in building trust toward the SNSs platforms.

Previously, Alwagait, Shahzad, and Alim (2014) discovered that perceived security of the SNS strongly influences trust in SNS. If the students in Saudi Arabian universities should become less concerned and have less fear towards the possibilities of security breach or illegal access to their confidential information by third parties, they will have greater trust and achieve a higher satisfaction towards SNS, thereby leading to a higher social commerce intention. Thus, SNS platform providers should improve their web security features in order to enhance the trust among students of universities as well as increase the level of satisfaction towards SNS platforms. This result is supported by the Theory of Planned Behaviour in the sense that the main contribution and postulation of the theory is confirmed.

Also, Alassafi, Alharthi, Walters, and Wills (2017) confirmed that trust is a determining factor of perceived security and satisfaction among Saudi Arabian students. The studies further affirmed that perceived security and satisfaction are largely influenced by trust deployed by student's social commerce intention towards SNS (Van Tubergen, Ali Al-Modaf, Almosaed, & Said Al-Ghamdi, 2016). This is consistent with the Theory of Planned Behaviour, whereby it was found that perceived security significantly influences satisfaction through trust. The findings revealed that trust is a mechanism through which perceived security leads to a higher satisfaction among students of Saudi Arabia universities. Therefore, the existence of

trust serves as a way through which perceived security can guarantee the satisfaction of university student's social commerce intentions.

5.3.23 Mediating Effect of Trust on the Relationship between Perceived Privacy and Satisfaction

Hypothesis 23 is formed to answer the research questions related to the mediating role of trust between perceived privacy and satisfaction among university students in Saudi Arabia. The results of PLS coefficient path modelling showed that trust mediates the relationship between perceived privacy and satisfaction, and this supports the conditions of mediation as stipulated by Hayes (2009), Hair et al. (2010), and Baron and Kenny (1986). As a result, hypothesis 23 is accepted and supported. This shows that trust influences perceived privacy to enhance satisfaction. This finding helps fill the gap in the literature related to the role of trust as a mediator in the relationship between perceived privacy and satisfaction, specifically in the Saudi Arabian context.

The findings revealed the extent to which trust by students of Saudi Arabian universities towards SNS platforms does facilitate the privacy concerns, which leads to a higher satisfaction towards SNS, and this finding is consistent with previous research. This shows that the level of privacy concerns as perceived by students of Saudi Arabian universities is pertinent criteria for trust and is therefore considered crucial for the progress of SNS in the context of Saudi Arabia. In addition, both the perceived privacy and trust have influencing effect on satisfaction indirectly, since trust was found to have a comprehensive mediating role between the perceived privacy and satisfaction. The student's perception towards privacy is significantly influenced by trust, which in return leads to a higher satisfaction. This implies that

students of Saudi universities perceive SNS as trustworthy when providing a greater level of security in their interactions. This consequently decreases the consumers' concerns towards privacy and assists in building online trust towards the SNS platforms which has the propensity to increase social commerce intention.

Previously, Jin, Line, and Merkebu (2016) also discovered that perceived privacy of the SNS strongly influences trust in the SNS. This indicates that students in Saudi Arabian universities should become assured that their privacy is protected, and then they will have greater trust and achieve a higher satisfaction towards SNS. This will lead to higher social commerce intention. Thus, SNS platform providers should do more to increase the privacy protection features to enhance the trust of university students as well as increase the level of satisfaction towards SNS platforms. The result is supported by the Theory of Planned Behaviour in the sense that the main contribution and postulation of the theory is confirmed.

In addition, Aldas-Manzano, Ruiz-Mafe, Sanz-Blas, and Lassala-Navarre (2011) confirmed that trust is a determining factor of perceived privacy and satisfaction among students of Saudi Arabian universities. The findings of the previous studies further affirmed that perceived privacy and satisfaction are largely influenced by trust that is deployed by student's social commerce intention in SNS (Oh, Chung, & Park, 2016; Aleisa & Renaud, 2017). This is consistent with the Theory of Planned Behaviour, whereby it was found that perceived privacy significantly influences satisfaction through trust. The findings revealed that trust is a mechanism through which perceived privacy leads to a higher satisfaction among students of Saudi Arabia universities. Therefore, the existence of trust serves as a way through which

perceived privacy can guarantee the satisfaction of university student's social commerce intentions.

5.3.24 Mediating Effect of Attitude on the Relationship between Trust and Social Commerce Intention.

Hypothesis 24 is formed to answer the research questions related to the possible mediating role of attitude between trust and social commerce intention among university students in Saudi Arabia. The results of PLS coefficient path modelling demonstrated that attitude mediates the relationship between trust and social commerce intention, which supports the conditions of mediation as stipulated by Hayes (2009), Hair et al. (2010), and Baron and Kenny (1986). The results showed that hypothesis 24 is accepted and supported. This finding shows that attitude impacts trust towards enhancing the social commerce intention. Such findings help fill the gap in the literature concerning the role of attitude as a mediator in the relationship between attitude and social commerce intention, specifically in the Saudi Arabian context.

The findings imply that attitude mediates the relationship between trust and social commerce intention, thus supporting H24. Hence, this study expects that as the level of students' social commerce intention to interact with SNS increases, the students will consider using SNS regularly, which in return motivates them to have more trust and develop greater social commerce intention. Several SNS studies have investigated the direct or mediating role of attitude. For example, Al-Debei, Akroush, and Ashouri, (2015) examined the direct influence of attitude on students' continuous interaction with SNS in Saudi Arabia. Alsuraihi et al. (2016) investigated the role of attitude as a moderating factor between trust and social commerce

intention. Meanwhile, this study is one of the first studies that aimed at investigating the mediating role of attitude within the SNS context. So, further research is required to validate this relationship. This finding is consistent with the Theory of Planned Behaviour, since it was found that the attitude can significantly influence social commerce intention through trust. The findings revealed that attitude can be a mechanism through which trust leads to higher social commerce intention among students of Saudi Arabia universities. Therefore, the existence of attitude serves as a way through which trust can be further boosted in order to ensure better university student's social commerce intentions.

5.3.25 Mediating Effect of Satisfaction on the Relationship between Trust and Social Commerce Intention.

Hypothesis 25 is formulated to answer the research questions related to whether satisfaction is mediating the relationship between trust and the social commerce intention among Saudi Arabian university students. The results of PLS coefficient path modelling showed that satisfaction is mediating the relationship between trust and the social commerce intention, thereby supporting the conditions of mediation as proposed by Hayes (2009), Hair et al. (2010), and Baron and Kenny (1986). Hence, hypothesis 25 is accepted and supported. The findings of the study could contribute to the literature by filling the gap in the literature concerning the role of satisfaction as a mediator in the relationship between attitude and social commerce intention, specifically in the Saudi Arabian context.

The finding in the present study finds that satisfaction is positively mediating the relationships between trust and the social commerce intention. The effect of satisfaction on trust becomes stronger when the social commerce intention is higher.

This mediating effect implies that satisfaction can be an important source of trust only under the condition of high rather than low social commerce intention. In other words, students of Saudi Arabian universities may become more hesitant to trust if their social commerce intention is not in place. This finding is an important contribution for scholarly understanding on how satisfaction and trust are evaluated in the existing SNS relationships. This finding reveals that, in general, positive satisfactory outcomes of previous relationships would enhance greater trust Eid, (2011). and, in particular, the satisfaction among students of Saudi universities will more likely lead to higher trust (Pothong & Sathitwiriawong, 2017). Consequently, the present study is among the first ones to address this theoretical gap in the SNS literature by theorizing and empirically verifying the important roles of the SNS institutional infrastructure in affecting satisfaction, trust, and social commerce intentions in existing SNS relationships platforms.

Further, this finding advances our understanding of the relationship between satisfaction and trust. Though several studies have examined their respective direct effects on social commerce intention (Flavián, Guinalíu, & Gurrea, 2006; Ribbink, Van Riel, Liljander, & Streukens, 2004), limited studies have recognized that different sources of satisfaction and trust could complement each other. In essence, this finding enriches the existing literature by demonstrating that an institution-based trust complement such as (satisfaction) can mediate to produce an additional influence on students' trust in SNS platforms. This is consistent with the Theory of Planned Behaviour, since it was reported that satisfaction can significantly influence the social commerce intention through trust. The findings of the present study revealed that satisfaction can be a mechanism through which trust leads to higher social commerce intention among students of Saudi Arabia universities towards SNS

platforms. Therefore, satisfaction serves as a way through which trust can be further boosted to ensure better university students social commerce intentions.

5.4 Theoretical Implications

The conceptual framework for the present study is based on several previous empirical evidences as well as theoretical gaps identified in literature. Thus, the present study proceeds to support the explanations made by three theoretical perspectives, including Theory of Planned Behaviour (Ajzen, 1991), Technology Acceptance Model (Davis, 1989; Davis, Bagozzi & Warshaw, 1989), and Theory of Reasoned Action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). In brief, the present study introduces trust, attitude, and satisfaction as mediators to better explain and understand the relationships between informational support, emotional support, and perceived ease of use, perceived usefulness, perceived privacy, perceived security and attitude. Finally, the mediating role of trust, attitude and satisfaction was tested towards the social commerce intention. Based on the research findings and discussions, the present study has theoretically contributed to the aspects of informational support, emotional support, and perceived ease of use, perceived usefulness, perceived privacy, perceived security, trust, attitude, and satisfaction.

5.4.1 Additional Empirical Evidence in the Domain of Theory of Planned Behaviour

The present study provides a theoretical suggestion by showing additional empirical evidences in the domain of Theory of Planned Behaviour. The theory posits that the underpinning assumptions of TPB is that behavioural intention of an individual determines his/her actual behaviour. The present study also tested the mediating role of trust, attitude, and satisfaction as mediators to better explain and understand the

relationships between informational support, emotional support, and perceived ease of use, perceived usefulness, perceived privacy, and perceived security. Extant empirical studies were conducted on the relationship between informational support, emotional support, and perceived ease of use, perceived usefulness, perceived privacy, and perceived security on trust, attitude, and satisfaction. Hence, this strongly suggests the need for incorporating a mediating variable on these relationships.

Based on the stipulations of Baron and Kenny (1986), a mediator was introduced to enhance the relationships. In order to cover the research gap, the present study incorporated trust, attitude and satisfaction as mediating variables to enhance their understanding and influence on the informational support, emotional support, perceived ease of use, perceived usefulness, perceived security, perceived privacy among students in the Saudi Arabia universities. In testing the Theory of Planned Behaviour, the results revealed that the theory has helped in explaining the need for emotional support and the influence it can have significantly on trust, attitude, and satisfaction among students. Based on the results, it can be concluded that the social support instituted by SNS is influenced by the theory of planned behaviour in achieving social commerce intentions.

5.4.2 Additional Empirical Evidence in the Domain of Theory of Acceptance Model

The present study provides a theoretical implication by introducing additional empirical evidence in the domain of Technology Acceptance Model. The theory's purpose is to elucidate the influence of external determinants on attitude, internal beliefs, and behavioural intentions. Hence, the present study has extended the theory

by assessing the role of attitudinal beliefs (perceived privacy and perceived security) on trust and social commerce intention of university students. While testing the theory, the findings revealed that attitude beliefs (perceived privacy and perceived security) constructs significantly predicts both trust and satisfaction, thereby lending empirical evidence in support of the theory.

Based on the results and discussions, it can be summarized that attitudinal belief constructs are significant predictors of social commerce intention among students in Saudi Arabian universities. Therefore, it is important to pay attention to these factors in ensuring positive social commerce intention, especially in terms of interacting with SNS platforms by university students in Saudi Arabia.

5.4.3 Additional Empirical Evidence in the Domain of Theory of Reasoned Action

The present study provided a theoretical implication by producing additional empirical evidences in the domain of Theory of Reasoned Action. The theory postulates that individuals' performance with respect to their behaviour is significantly influenced by their behavioural intention. In addition, the behavioural intention is regarded to be a pointer of a person's intention to execute a specific behaviour. In their model, they defined subjective norm as the perception of an individual that other people may influence to perform or not to perform a certain behaviour (Fishbein & Ajzen, 1975). Belief is seen to be an assumption of a person that if a particular behaviour is performed, it will result in certain consequences (Fishbein & Ajzen, 1975). The model also theorizes that normative belief of an individual has a strong influence on subjective norms (Fishbein & Ajzen, 1975). In addition, a person's subjective norm and attitude also influence the behavioural

intention. The present study has extended the TRA theory by assessing the role of trust and satisfaction on social commerce intention of university students. In the course of testing the theory, the findings in this study demonstrates that both trust and satisfaction lends empirical evidence in support of the theory.

Based on the results and discussions, it can be summarized that trust, and satisfaction are a significant predictor of social commerce intention among students of Saudi Arabian universities. Therefore, it is important to pay attention to these factors in ensuring positive social commerce intention, especially in terms of interacting with SNS platforms by university students in Saudi Arabia. Also, this finding advances our understanding between trust, satisfaction and social commerce intention mechanisms. Achieving trust through satisfaction for enhancing social commerce intention is a new source of trust for social commerce intention, whereas other institutional structures have long been considered as an alternative source of satisfaction in SNS through social commerce intentions (Zucker,1986). Numerous studies have examined their respective direct effects on trust (Flavian et al. 2006; Ribbink et al. 2004) with little research recognizing that different sources of trust and satisfaction could complement each other. In essence, this finding adds to the existing literature by demonstrating that both trust and satisfaction can interact to produce an additional influence on students' trust which can lead to satisfaction in SNS platforms for achieving social commerce intention.

5.5 Significant Mediating Roles of Trust, Attitude, and Satisfaction

The present study has also provided empirical evidence on the significant role of trust, attitude, and satisfaction as a mediator on the relationship between informational support, emotional support, and perceived ease of use, perceived

usefulness, perceived privacy, perceived security and social commerce intention. Although most previous studies (Lu et al., 2016; Lal, 2017; Li & Ku, 2017) have mainly focused on investigating the direct linkage between informational support, emotional support, perceived ease of use, perceived usefulness, perceived privacy, perceived security and social commerce intention. The present study has incorporated trust, attitude, and satisfaction as mediators on these relationships since trust, attitude, and satisfaction are expected to mediate the relationships between informational support, emotional support, and perceived ease of use, perceived usefulness, perceived privacy, perceived security and social commerce intention because individuals with low self-regulatory efficacy tend to be aggressive, and they find it hard to internalise their negative feelings or behaviours (Bai, Yao, & Dou, 2015; Sun et al., 2016). Consequently, the present study has added empirical evidence to the body of knowledge related to SNS and the research findings could be a strong basis for future researches on SNS platforms towards social commerce intentions as group factors as well as work attitudes and behaviours.

5.6 Practical Implications

Based on the research findings, the present study has presented several practical implications in terms of social networking practices in the context of Saudi Arabian universities. First, the results suggest that the social support factors can play an important role in facilitating online SNS. Social support in this study is one of the social factors involved in social networking. There are other factors whose effects worth further investigations. The social support is important in social commerce since supportive interactions among the social network members let them feel closer to one another and be more comfortable in exchanging information.

Second, the supportive environment will motivate the students in SNSs to keep their relationships with the site. Most students joining SNSs expect interacting with their friend/s conveniently as well as employing them as a method for educational supports and for transactional purchase purposes. Due to such supportive environment, the motivation for continuous use and information sharing would increase. This also implies that a decision towards facilitating the maintenance of such supportive environments is essential for the social commerce providers to think cautiously when running a social commerce site. These web sites are used mainly for interactions, and therefore the quality of such media can influence the interaction processes and their outcomes. That is, a high-quality of SNSs can help students communicate and make information exchange with their friend/s. Therefore, enhancing the perceived usefulness, ease of use, and service quality is significant for enhancing trust in SNSs platforms through social commerce.

Third, the quality of the relationship when measured by trust, attitude, and satisfaction is a substantial mediator between the quality of SNS and students' social commerce intentions. Overall, the findings of the present study implies that SNSs that have a good Web site function, service, and supportive social culture in its virtual communities will probably keep the university students' trust and facilitate the conduct, thereby leading to positive social commerce intentions.

The contributions of the findings in the present study are two folds. First, this study has examined the relationships perspectives and the basic roles of the social support in the domain of social media use and the social commerce intentions, which have not been examined previously. It was found that the social support has more effects compared to SNS quality on student's trust, attitude, and satisfaction towards the

social commerce intention. This has resulted in creating new theoretical basics for examining the commercial behaviours on the social media and represents a new direction for possible future research. Second, the findings of the present study suggest that practitioners who have social media sites and tend to carry out social commerce have to consider not only the good functions and services but also cultivating a supportive environment in the associated communities to keep a good relationship with the user/s. This can effectively enhance the user's trust and intention to share commercial information.

5.7 Limitations and Future Research Directions

The present study offers limited generalizability as it focuses mainly on students of universities in Saudi Arabia. Consequently, an additional work is needed to include non-students from various universities to generalize the findings more widely. Universities should be studied and compared with other institutes of higher education, such as polytechnics, monotechnic and colleges. Also, the model is able to explain 73% of the total variance in social commerce intention thus implying that there are other latent variables that could significantly explain the other variance. In other words, the remaining 27% of the variance could be explained by other factors. Therefore, future research is needed to consider other factors that could address the concern of students towards the social commerce intention

The relationships between informational support and attitude, perceived ease of use and attitude, perceived usefulness and attitude, information support and satisfaction, perceived ease of use and satisfaction, perceived usefulness, and satisfaction may be moderated by trust, attitude, and satisfaction. Similarly, the relationships between trust and social commerce intention may be also moderated by both attitude and

satisfaction, respectively. Hence, examining trust, attitude, and satisfaction as moderators between these relationships could be an avenue for future research because the literature indicates that less attention has been paid to the fundamental reason of the possible prediction of the social support and attitudinal belief towards the social commerce intention.

Thus, more research is needed to investigate such moderating effects. Furthermore, regarding the relationships that revealed insignificant result in the current research, it is necessary to conduct future research to verify whether other moderating variable may strengthen this relationship.

5.8 Conclusion

The present study has provided additional evidence to the growing body of knowledge concerning the mediating role of trust, attitude, and satisfaction on the relationship between organisational formal control, workgroup norms and workplace deviance. Hence, results of the present study lend support to the key theoretical propositions. In particular, this study has successfully answered all the research questions and objectives in spite of some limitations. Although several studies have examined the underlying causes of social support issues and attitudinal beliefs, the present study addresses the theoretical gap by incorporating trust, attitude, and satisfaction as significant mediating variables. The theoretical framework of this study also adds to the domain of the Theory of Planned behaviour, Technology Acceptance Model and Theory of Reasoned Action.

In addition to the theoretical contributions, the results of this study provide some important practical implications to organizations and users. In conclusion, this study

has added valuable theoretical, practical, and methodological ramifications to the growing body of knowledge.



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Yours faithfully

Section (A)

PARTICIPANTS BACKGROUND INFORMATION

1	Gender: Select only one			
		Male		Female
2	Age: Select only one			
		Below 20 years old		
		21- 25 years old		
		26- 30 years old		
		31- 35 years old		
		36-40 years old		
		41-45 years old		
		More than 46 years old		
3	Education Level: Select only one			
		Master Degree		
		Bachelor Degree		
		PHD		
		Other		

4	Marital Status: Select only one	
		single
		married
		divorced
		Widowed
Internet Usage Question		
1	How long have you been using the internet?	
		Less than 6 months
		6 months to 1 year
		1 to 2 years
		2 to 4 years
		Over 4 years
2	On average ,how many hours do you spend per day using the internet?	
		Never/almost never
		Less than $\frac{1}{2}$ an hour
		From $\frac{1}{2}$ to 1 hour

		1-2 hours
		2-3 hours
		More than 3 hours
3	Do you have social media account such as Facebook, twitter?	
		yes
		No
4	Experience with social network sites	
		1 month or less
		2- 6 months
		7-11 months
		More than one year
5	Number of contacts on social network sites	
		50 or less
		51-100
		101-200
		More than 200

6	On average how frequently do you use online shopping to purchase products and services ?	
		Never/almost never
		Less than once a month
		A few time a week
		About once a day
		Several times a day
7	Which one of the following products and services you frequently purchase online or that you intend to purchase online in the near future?	
		Cd's
		Books
		Airline reservations
		Others
		None

Section (B)

N. o	Statement	S D	D	N	A	S A
Social commerce intention :Adapted from (Hajli, M. N., 2014; Turban, 2015)						
1	I will continue using online social network sites.	1	2	3	4	5
2	I am very likely to provide the online vendors with the information they need to better serve my needs.	1	2	3	4	5
3	I am willing to provide my experiences and suggestions when my friends on the social network sites want my advice on buying something.	1	2	3	4	5
4	I am willing to buy the products recommended by my friends on social network sites.	1	2	3	4	5
5	I will consider the shopping experiences of my friends on social network sites when I want to shop.	1	2	3	4	5
Attitude: Adapted from (Olney,Holbrook, and Batra,1991)						
6	Using online shopping on social network sites pleasant	1	2	3	4	5
7	Using online shopping on social network sites .is fun .	1	2	3	4	5
8	Using online shopping on social network sites enjoyable	1	2	3	4	5
9	I would describe my attitude toward social network sites as very favorably	1	2	3	4	5

10	I am positive toward shopping products on social network sites	1	2	3	4	5
Satisfaction: Adapted from: (Hajli, M. N., 2014; Spreng et al., 1995)						
11	I am satisfied with using social network sites.	1	2	3	4	5
12	I am pleased with using social network sites.	1	2	3	4	5
13	I am happy with social network sites.	1	2	3	4	5
14	I am contented with using social network sites.	1	2	3	4	5
Trust (Lin, 2007)						
15	Online social network sites are safe environments to exchange information with others	1	2	3	4	5
16	Online social network sites are reliable environments to conduct their activities.	1	2	3	4	5
17	Online social network sites handle personal information submitted by users in a competent fashion.	1	2	3	4	5
18	Services provided by social network sites instills the confidence of customers.					
19	Service provide by social network sites are trustworthy.					
Information Support Adapted from(Hajli, M.; Liang, Ho, Li, (2011)						
20	On the social network sites, some people would offer suggestions when I need help.	1	2	3	4	5

21	When I encountered a problem, some people on social network sites would give me information to help me overcome the problem.	1	2	3	4	5
22	When faced with difficulties, some people on social network sites would help me discover the cause and provide me with suggestions.	1	2	3	4	5
Emotional Support Adapted from(Hajli, M.; Liang, Ho, Li, (2011)						
23	When I face difficulties, I easily can find support from friends on social network	1	2	3	4	5
24	When I face difficulties, some people on social network sites comfort and encouraged me to face the difficulties.	1	2	3	4	5
25	When I face difficulties, some people on social network sites listen to me talking about my private feelings.	1	2	3	4	5
26	When I face difficulties, some people on social network sites express interest and concern in my emotions.	1	2	3	4	5
Perceived ease of use adapted from: (Gefen et al., 2003)						
27	The social network sites are easy to use.	1	2	3	4	5
28	It is easy to become skillful at using the social network sites and the customer reviews	1	2	3	4	5
29	The social network sites are flexible to interact with	1	2	3	4	5
30	It is easy to reference the customer reviews on the social network sites.	1	2	3	4	5

31	My interaction with the social network sites is clear and easy to be understood.	1	2	3	4	5
32	It is easy to interact with social network sites.	1	2	3	4	5
Perceived Usefulness Adapted from: (Davis, 1989; Venkatesh et al., 2003)						
33	Using online social network sites improves my ability in sharing information and connecting with others.	1	2	3	4	5
34	Using online social network sites enables me to acquire more information or meet more people.	1	2	3	4	5
35	The online social network sites are a useful in increasing my communication with others.	1	2	3	4	5
36	The online social network sites are a useful to interact with other members.	1	2	3	4	5
Perceived Security Adapted from: (Kolsaker and Payne, 2002; DongHer, 2004)						
37	The social network sites have mechanism to ensure the safe transmission of their users information.	1	2	3	4	5
38	The social network sites have sufficient technical capacity to ensure that the data I send cannot be modified by hackers.	1	2	3	4	5
39	Purchasing on the social network sites do not cause financial risks.	1	2	3	4	5
40	The electronic payment on the social network sites is safe.	1	2	3	4	5
Perceived Privacy Adapted from: (Park and Kim, 2003; Kelly and Erickson, 2005)						

41	The social network sites are abide by personal data protection laws.	1	2	3	4	5
42	The social network sites only collect user's personal data that are necessary for their activity.	1	2	3	4	5
43	The social network sites do not provide my personal information to others without my consent.	1	2	3	4	5
44	I feel safe when sending my personal information to the social network sites.	1	2	3	4	5
45	The social network sites show concern for privacy of their users.	1	2	3	4	5



UUM
Universiti Utara Malaysia

معلومات حول تقييم المشركين
(لقسم أ)

الجنس: اختر واحفظ			1
لثى		ذكر	
العدد: اختر واحفظ			2
قل من 20 سنة			
21 - 25 سنة			
26 - 30 سنة			
31 - 35 سنة			
36 - 40 سنة			
41 - 45 سنة			
أكبر من 46 سنة			
مستوى التعليم: اختر واحفظ			3
درج للماجستير			
درج بلكالوريوس			
لثوراه			
أخرى			

4	الحالة الاجتماعية: اذكر واحفظ	
	أعزب	
	متزوج	
	مطلق	
	أرمل	
سؤال است خدام الانترنت		
1	في نهاية وقت است خدم الانترنت	
	قل من 6 ثمر	
	6 ثمر الى سنة واحدة	
	من سنة الى سنتين	
	من سنتين الى 4 سنوات	
	أكثر من 4 سنوات	
2	في المتوسط، كم ساعة تقضي هلي وهي في وقت خدام الانترنت؟	
	بداً التقريباً	
	قل من نصف ساعة	
	من نصف ساعة الى ساعة	

من ساعات إلى ساعات		
من ساعات إلى ساعات		
أكثر من ساعات		
هل لديك حساب الوسيط أو الخادم؟	3	
نعم		
لا		
خبرة بموقع على شبكات الإنترنت	4	
1 شهر أو أقل		
2-6 أشهر		
6 أشهر إلى سنة		
أكثر من سنة واحدة		
لقد اتصلت بغيري موقع على شبكات الإنترنت	5	
50 أو أقل		
51-100		
101-200		
أكثر من 200		

6	في المتوسط كم عدد المرات التي تستخدم فيها سوق عبر الهاتف نشر اراء المنتجات ولخدمات؟	
	بداً/بقياً ابداً	
	قل من مره هـي	
	مرات قليلة لـبوعـي	
	حوالي مره هـي	
	عدة مرات في اليوم	
7	أي واحد من منتجات ولخدمات التلالي مقيم بـرول بشرك متكرر عباللنترنت أو لـيـتقـوي شـيءـهـا عـلى الـهـتـفـن بـفـي لـمـتـقـالـلـقـريـب؟	
	أس طولات	
	لـتـب	
	حـجـز طـيران	
	أخرى	
	الشيء	

القسم ب)

لوقم	ليوان	ال ألف بشدة	ال ألف	مجلد	ألف أو بشدة	لوقم
هدفلت ج ا ر ل ل ج ت لم ع ي ة)تقبس من هالجي، امل ي ان ج، هو، لي، 2011 وتوبان، 2015)						
1	سوفلست مرفي است خ دام موق لل شكاات ال تخم اعة على الترنت.	1	2	2	3	5
2	من ال م تخمل ج دتقوي ر ال طع ي ن عل لل نترنت م عالم عمل ومات التي بيخا ج و ر ل هتق قيم خ د فتلل ال مخي ا مخي.	1	2	3	4	5
3	ل اعل است عدالتق ي م خريثي والقتراحات ع دم لي يد أصقني عل لل شكاة ال تخم اعي ق صي تخلي ش را عشيء م.	1	2	3	4	5
4	ل اعل است عدالتق شرا ال تخم اعات التي و صي تب ه أصقني لجي موق لل شكاات ال تخم ع ي ة.	1	2	3	4	5
5	س ل ظرفيت ج ا ر ب ل س و ق ل ص قني على موق لل شكاة ال تخم اعة ع دم أي د أن ل س و ق.	1	2	3	4	5
6	ال تسويق عر التترنت على موق لل شكاات ال تخم اعة م خ ع.	1	2	3	4	5
7	ال تسويق عر التترنت على موق لل شكاات ال تخم اعة م ر ح.	1	2	3	4	5
8	ال تسويق عر التترنت على موق لل شكاات ال تخم اعة م ه ج.	1	2	3	4	5
9	أود أن أفضي س ل و ك ي ت ج ا ه موق لل شكاة ال تخم اعة ليلي مخي ج د ا.	1	2	3	4	5

5	4	3	2	1	أنا وثقن ورحمت جالت تسبق على موق لل شكات ال حجام عية.	10
5	4	3	2	1	أنا راض عن است خلم موق لل شكات ال حجام عية.	11
5	4	3	2	1	يسرن ي است خدام موق لل شكات ال حجام عية.	12
5	4	3	2	1	أنا لس عيب است خدام موق لل شكات ال حجام عية.	13
5	4	3	2	1	أنا مقق ع است خدام موق لل شكات ال حجام عية.	14
5	4	3	2	1	موق عالت واصل ال حجام عي عل لل نترنت هيبية أمن ف تبادل الم عمل ومات مع آل خرين.	15
5	4	3	2	1	موق عالت واصل ال حجام عي عل لل نترنت هيبية انتي مكن ال عدم ادع لي هالتي لني ش طهم.	16
5	4	3	2	1	ت عامل موق عالت واصل ال حجام عي عل لل نترنت الم عمل ومات الش خصري لل مودة من قبل الم ست خدي بطريقه مخصصة.	17
					ت غرس ال خدم ات التي يتقد م ه موق لل شكات ال حجام عي فلكية في ال عملاء.	18
					ال خد م لل مودة من خال موق لل شكات ال حجام عية هي جي ريقا الثقة.	19
5	4	3	2	1	لني موق لل شكات ال حجام عي قب عض الن اس يتقدم فتر احات	20

					تقدم أكونب حاج إلى مساعدة.	
5	4	3	2	1	تقدم واج منتشكلة فإنب عضالاس على موق على شبكات ال حتم اعجت عطيني الم عل وم انل مس عدت يفاليت غلب على لامشكلة.	21
5	4	3	2	1	تقدم اوجه ص عوبات فإنب عضالاس على موق ال شبكات ال حتم اعجتس اعن يف لکش افلى سبب وتزوني بالقراحت	22
5	4	3	2	1	تقدم اوله ص عوبات، أجهس مولد دعم من الصق على ال شبكة ال حتم اعجة	23
5	4	3	2	1	تقدم اوله ص عوبات فإنب عضالاس على موق على شبكة ال حتم اعجت عطيني تشج عي على مواج القص عوبات.	24
5	4	3	2	1	تقدم اوله ص عوبات فإنب عضالاس على موق على شبكة ال حتم اعجتس م على ول انك حدث عن مشاعي الخاصة.	25
5	4	3	2	1	تقدم اوله ص عوبات فإنب عضالاس على موق على شبكة ال حتم اعجتس عر عن ال قنم اوال قني مشاعي.	26
5	4	3	2	1	موق على شبكات ال حتم اعجي قبول ال ستخدام.	27
5	4	3	2	1	من لسل ا تصبح ما رلفي لتخدام موق على شبكات ال حتم اعجة ومراج عة ل عمالء.	28
5	4	3	2	1	موق على شبكات ال حتم اعجة من ل قنم اعل معها.	29

30	من لاسله الإشاره إلى مراجع عمل عملاء تجزى موق على شبكات ال استخدامية.	1	2	3	4	5
31	نفا تجزي مع موق على شبكات ال استخدامية واضح وسهل ليكون فم مومًا.	1	2	3	4	5
32	من لاسله الفضا على مع موق على شبكات ال استخدامية.	1	2	3	4	5
33	ي حسن استخدام موق على شبكات ال استخدامية على الانترنت قد يفي بتبادل العمل ومات ولك واصل مع آل خرين.	1	2	3	4	5
34	يمكنني استخدام موق على شبكات ال استخدامية على الانترنت من ال حصول على مزيد من العمل ومات أو قبالة مزيد من الناس.	1	2	3	4	5
35	موق على شبكات ال استخدامية على الانترنت تم في دقي زيادة التوصل مع آل خرين.	1	2	3	4	5
36	موق على شبكات ال استخدامية على الانترنت تم في دقي الفضا على مع آل عضله آل خرين.	1	2	3	4	5
37	لدى شبكات التوصل ال استخدامية التي في ضم ان النقل آل من لم عمل ومات مستخدميه.	1	2	3	4	5
38	لدى شبكات التوصل ال استخدامية في ذلك افي قك أكد من أن البيئات التي سلت لل يمكن عيها مقبالا قدر اصرنة	1	2	3	4	5
39	ال يسبب لشراء تجزى موق على شبكة ال استخدامية ال م خاطر ال الهية	1	2	3	4	5

APPENDIX B

Missing Values Maintaining

Frequencies

Notes

Output Created		18-APR-2018 19:32:38
Comments		
Input	Data	C:\Users\User\Desktop\Umro\Umro .sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	360
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.

Syntax		FREQUENCIES VARIABLES=Gender Age Education Marital status Internet_Usage_period Avergare_Hours Media_Account network_experience media_contacts online_social_commerce frequently_purchahses SCI1 SCI2 SCI3 SCI4 SCI5 ATT1 ATT2 ATT3 ATT4 ATT5 SATT1 SATT2 SATT3 SATT4 TRUST1 TRUST2 TRUST3 TRUST4 TRUST5 INFSPPT1 INFSPPT2 INFSPPT3 EMTSPPT1 EMTSPPT2 EMTSPP3 EMTSPP4 PEU1 PEU2 PEU3 PEU4 PEU5 PEU6 PU1 PU2 PU3 PU4 PS1 PS2 PS3 PS4 PP1 PP2 PP3 PP4 PP5 /ORDER=ANALYSIS.
Resources	Processor Time	00:00:00.08
	Elapsed Time	00:00:00.14

Statistics

	N
--	---

	Valid	Missing
Gender	360	0
Age	360	0
Education	360	0
Marital_status	360	0
How long have you been using internet	360	0
How many hours do you spend per day using the internet	360	0
Do you have social media account	360	0
Experience with social network sites	360	0
Number of contacts on social network sites	360	0
on the average how frequently do you purchases through social network sites	360	0

Which do you purchase frequently on social network sites	360	0
Social Commerce Intention	360	0
SCI2	360	0
SCI3	360	0
SCI4	360	0
SCI5	360	0
Attitude	360	0
ATT2	360	0
ATT3	360	0
ATT4	360	0
ATT5	360	0
Satisfaction	360	0
SATT2	360	0
SATT3	360	0

SATT4	360	0
Trust	360	0
TRUST2	360	0
TRUST3	360	0
TRUST4	360	0
TRUST5	360	0
Information Support	360	0
INFSPPT2	360	0
INFSPPT3	360	0
Emotional Support	360	0
EMTSPPT2	360	0
EMTSPP3	360	0
EMTSPP4	360	0
Perceived Easy of Use	360	0
PEU2	360	0
PEU3	360	0

PEU4	360	0
PEU5	360	0
PEU6	360	0
Perceived Usefulness	360	0
PU2	360	0
PU3	360	0
PU4	360	0
Perceived Security	360	0
PS2	360	0
PS3	360	0
PS4	360	0
Perceived Privacy	360	0
PP2	360	0
PP3	360	0
PP4	360	0

PP5	360	0
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Krejcie and Morgan's

TABLE FOR DETERMINING S.

N	S	N	S	N
10	10	100	80	2
15	14	110	86	2
20	19	120	92	3
25	24	130	97	3
30	28	140	103	3
35	32	150	108	3
40	36	160	113	3
45	40	180	118	4
50	44	190	123	4
55	48	200	127	4
60	52	210	132	4
65	56	220	136	4
70	59	230	140	5
75	63	240	144	5
80	66	250	148	6
85	70	260	152	6
90	73	270	155	7
95	76	270	159	7

Note: "N" is population size
 "S" is sample size.]

APPENDIX C

Cross Loadings

	ATT	EMTSPPT	INFSPPT	PEU	PP	PS	PU
ATT1	0.750	0.176	0.071	0.029	0.148	0.236	
ATT2	0.896	0.283	0.260	0.242	0.166	0.303	
ATT3	0.879	0.222	0.231	0.162	0.200	0.320	
ATT4	0.714	0.308	0.347	0.234	0.133	0.187	
ATT5	0.699	0.261	0.344	0.266	0.232	0.402	
EMTSPPT1	0.348	0.799	0.601	0.247	0.331	0.381	
EMTSPPT2	0.270	0.848	0.528	0.308	0.384	0.372	
EMTSPPT3	0.197	0.835	0.322	0.172	0.450	0.456	
EMTSPPT4	0.221	0.766	0.302	0.202	0.391	0.327	
INFSPPT1	0.300	0.403	0.867	0.389	0.232	0.283	
INFSPPT2	0.282	0.492	0.904	0.324	0.167	0.265	
INFSPPT3	0.305	0.568	0.908	0.278	0.321	0.355	
PEU1	0.164	0.083	0.247	0.611	0.064	0.066	
PEU2	0.225	0.141	0.183	0.595	0.002	-0.068	
PEU3	0.228	0.207	0.348	0.892	0.103	0.047	

PEU4	0.176	0.234	0.249	0.748	0.150	0.125	
PEU5	0.249	0.304	0.318	0.859	0.199	0.098	
PEU6	0.213	0.227	0.300	0.878	0.141	0.108	
PP1	0.127	0.450	0.201	0.106	0.779	0.655	
PP2	0.041	0.277	0.287	0.191	0.683	0.473	
PP3	0.081	0.323	0.199	0.165	0.816	0.526	
PP4	0.265	0.421	0.172	0.118	0.841	0.661	
PP5	0.289	0.386	0.279	0.178	0.839	0.649	
PS1	0.266	0.385	0.368	0.159	0.517	0.749	
PS2	0.271	0.356	0.213	0.113	0.703	0.858	
PS3	0.363	0.451	0.302	0.129	0.677	0.897	
PS4	0.323	0.397	0.277	0.015	0.625	0.839	
PU1	-0.016	0.041	0.188	0.371	0.073	0.017	
PU2	0.156	0.234	0.269	0.404	0.166	0.208	
PU3	0.198	0.359	0.366	0.370	0.387	0.428	
PU4	0.211	0.386	0.415	0.437	0.349	0.391	
SATT1	0.343	0.328	0.500	0.320	0.271	0.284	
SATT2	0.389	0.450	0.505	0.476	0.249	0.262	
SATT3	0.333	0.442	0.410	0.381	0.184	0.315	

SATT4	0.283	0.390	0.468	0.324	0.261	0.243	
SCI1	0.334	0.309	0.431	0.326	0.176	0.201	
SCI2	0.326	0.060	0.219	0.171	-0.022	0.079	
SCI3	0.309	0.185	0.292	0.426	0.023	0.031	
SCI4	0.340	0.078	0.108	0.302	0.002	0.156	
TRUST1	0.393	0.430	0.285	0.157	0.378	0.487	
TRUST2	0.260	0.328	0.403	0.202	0.272	0.343	
TRUST3	0.218	0.408	0.362	0.232	0.403	0.441	
TRUST4	0.236	0.241	0.040	0.083	0.482	0.406	
TRUST5	0.334	0.377	0.227	0.019	0.523	0.525	

Cronbach's Alpha

Mean, STDEV, T-Values, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O /STDEV)
ATT	0.848	0.847	0.015	5
EMTSPPT	0.829	0.827	0.021	3
INFSPPT	0.874	0.873	0.014	6
PEU	0.891	0.890	0.012	7

PP	0.855	0.854	0.016	5
PS	0.857	0.857	0.015	5
PU	0.848	0.847	0.018	4
SATT	0.893	0.892	0.013	6
SCL	0.713	0.709	0.032	2
TRUST	0.771	0.768	0.020	3

Confidence Intervals

	Original Sample (O)	Sample Mean (M)	2.5%	97.5%
ATT	0.848	0.847	0.817	
EMTSPPT	0.829	0.827	0.787	
INFSPPT	0.874	0.873	0.843	
PEU	0.891	0.890	0.866	
PP	0.855	0.854	0.820	
PS	0.857	0.857	0.827	
PU	0.848	0.847	0.809	
SATT	0.893	0.892	0.862	

SCL	0.713	0.709	0.643	
TRUST	0.771	0.768	0.726	

Confidence Intervals Bias Corrected

	Original Sample (O)	Sample Mean (M)	Bias	2.5%
ATT	0.848	0.847	-0.001	
EMTSPPT	0.829	0.827	-0.001	
INFSPPT	0.874	0.873	0.000	
PEU	0.891	0.890	-0.001	
PP	0.855	0.854	-0.001	
PS	0.857	0.857	-0.001	
PU	0.848	0.847	-0.001	
SATT	0.893	0.892	-0.001	
SCL	0.713	0.709	-0.004	
TRUST	0.771	0.768	-0.003	

Composite Reliability

Mean, STDEV, T-Values, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)
ATT	0.893	0.892	0.010	9
EMTSPPT	0.886	0.885	0.012	7
INFSPPT	0.922	0.921	0.008	#####
PEU	0.897	0.855	0.128	
PP	0.895	0.894	0.011	8
PS	0.903	0.903	0.009	#####
PU	0.874	0.869	0.024	3
SATT	0.926	0.925	0.008	#####
SCL	0.820	0.817	0.019	4
TRUST	0.845	0.843	0.011	7

Confidence Intervals

	Original Sample (O)	Sample Mean (M)	2.5%	97.5%
ATT	0.893	0.892	0.874	
EMTSPPT	0.886	0.885	0.860	

INFSPPT	0.922	0.921	0.903	
PEU	0.897	0.855	0.493	
PP	0.895	0.894	0.871	
PS	0.903	0.903	0.885	
PU	0.874	0.869	0.815	
SATT	0.926	0.925	0.906	
SCL	0.820	0.817	0.774	
TRUST	0.845	0.843	0.819	

Confidence Intervals Bias Corrected

	Original Sample (O)	Sample Mean (M)	Bias	2.5%
ATT	0.893	0.892	-0.001	
EMTSPPT	0.886	0.885	-0.001	
INFSPPT	0.922	0.921	0.000	
PEU	0.897	0.855	-0.042	
PP	0.895	0.894	-0.001	
PS	0.903	0.903	0.000	

PU	0.874	0.869	-0.005	
SATT	0.926	0.925	0.000	
SCL	0.820	0.817	-0.003	
TRUST	0.845	0.843	-0.002	

Average Variance Extracted (AVE)

Mean, STDEV, T-Values, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistic
ATT	0.628	0.626	0.023	
EMTSPPT	0.660	0.659	0.027	
INFPPT	0.797	0.797	0.019	
PEU	0.599	0.554	0.115	
PP	0.631	0.630	0.025	
PS	0.701	0.701	0.021	
PU	0.644	0.639	0.041	
SATT	0.757	0.757	0.022	
SCL	0.534	0.530	0.031	

TRUST	0.522	0.520	0.021	
--------------	-------	-------	-------	--

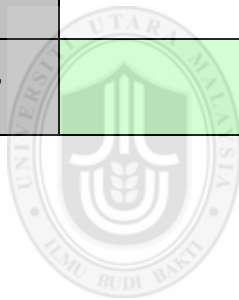
Confidence Intervals

	Original Sample (O)	Sample Mean (M)	2.5%	97.5%
ATT	0.628	0.626	0.585	
EMTSPPT	0.660	0.659	0.607	
INFSPPT	0.797	0.797	0.757	
PEU	0.599	0.554	0.193	
PP	0.631	0.630	0.578	
PS	0.701	0.701	0.659	
PU	0.644	0.639	0.557	
SATT	0.757	0.757	0.707	
SCL	0.534	0.530	0.466	
TRUST	0.522	0.520	0.477	

Confidence Intervals Bias Corrected

	Original Sample (O)	Sample Mean (M)	Bias	2.5%
ATT	0.628	0.626	-0.001	

EMTSPPT	0.660	0.659	-0.001	
INFSPPT	0.797	0.797	-0.001	
PEU	0.599	0.554	-0.045	
PP	0.631	0.630	0.000	
PS	0.701	0.701	0.000	
PU	0.644	0.639	-0.005	
SATT	0.757	0.757	0.000	
SCL	0.534	0.530	-0.003	
TRUST	0.522	0.520	-0.002	



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APPENDIX D

Descriptive for Each Item

DESCRIPTIVES VARIABLES=INFSPPT1 INFSPPT2 INFSPPT3 EMTSPPT1 EMTSPPT2
EMTSPP3 EMTSPP4 PEU1 PEU2 PEU3

PEU4 PEU5 PEU6 PU1 PU2 PU3 PU4 PS1 PS2 PS3 PS4 PP1 PP2 PP3 PP4 PP5 TRUST1
TRUST2 TRUST3 TRUST4

TRUST5 SATT1 SATT2 SATT3 SATT4 ATT1 ATT2 ATT3 ATT4 ATT5 SCI1 SCI2 SCI3 SCI4
SCI5

/STATISTICS=MEAN STDDEV MIN MAX.

Descriptive

		Notes
Output Created		19-APR-2018 17:22:49
Comments		
Input	Data	C:\Users\User\Desktop\Umro\Umro .sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	360
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=INFSPPT1 INFSPPT2 INFSPPT3 EMTSPPT1 EMTSPPT2 EMTSPP3 EMTSPP4 PEU1 PEU2 PEU3 PEU4 PEU5 PEU6 PU1 PU2 PU3 PU4 PS1 PS2 PS3 PS4 PP1 PP2 PP3 PP4 PP5 TRUST1 TRUST2 TRUST3 TRUST4 TRUST5 SATT1 SATT2 SATT3 SATT4 ATT1 ATT2 ATT3 ATT4 ATT5 SCI1 SCI2 SCI3 SCI4 SCI5 /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.09

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Information Support	360	1	5	3.42	1.114
INFSPPT2	360	1	5	3.44	1.043
INFSPPT3	360	1	5	3.39	1.049
Emotional Support	360	1	5	3.40	1.051
EMTSPPT2	360	1	5	3.52	1.092
EMTSPPT3	360	1	5	3.07	1.208
EMTSPPT4	360	1	5	3.08	1.137
Perceived Easy of Use	360	1	5	3.94	1.164
PEU2	360	1	5	3.93	1.052
PEU3	360	1	5	4.02	.920
PEU4	360	1	5	3.54	1.078
PEU5	360	1	5	3.92	.932
PEU6	360	1	5	4.11	.994
Perceived Usefulness	360	1	5	3.74	1.028

PU2	360	1	5	3.84	.993
PU3	360	1	5	3.74	1.167
PU4	360	1	5	3.58	1.129
Perceived Security	360	1	5	2.79	1.166
PS2	360	1	5	2.75	1.167
PS3	360	1	5	2.81	1.252
PS4	360	1	5	2.89	1.084
Perceived Privacy	360	1	5	3.27	1.054
PP2	360	1	5	3.43	1.051
PP3	360	1	5	3.29	1.152
PP4	360	1	5	2.94	1.262
PP5	360	1	5	3.28	1.258
Trust	360	1	5	2.62	1.292
TRUST2	360	1	5	3.24	1.065
TRUST3	360	1	5	3.11	1.026
TRUST4	360	1	5	3.43	.962

TRUST5	360	1	5	2.90	.898
Satisfaction	360	1	5	3.68	1.145
SATT2	360	1	5	3.85	.942
SATT3	360	1	5	3.74	.982
SATT4	360	1	5	3.75	1.070
Attitude	360	1	5	3.56	1.111
ATT2	360	1	5	3.44	1.108
ATT3	360	1	5	3.41	1.116
ATT4	360	1	5	3.43	1.026
ATT5	360	1	5	2.84	1.175
Social Commerce Intention	360	1	5	4.11	1.013
SCI2	360	1	5	3.59	1.046
SCI3	360	1	5	3.93	1.055
SCI4	360	1	5	3.58	1.039
SCI5	360	1	5	3.89	.983

Valid N (listwise)	360				
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APPENDIX E

Descriptive for Latent variables

DESCRIPTIVES VARIABLES=INFSPPT EMSPPT PEU PU PS PP TRUST SATT ATT SCI
/STATISTICS=MEAN STDDEV MIN MAX.

Descriptive

Notes

Output Created	19-APR-2018 17:21:18
Comments	
Input	Data C:\Users\User\Desktop\Umro\Umro.sav
Active Dataset	DataSet1
Filter	<none>
Weight	<none>
Split File	<none>
N of Rows in Working Data File	360

Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=INFSPPT EMSPPT PEU PU PS PP TRUST SATT ATT SCI /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.13

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
INFSPPT	360	1.00	5.00	3.4157	.95472
EMSPPT	360	1.00	5.00	3.2660	.91333
PEU	360	1.00	5.00	3.9111	.82111
PU	360	1.00	5.00	3.7250	.89688
PS	360	1.00	5.00	2.8104	.97782
PP	360	1.00	5.00	3.2417	.92127

TRUST	360	1.00	4.60	3.0583	.75944
SATT	360	1.00	5.00	3.7549	.89867
ATT	360	1.00	5.00	3.3350	.87382
SCI	360	1.00	5.00	3.8222	.72393
Valid N (listwise)	360				



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APPENDIX F

Multicollinearity based on Correlation

CORRELATIONS

/VARIABLES=ATT SATT TRUST INFSPPT EMSPPT PEU PU PS PP

/PRINT=TWOTAIL NOSIG

/MISSING=PAIRWISE.

Correlations

Notes

Output Created	19-APR-2018 20:48:43
Comments	
Input	Data
	C:\Users\User\Desktop\Umro\Umro . After deleting outliers.sav
	Active Dataset
	DataSet1
	Filter
	<none>
	Weight
	<none>
	Split File
	<none>
	N of Rows in Working Data File
	342

Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=ATT SATT TRUST INFSPPT EMSPPT PEU PU PS PP /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

Correlations

		ATT	SATT	TRUST	INFSPPT	EMSPPT	PEU	PU
ATT	Pearson Correlation	1	.385**	.421**	.326**	.308**	.230**	.1
	Sig. (2-tailed)		.000	.000	.000	.000	.000	
	N	342	342	342	342	342	342	
SATT	Pearson Correlation	.385**	1	.345**	.506**	.414**	.368**	.3

	Sig. (2-tailed)	.000		.000	.000	.000	.000	
	N	342	342	342	342	342	342	
TRUST	Pearson Correlation	.421**	.345**	1	.341**	.469**	.086	.2
	Sig. (2-tailed)	.000	.000		.000	.000	.112	
	N	342	342	342	342	342	342	
INFSPPT	Pearson Correlation	.326**	.506**	.341**	1	.504**	.299**	.3
	Sig. (2-tailed)	.000	.000	.000		.000	.000	
	N	342	342	342	342	342	342	
EMSPPT	Pearson Correlation	.308**	.414**	.469**	.504**	1	.190**	.3
	Sig. (2-tailed)	.000	.000	.000	.000		.000	
	N	342	342	342	342	342	342	
PEU	Pearson Correlation	.230**	.368**	.086	.299**	.190**	1	.5
	Sig. (2-tailed)	.000	.000	.112	.000	.000		
	N	342	342	342	342	342	342	
PU	Pearson Correlation	.162**	.335**	.253**	.338**	.322**	.580**	

	Sig. (2-tailed)	.003	.000	.000	.000	.000	.000	
	N	342	342	342	342	342	342	
PS	Pearson Correlation	.381**	.292**	.588**	.333**	.460**	.068	.3
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.208	
	N	342	342	342	342	342	342	
PP	Pearson Correlation	.214**	.236**	.530**	.238**	.439**	.096	.3
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.075	
	N	342	342	342	342	342	342	

** . Correlation is significant at the 0.01 level (2-tailed).

APPENDIX G

Multicollinearity based on Tolerance value and VIF

Notes

Output Created	19-APR-2018 20:58:04
Comments	
Input	Data
	C:\Users\User\Desktop\Umro\Umro. After deleting outliers.sav
	Active Dataset
	DataSet1
	Filter
	<none>
	Weight
	<none>
	Split File
	<none>
	N of Rows in Working Data File
	342
Missing Value Handling	Definition of Missing
	User-defined missing values are treated as missing.
	Cases Used
	Statistics are based on cases with no missing values for any variable used.

Syntax	REGRESSION
	/MISSING LISTWISE
	/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
	/CRITERIA=PIN(.05) POUT(.10)
	/NOORIGIN
	/DEPENDENT SCI
	/METHOD=ENTER ATT SATT TRUST INFSPPT EMSPTT PEU PU PS PP
	/SCATTERPLOT=(*ZRESID ,*ZPRED)
	/SAVE MAHAL.
Resources	Processor Time 00:00:00.45
	Elapsed Time 00:00:00.61
	Memory Required 5748 bytes
	Additional Memory Required for Residual Plots 176 bytes
Variables Created or Modified	MAH_5 Mahalanobis Distance

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	1.533	.185		8.284	.000		
ATT	.217	.037	.286	5.859	.000	.686	1.457
SATT	.218	.040	.280	5.482	.000	.624	1.602
TRUST	-.058	.049	-.064	-1.177	.240	.547	1.830
INFSPPT	.033	.038	.045	.872	.384	.608	1.644
EMSPPT	-.095	.039	-.128	-2.424	.016	.589	1.698
PEU	.206	.045	.246	4.601	.000	.571	1.752
PU	.162	.043	.204	3.724	.000	.542	1.844
PS	.048	.047	.070	1.028	.305	.349	2.867
PP	-.120	.047	-.164	-2.571	.011	.402	2.486

a. Dependent Variable: SCI

Error # 2070

The application is unable to communicate properly with the license server.

The license server may be down, or there may be other network-related

communication or DNS issues interfering. This command is not executed.

Execution of this command stops.

Specific symptom number: 5

End of job: 29 command lines 1 errors 0 warnings 1 CPU seconds



APPENDIX H

Non response Bias- Report both tables in the thesis. Sig 2 tale must be above 0.05

T-TEST GROUPS=Responsebias(1 2)

/MISSING=ANALYSIS

/VARIABLES=SCI ATT SATT TRUST INFSPPT EMSPPT PEU PU PS PP

/CRITERIA=CI(.95).

T-Test

Notes

Output Created	19-APR-2018 21:23:35	
Comments		
Input	Data	C:\Users\User\Desktop\Umro\Umro . After deleting outliers.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	342

Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST GROUPS=Responsebias(1 2) /MISSING=ANALYSIS /VARIABLES=SCI ATT SATT TRUST INFSPPT EMSPPT PEU PU PS PP /CRITERIA=CI(.95).
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.31

Group Statistics

	Responsebias	N	Mean	Std. Deviation	Std. Error Mean
SCI	Early Response	248	3.93	.587	.037
	Late Response	94	3.77	.851	.088
ATT	Early Response	248	3.33	.881	.056

	Late Response	94	3.39	.909	.094
SATT	Early Response	248	3.84	.817	.052
	Late Response	94	3.72	.985	.102
TRUST	Early Response	248	3.11	.753	.048
	Late Response	94	2.99	.734	.076
INFSPPT	Early Response	248	3.52	.903	.057
	Late Response	94	3.39	.964	.099
EMSPPT	Early Response	248	3.34	.867	.055
	Late Response	94	3.15	.997	.103
PEU	Early Response	248	3.96	.749	.048
	Late Response	94	3.90	.942	.097
PU	Early Response	248	3.79	.831	.053
	Late Response	94	3.81	.898	.093
PS	Early Response	248	2.78	.973	.062
	Late Response	94	2.94	1.017	.105

PP	Early Response	248	3.21	.881	.056
	Late Response	94	3.39	.997	.103

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
SCI	Equal variances assumed	10.595	.001	1.960	340	.051	
	Equal variances not assumed			1.668	128.052	.098	
ATT	Equal variances assumed	.028	.867	-.538	340	.591	
	Equal variances not assumed			-.530	163.252	.597	
SATT	Equal variances assumed	3.003	.084	1.109	340	.268	
	Equal variances not assumed			1.020	144.106	.309	
TRUST	Equal variances assumed	.028	.868	1.273	340	.204	

	Equal variances not assumed			1.287	171.650	.200	
INFSPPT	Equal variances assumed	.072	.789	1.175	340	.241	
	Equal variances not assumed			1.140	158.501	.256	
EMSPPT	Equal variances assumed	2.030	.155	1.721	340	.086	
	Equal variances not assumed			1.616	149.353	.108	
PEU	Equal variances assumed	2.411	.121	.613	340	.540	
	Equal variances not assumed			.554	139.878	.581	
PU	Equal variances assumed	1.275	.260	-.202	340	.840	
	Equal variances not assumed			-.196	157.033	.845	
PS	Equal variances assumed	.060	.807	-1.377	340	.170	
	Equal variances not assumed			-1.349	161.429	.179	
PP	Equal variances assumed	1.746	.187	-1.568	340	.118	

Equal variances not assumed			-1.482	151.133	.140
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APPENDIX I

Normality based on Skewness and Kurtosis for each item. Appendix

DESCRIPTIVES VARIABLES=SCI1 SCI2 SCI3 SCI4 SCI5 ATT1 ATT2 ATT3 ATT4 ATT5
SATT1 SATT2 SATT3 SATT4

TRUST1 TRUST2 TRUST3 TRUST4 TRUST5 INFSPPT1 INFSPPT2 INFSPPT3 EMTSPPT1
EMTSPPT2 EMTSPPT3 EMTSPPT4

PEU1 PEU2 PEU3 PEU4 PEU5 PEU6 PU1 PU2 PU3 PU4 PS1 PS2 PS3 PS4 PP1 PP2 PP3 PP4
PP5

/STATISTICS=KURTOSIS SKEWNESS.

Descriptive

Notes		
Output Created		19-APR-2018 20:01:32
Comments		
Input	Data	C:\Users\User\Desktop\Umro\Umro . After deleting outliers.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	342

Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=SCI1 SCI2 SCI3 SCI4 SCI5 ATT1 ATT2 ATT3 ATT4 ATT5 SATT1 SATT2 SATT3 SATT4 TRUST1 TRUST2 TRUST3 TRUST4 TRUST5 INFSPPT1 INFSPPT2 INFSPPT3 EMTSPPT1 EMTSPPT2 EMTSPP3 EMTSPP4 PEU1 PEU2 PEU3 PEU4 PEU5 PEU6 PU1 PU2 PU3 PU4 PS1 PS2 PS3 PS4 PP1 PP2 PP3 PP4 PP5 /STATISTICS=KURTOSIS SKEWNESS.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.10

Descriptive Statistics

	N	Skewness	Kurtosis
--	---	----------	----------

	Statistic	Statistic	Std. Error	Statistic	Std. Error
Social Commerce Intention	342	-1.151	.132	1.396	.263
SCI2	342	-.593	.132	-.050	.263
SCI3	342	-1.102	.132	1.176	.263
SCI4	342	-.801	.132	.480	.263
SCI5	342	-1.149	.132	1.336	.263
Attitude	342	-.607	.132	-.260	.263
ATT2	342	-.600	.132	-.222	.263
ATT3	342	-.355	.132	-.591	.263
ATT4	342	-.206	.132	-.317	.263
ATT5	342	.065	.132	-.804	.263
Satisfaction	342	-.982	.132	.467	.263
SATT2	342	-1.073	.132	1.706	.263
SATT3	342	-.846	.132	.444	.263
SATT4	342	-1.039	.132	.732	.263

Trust	342	.226	.132	-1.083	.263
TRUST2	342	-.591	.132	-.281	.263
TRUST3	342	-.244	.132	-.426	.263
TRUST4	342	-.764	.132	.153	.263
TRUST5	342	-.108	.132	-.258	.263
Information Support	342	-.877	.132	.362	.263
INFSPPT2	342	-.832	.132	.384	.263
INFSPPT3	342	-.655	.132	.009	.263
Emotional Support	342	-.696	.132	.166	.263
EMTSPPT2	342	-.830	.132	.158	.263
EMTSPPT3	342	-.258	.132	-.775	.263
EMTSPPT4	342	-.299	.132	-.633	.263
Perceived Easy of Use	342	-1.176	.132	.902	.263
PEU2	342	-1.091	.132	.750	.263
PEU3	342	-.947	.132	1.117	.263
PEU4	342	-.616	.132	.125	.263

PEU5	342	-.899	.132	1.038	.263
PEU6	342	-1.144	.132	1.058	.263
Perceived Usefulness	342	-1.020	.132	1.394	.263
PU2	342	-1.128	.132	1.301	.263
PU3	342	-1.064	.132	.730	.263
PU4	342	-.814	.132	.183	.263
Perceived Security	342	-.074	.132	-.810	.263
PS2	342	-.149	.132	-1.139	.263
PS3	342	.038	.132	-1.003	.263
PS4	342	-.100	.132	-.644	.263
Perceived Privacy	342	-.516	.132	-.130	.263
PP2	342	-.868	.132	.362	.263
PP3	342	-.512	.132	-.445	.263
PP4	342	-.183	.132	-1.042	.263
PP5	342	-.484	.132	-.700	.263

Valid N (listwise)	342				
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APPENDIX J

Normality based on Skewness and Kurtosis for variable.

DESCRIPTIVES VARIABLES=SCI ATT SATT TRUST INFSPPT EMSPPT PEU PU PS PP

/STATISTICS=KURTOSIS SKEWNESS.

Descriptive

Notes

Output Created	19-APR-2018 20:09:53
Comments	
Input	 C:\Users\User\Desktop\Umro\Umro . After deleting outliers.sav
Active Dataset	DataSet1
Filter	<none>
Weight	<none>
Split File	<none>
N of Rows in Working Data File	342
Missing Value Handling	Definition of Missing User defined missing values are treated as missing.

Syntax	Cases Used	All non-missing data are used.
		DESCRIPTIVES VARIABLES=SCI ATT SATT TRUST INFSPPT EMSPPT PEU PU PS PP /STATISTICS=KURTOSIS SKEWNESS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.06

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
SCI	342	-1.221	.132	2.453	.263
ATT	342	-.303	.132	-.035	.263
SATT	342	-.983	.132	1.246	.263
TRUST	342	-.268	.132	-.622	.263
INFSPPT	342	-.906	.132	.636	.263
EMSPPT	342	-.595	.132	.231	.263

PEU	342	-.983	.132	1.081	.263
PU	342	-1.083	.132	1.407	.263
PS	342	-.047	.132	-.910	.263
PP	342	-.709	.132	.024	.263
Valid N (listwise)	342				



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APPENDIX K

Normality Using Graph. Histogram and P-plot. Either in Thesis or Appendix

Charts

