The Drivers of Social Commerce: A Broad View of the Factors That Predict Intention to Buy

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ABSTRACT

The revolution of innovative technologies has changed almost every aspect of human lives. These technologies have been used in various contexts, for instance, in the business context. More people have moved from conducting business activities in a traditional way to leveraging what technology offers. Selling activities, for example, have benefited from technology innovation, where merchants use e-commerce tools, and more recently, social commerce (SC) concepts to compete and gain competitive advantages. This use of technology is not restricted to business owners and practitioners, it has also been offered to consumers. In some cases, such as SC, both businesses and consumers exploit a set of technologies.

The notion of SC basically embraces two concepts: e-commerce activities and human social interaction on virtual settings. SC acceptance and growth has been captured due to its perceived benefits for both merchants and consumers. It has offered sellers great opportunities where real-time data can be used to obtain consumer satisfaction, which in turn leads to financial advantages. On the other hand, it enables consumers to look for more options with the aid of technologies that facilitate interactions with wider communities whereby better decisions can be made.

However, prior research indicates that the acceptance and adoption of SC is dependent on different factors. There have been numerous attempts to study which factors, for instance, impact consumers’ intention to buy via SC. Nevertheless, little attention has been paid to studying which factors affect the adoption of SC from various points of view. That is, SC is believed to be a complex setting where multiple disciplines intersect; thus, it has to be investigated wisely, by not neglecting major factors that may affect the adoption.
Consequently, this research aims to address this issue by examining, from a broader view, consumer behavior in adopting SC.

Simultaneously, one of the research objectives is to investigate the factors that support the pursuit of achieving successful implementation of the “Vision 2030” in Saudi Arabia. This vision includes several initiatives that aim for economic growth. From these initiatives, the initiative for using digital economy is highlighted in this research for its relevance. Promoting the use of SC for both local sellers and local consumers is considered part of the digital economy initiative. However, there is a revenue leakage to SC platforms that reside outside of Saudi Arabia’s borders, which does not support the goal of economic growth. Thus, this research points toward addressing this issue, with practical recommendations to be communicated to concerned government departments and merchants.

Thus, the main research question designed to address the above-mentioned aims is “What are the key factors that influence consumers’ adoption of SC in Saudi Arabia?”. The objective is to determine the broad view of how the process of adoption is built from a consumer’s point of view. Identifying the factors that are considered the key predictors of consumers’ intention to buy, along with exploring some of the relationships between these predictors are the objectives of this research.

Obtaining such a broad view prompted careful selection of the study’s methodology. The pragmatic philosophical paradigm, which functions as an umbrella of this study’s methodology, advocates the employment of “what works” to achieve the goals and objective of a research. Thus, the methodology and research design chosen for this study represent what works to attain a desirable broad view. A sequential explanatory design was employed in this research, where both quantitative and qualitative methods were used. Quantitative
methods were used to test and validate the model proposed in this research, whereas qualitative methods were employed to provide a more in-depth understanding of certain circumstances that remained unexplained from the quantitative outcomes. The study’s quantitative sample was collected in Saudi Arabia, with 1,012 complete responses. The qualitative study sample (11 participants) comprised two groups: consumers and experts.

Employing a set of statistical procedures, the results showed that, with the exception of subjective norms and electronic word of mouth, all other factors were predictors of social commerce intention (SCI). Attitude was considered the most important predictor of SCI, as well as a central factor that could be changed by the effect of other factors in the study’s model. The impact of trust on SCI was amongst the weakest significant impacts. The explanation for the case of trust, and for the cases of the insignificant impact of subjective norms and electronic word of mouth was investigated by employing qualitative methods. The interview data showed that there were moderators that might affect the impact of such factors.

This research makes a number of contributions. Theoretically, the extension to the theory of planned behavior advances and enriches the literature because it incorporates factors and introduces new relationships that show significance. Practically, insights from this research can be conveyed to different parties, such as government departments, sellers, and companies. These practical implications are expected to contribute to supporting the goal of achieving the economic growth stated in the Saudi Vision 2030.

There are a number of limitations of this study, for instance, the unspecified definition of the trust factor. Lastly, this study provides directions for future research, such as using and augmenting the model presented in this study in other contexts, conducting research while ensuring the trust factor is fully defined, and comparing the initiatives that are provided by
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governments with initiatives provided by commercial institutions (i.e., online payment gateways).
STATEMENT OF ORIGINALITY

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

(Signed)______________________________

Ali Alghamdi
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My appreciation and acknowledgement must also be expressed to the Saudi Government for the provision of a full scholarship and financial aid throughout my candidature.
DEDICATION

“When I get older, I will read your book” said Lina, my three and a half year old daughter. So, first of all, I dedicate this work to my gorgeous and smart Lina.

I also dedicate my thesis to my loving parents, my beloved wife, and my dear sisters and brothers.
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<thead>
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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AT</td>
<td>Attitude</td>
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<tr>
<td>AVE</td>
<td>Average variance extracted</td>
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<tr>
<td>CFA</td>
<td>Confirmatory factor analysis</td>
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<tr>
<td>CITC</td>
<td>The Communication and Information Technology Commission</td>
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<tr>
<td>E-commerce</td>
<td>Electronic commerce</td>
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<tr>
<td>EFA</td>
<td>Exploratory factor analysis</td>
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<td>ESS</td>
<td>Emotional social support</td>
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<tr>
<td>E-WOM</td>
<td>Electronic word of mouth</td>
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<td>GaStat</td>
<td>The General Authority for Statistics</td>
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<td>IDV</td>
<td>Individualism and collectivism</td>
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<td>ISS</td>
<td>Informational social support</td>
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<tr>
<td>MOA</td>
<td>Motivation, opportunity, and ability model</td>
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<tr>
<td>OPEC</td>
<td>The Organization of Petroleum Exporting Countries</td>
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<tr>
<td>PBC</td>
<td>Perceived behavioral control</td>
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<td>PCA</td>
<td>Principal component analysis</td>
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<tr>
<td>PE</td>
<td>Perceived enjoyment</td>
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<td>PEOU</td>
<td>Perceived ease of use</td>
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<tr>
<td>PI</td>
<td>Personal innovativeness</td>
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<tr>
<td>PLS-SEM</td>
<td>Partial least squares structural equation modelling</td>
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<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tr>
<td>PU</td>
<td>Perceived usefulness</td>
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<td>PV</td>
<td>Price value</td>
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<td>SC</td>
<td>Social commerce</td>
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<td>SCI</td>
<td>Social commerce intention</td>
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<td>SEM</td>
<td>Structural equation modelling</td>
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<td>SMEs</td>
<td>Small and medium sized enterprises</td>
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<td>SN</td>
<td>Subjective norms</td>
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<td>SP</td>
<td>Secure payment</td>
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<td>SS</td>
<td>Social support</td>
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<tr>
<td>TAM</td>
<td>Technology acceptance model</td>
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<td>TPB</td>
<td>Theory of planned behavior</td>
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<td>TR</td>
<td>Trust</td>
</tr>
<tr>
<td>TRA</td>
<td>Theory of reasoned action</td>
</tr>
<tr>
<td>UTAUT</td>
<td>The unified theory of acceptance and use of technology</td>
</tr>
<tr>
<td>UTAUT2</td>
<td>The extended unified theory of acceptance and use of technology</td>
</tr>
<tr>
<td>VSM</td>
<td>Value survey model</td>
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LIST OF PUBLICATIONS

Published paper:

Submitted paper for review:
1 CHAPTER ONE: INTRODUCTION

1.1 OVERVIEW

This chapter provides the introduction to this research. It comprises sections that briefly introduce the background of the research, a profile of the country where the research was conducted, the motivation and statement of the research problems, the objectives of the research, the research questions, and the methodology employed to conduct this research. The chapter concludes with an overview of the structure of the thesis. Figure 1.1 provides a pictorial overview of the chapter.

![Figure 1.1: An overview of Chapter 1](image-url)
1.2 RESEARCH BACKGROUND

Social commerce (SC) is a multidisciplinary topic, and can be defined in many ways. However, it is generally defined as the practice of electronic commerce (e-commerce) activities using social media networks (Turban, Bolloju, & Liang, 2010), and is considered as a subset of e-commerce (Afrasiabi Rad & Benyoucef, 2011). SC is enabled by the new interactive technologies such as wikis, blogs, and social media networks (Afrasiabi Rad & Benyoucef, 2011). The term “social commerce” was first introduced on Yahoo (Wang & Zhang, 2012); however, the concept has been in action since 1999 (Curty & Zhang, 2011).

SC adoption has been studied from different perspectives by applying diverse theories that concern technology acceptance. For instance, Teh and Ahmed (2011) applied the theory of reasoned action (TRA) and Shin (2013) applied the theory of planned behavior (TPB) with other external factors. In addition, Gatautis and Medziausiene (2014) and Abed, Dwivedi, and Williams (2015) respectively applied the theory of acceptance and use of technology (UTAUT) and the extended unified theory of acceptance and use of technology (UTAUT2). Furthermore, Liang, Ho, Li, and Turban (2011), Zhang, Lu, Gupta, and Zhao (2014) and Hajli and Sims (2015) looked at SC from a social support theory point of view.

Moreover, SC adoption has been investigated from electronic word of mouth (E-WOM) and trust viewpoints. For example, Amblee and Bui (2011); Park, Lee, and Han (2007); and Hajli, Hajli, and Khani (2013) investigated the role of E-WOM on SC intention. In addition, Hajli (2013), Kim and Park (2013), and Hajli (2015) looked at SC adoption from trust point of view.

In addition to these studies that were conducted in a global context, there are a few studies that discussed SC in a Middle Eastern context. Also, some e-commerce research in
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the Middle East was reviewed as the number of SC studies was small. Briefly, Alrawi and Sabry (2009) mentioned that online shopping in the Arab countries is expected to grow tremendously. However, there are some factors that contribute to adopting online shopping such as payment systems and government involvement (AlGhamdi & Drew, 2012; Alrawi & Sabry, 2009)

The main findings of these studies are presented in detail in Chapter 2. However, broadly speaking, SC intention (SCI), which refers to consumers’ intention to use and conduct SC activities, is influenced by a number of factors. Some of these factors were categorized in this study into individual-related, social-related, and government-related factors. This categorization helped to capture a broad picture of the factors that influence consumers’ intention to buy via SC, abbreviated as SCI.

This research pays particular attention to the involvement of the government in the process of SC adoption. The literature shows, particularly in Chapter 2, Section 2.4, that government involvement is an important aspect to achieve success in e-commerce adoption. However, over the course of the literature review, no studies were found that investigated government involvement in the context of SC. Nevertheless, because SC is seen as a subset of e-commerce, this research reflects studies that examined government involvement in e-commerce on the adoption of SC. Later in Chapter 2, the significance of government involvement is discussed and the focus on government involvement in SC in this study is then justified.

1.3 PROFILE OF SAUDI ARABIA

This section provides a general and brief profile of Saudi Arabia, because it represents the context of this study where the data were collected. In addition, it helps the reader to get
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a general view of Saudi Arabia where the results and discussions can be reflected. According to the website of the General Authority for Statistics (GaStat), the Kingdom of Saudi Arabia, internationally known as Saudi Arabia, is located in the furthest part of southwest Asia ("General Information about The Kingdom of Saudi Arabia," 2016). It is the biggest country in the Arab Peninsula, occupying approximately four-fifth of its area, which is equivalent to around 2,000,000 square kilometers, with a total population of more than 33,000,000. It is bordered by seven countries and the Red Sea: United Arab Emirate and Qatar from the east, the Red Sea from the west, Kuwait, Iraq, and Jordan from the north and Oman and Yemen from the south ("General Information about The Kingdom of Saudi Arabia," 2016).

The large area of Saudi Arabia has resulted in a diverse topography with different climates. There are coastal plains, a chain of mountains called Sarawat, and several valleys and deserts ("General Information about The Kingdom of Saudi Arabia," 2016). The climate in general is hot in summer and cold in winter, with more frequent rainfall in winter. Saudi Arabia is divided into 13 administrative regions, which are divided into governorates. Islam is the main religion in the country and Arabic language is the most spoken language. The currency is Saudi Riyal (SAR), with an exchange rate of SAR 3.75 for every 1 U.S. dollar ("General Information about The Kingdom of Saudi Arabia," 2016).

According to the website of the Organization of Petroleum Exporting Countries (OPEC), Saudi Arabia is the 14th largest country in the world, the 2nd largest OPEC member, and the largest exporter of oil, as it has 18 per cent of the world’s petroleum reserves (2019). These facts have contributed to Saudi Arabia’s economy being dependent on oil (Alshehri, 2013). However, this has been changing, as discussed in the following section. Saudi Arabia has also given high priority to information and communication technology, as these play a
significant role in the economy (Alshehri, 2013). These factors have also played essential roles in improving several industries in Saudi, such as financial, industrial, and more related to this study, governmental and commercial (Alshehri, 2013).

### 1.3.1 VISION 2030

Under the current ruling power of King Salman and crown prince Mohammed bin Salman, Saudi Arabia is going through a sequence of comprehensive reforms (Khan, 2016). These reforms concern regulation, budgets, and policies that are going to be implemented over a period of 15 years, where less dependence on oil and more dependence on sustainable economy are to be achieved (Khan, 2016). These reforms are integral elements of a plan called the Saudi Vision 2030, which was established as a roadmap for economy diversification. The vision will stand on three pillars considered the core strengths of the country: the country’s Islamic leadership, the country’s strategic and important location, and the country’s massive natural resources (Khan, 2016).

The plan is about an investment in Saudi Arabia’s future, where more than half of the population is aged 30 and younger (Neil & Sprusansky, 2017). One of the most important goals of the vision is to “ensure a thriving economy include raising the share of non-oil private sector GDP from 40 percent to 65 percent” (Khan, 2016, p. 38). Furthermore, the vision recognizes the importance of small and medium sized enterprises (SMEs) in making a contribution to the growth of the overall economy of the country by creating more jobs, innovating, and contributing to export (Alshuwaikhat & Mohammed, 2017). Consequently, the Saudi Government introduced initiatives to support small businesses. The establishment of an authority that supports and organizes SMEs was among these initiatives (Vision 2030 - Kingdom of Saudi Arabia, 2019). This authority supports entrepreneurship in many ways.
For instance, the authority passes easy regulations for entrepreneurs, provides easy access to funding, and facilitates microfinance (Vision 2030 - Kingdom of Saudi Arabia, 2019).

Localization of specific sectors, such as digital economy, is also a focus of the vision (Alshuwaikhat & Mohammed, 2017). According to Mesenbourg (2001), digital economy has three components: supporting infrastructures (i.e., hardware, software, telecommunication networks), electronic business processes (i.e., electronic payments and electronic marketplaces), and e-commerce transactions (i.e. selling using online networks). Saudi Arabia pays great attention to e-commerce and real efforts are being made to attract sellers and consumers to use this to achieve economic benefits. A report published by the Communication and Information Technology Commission in Saudi Arabia (CITC) stated that “creating a vibrant e-commerce ecosystem will have a multiplier effect on the economy as it will create new business models and opportunities for local businesses (SMEs, home-based sellers, etc.) to sell to a wider domestic customer base and help them take their products and services beyond the borders of Saudi Arabia” (CITC, 2017, p. 21).

James Smith, United States former ambassador to Saudi Arabia, and Julie Monaco, Global Head of Corporate and Investment Banking Coverage for Public Sector at Citigroup, both said that the Saudi Vision 2030 is promising (Neil & Sprusansky, 2017). However, they both remarked that high level of devotion and consolidated work needs to take place to execute and accomplish this plan successfully (Neil & Sprusansky, 2017).

1.3.2 SOCIAL COMMERCE IN SAUDI ARABIA

As mentioned earlier, the Saudi Arabia Government has paid great attention to information and communication technology (Alshehri, 2013). In fact, Alotaibi (2017) stated, according to World Economic Forum 2013, 2014, 2015 and 2016, that Saudi Arabia is
amongst the top 25% countries in terms of infrastructure and digital content and in the top 5% countries in terms of the importance of information and communication technology. The outcomes of these facts are proven through the use of the internet. Alotaibi (2017) mentioned that internet usage among the Saudi population has increased dramatically, from 13 per cent in 2005 to almost 65 per cent in 2014. This has led to an increase in the level of familiarity of technology in Saudi Arabia.

What is more, these aspects have contributed to a high level of e-commerce readiness in Saudi Arabia. According to CITC (2017), Saudi Arabia ranked 46th out of 144 countries in e-commerce readiness, placing it closer to countries such as Italy and Russia. This contributed to strong spending in business to consumer e-commerce settings. The spending in business to consumer settings totaled SAR 29.7 billion in 2016, with an expectation of growth by 20 per cent in the next few years (CITC, 2017). “Given the size of the market and the growing appetite of consumers for online shopping, e-commerce companies are expected to invest more in the coming years” (CITC, 2017, p. 27).

Buying via social media platforms such as Instagram, Twitter, and Facebook has also been captured in Saudi Arabia. According to CITC (2017), 42% of a survey participants who have shopped online in the last 12 months have purchased via social media platforms. This growth of online buying using social media platforms is attributed to efficiency and ease for consumers to check for recommendations and advice from other shoppers (CITC, 2017). “Consumers also get an increased sense of transparency if the seller is active on social media” (CITC, 2017, p. 35). These are indicators that the use of SC in Saudi Arabia is becoming more popular, and consumers do not merely conduct buying activities, but also take turns in social interaction on social media platforms to make better buying decisions.
1.3.3 MAROOF AND SADAD

Given the economic importance of e-commerce and SC within the context of the Saudi Vision 2030, the government has initiated supporting products and services to accelerate the adoption and maximize the use of e-commerce and SC. In this research, two initiatives are highlighted because they have strong associations to the study’s context. The Ministry of Commerce and Investment and Saudi Arabian Monetary Authority initiated supportive tools for successful use and adoption of e-commerce and SC. The Ministry of Commerce and Investment introduced Maroof (Maroof, 2017) and Saudi Arabian Monetary Authority introduced Sadad (Sadad, 2019b).

Maroof is an electronic word of mouth website established to allow an exchange of SC experiences between consumers (Maroof, 2017). Maroof is an Arabic word that means ‘known’. The concept of the Maroof platform suggests that online Saudi sellers develop trust and become well-known upon registering and receiving positive reviews and recommendations from buyers (Maroof, 2017). The Maroof platform supports writing reviews and also giving rating scores to sellers by consumers. Current statistics show more than 20,000 online stores are registered on Maroof and conduct their e-commerce activities in Saudi Arabia. However, even though the perceived value of Maroof seems high, analyses of this study revealed that Maroof is not an effective tool for the context of SC in Saudi Arabia.

Sadad is an Arabic word that means ‘payment’. It is a service that allows consumers to register and create an online account to use the online payment gateway (Sadad, 2019a). This payment method is secure and used by Saudi online stores where consumers link their Saudi bank accounts to a Sadad accounts and pay for products and services (Sadad, 2019a). It was
established and is monitored by the Saudi Arabian Monetary Authority (Sadad, 2019b). Abou Shousha (2016) stated that Sadad account is a game changer and an innovative non-card online payment system, where sensitive payment information is not shared so consumers can shop with confidence. However, the use of Sadad is lower than the use of other payment options, such as cash on delivery, credit cards, and eWallet (CITC, 2017). This is because consumers have low awareness of the service or perceive that the service is poor (CITC, 2017).

1.4 STATEMENT OF THE RESEARCH PROBLEM AND RESEARCH QUESTIONS

The brief profile of Saudi Arabia provided in the previous section presented an overview of Saudi Arabia’s ambitious vision that aims to move the country forwards to be amongst the most prosperous countries. There are many objectives of such a striving vision; however, amongst those objectives are two objectives related to this study: diversifying income sources and empowering entrepreneurs and SMEs. The heavy reliance on oil as the primary source of income for the country will eventually be substituted with multiple different sources of income.

For instance, the role of entrepreneurship and SMEs is emphasized in the Saudi Vision 2030, stating that the economy will benefit from these because they will create more jobs and contribute to exports (Alshuwaikhat & Mohammed, 2017). In this era of network connectivity, the globe has become a village where people connect, exchange thoughts, and sell products and services over borders. SMEs ability to exploit such situations is highlighted in the Vision 2030 to create opportunities that may contribute to boosting the economy (Vision 2030 - Kingdom of Saudi Arabia, 2019). However, exploiting such a golden
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opportunity is not an easy task as it required combined collaboration from multiple players. There is risk involved, as well as a need for dedication and commitment to succeed in achieving the successful implementation of these aspects of the vision (Neil & Sprusansky, 2017).

In a global context, the increased number of internet users, the provision of digital payments, and developments in logistics facilities have created promising opportunities for emerging markets, such as China and India, which have experienced huge growth in e-commerce (CITC, 2017). As a result of exploiting these aspects, the Chinese and Indian markets are amongst the world’s largest e-commerce markets (CITC, 2017). While Saudi Arabia also aims to exploit these aspects, it is important to recognize who the other powerful players are. In fact, according to (CITC, 2017), global e-commerce giants such as Alibaba and Amazon have recently been making huge investments in other markets. For instance, Alibaba’s interests in Southeast Asian and Singaporean markets, and Amazon’s interest in the Middle Eastern (including Saudi Arabia) and Indian markets (CITC, 2017).

Despite Saudi Arabia experiencing fast growth and improvement in information technology and infrastructure, where it is the largest in the Arab region, local e-commerce activities are not evolving at the same pace (Al Ghamdi, 2014). At the same time, the number of online stores in Saudi Arabia has dramatically increased, with more than 20,000 online stores registered on Maroof ("Ministry of Commerce: 20 thousand online stores registered on "Maroof"," 2018). However, according to CITC, consumer behavior analysis has revealed that most online shoppers in Saudi purchase their goods and services from online shopping platforms that are based outside of the country, with only 7 percent of shoppers making purchases exclusively from Saudi-based online shops (2017).
Such instances raise the question of what is inhibiting consumers in Saudi from purchasing from Saudi-based online shops. There is a substantial leakage of e-commerce profits that goes to non-Saudi companies (CITC, 2017). This does not contribute to or support the aims of Vision 2030. There are many possible reasons for these circumstances, such as consumers’ perception of the immaturity of SC in Saudi Arabia, or perceived low quality of the services in conducting and handling SC activities by sellers. In addition, the supporting initiatives (i.e., Maroof and Sadad) are not enough for successful local SC adoption or have been established poorly, where no or little contribution has been made. Furthermore, this could be due to the price ranges offered in Saudi online stores. In such a very highly competitive environment, where external players offer constant product availability, competitive prices, service quality, and high level of support, consumers may choose to buy from non-Saudi online stores.

The recent reforms implemented in Saudi Arabia made it an interesting case. This is because such a huge transformation requires consolidated effort through which the vision can be successfully fulfilled. Thus, this research is an attempt to support the achievement of a successful vision, specifically in regards to motivating entrepreneurs and SMEs to effectively make use of the opportunities that digital economy offers. That is, in such a vibrant era of technological connectivity, where consumer acquisitions are made easy over borders, competitive advantage can be attained in which economic benefits are achieved. However, the giant e-commerce and SC players are more likely to propose plans and execute them in an institutional manner, paying attention to every single factor that might contribute to achieving success. On the other hand, Saudi entrepreneurs and SMEs might lack such competencies, especially those related to research and development. The evolution from e-
commerce to SC may make it even harder for entrepreneurs and SMEs to capture the complexity of human behavior in a SC setting, as stated by Wang and Zhang (2012). Consequently, this research is an attempt to broadly understand the drivers that make consumers adopt SC in Saudi Arabia. The answers will be communicated to the related parties, therefore corrective moves should be applied to prevent revenue leakage and support the successful employment of digital economy initiatives.

In addition, and theoretically speaking, little attention has been paid to understanding human behavior in a SC context from a broad and general perspective. There have indeed been numerous attempts to investigate what influences SCI; for instance, studies conducted by Liang et al. (2011), Zhang et al. (2014) and Hajli (2015). However, these studies, that were reviewed from the literature in this current research, have not captured human behavior, where a clear and broad picture of different and distinct factors predicting SCI is offered in one place. Nowadays, SC is gaining more attention around the world due to the widespread use of social networks and the advancement in technology that enable humans to interact efficiently in the cyber area. Yet, comprehending the core factors affecting SC adoption related to different disciplines (i.e. individual, social and governmental) in a broad perspective has not been achieved. Consequently, this research is an attempt to explain, from a broad perspective, the predictors of SCI by introducing an integrative model that incorporates several factors and explores the interlinking relationships between these predictors.

The primary research question that is linked to the statement and the aim of the research is the following:
What are the key factors that influence consumers’ adoption of SC in Saudi Arabia?

However, there are multiple questions that correlate with the main research questions and research aim and objectives. These sub-questions are articulated in Chapter 2, Section 2.7.

In summary, there are two motivators for this research. First, the research will contribute to the body of SC literature by introducing a model that examines SC from multiple perspectives. Such a model provides a broad understanding of how consumers behave in such a complex environment. Second, and practically speaking, this research is expected to support the ambitious Saudi vision, where institutional and commercial parties will benefit by conveying the outcomes, interpretations, and recommendations of the study.

1.5 OBJECTIVES OF THE RESEARCH

This research aims to study human behavior in embracing SC in Saudi Arabia from different points of view. It examines the role that individual factors, social factors, and governmental factors, identified and classified in detail in Chapter 2, play in influencing consumers to adopt SC in Saudi Arabia. This study aims to examine the impact of a number of factors on SCI, consumers’ attitude, and consumers’ trust. The factors incorporated in this study are attitude (AT), perceived behavioral control (PBC), price value (PV), trust (TR), social support (SS), subjective norms (SN), the Maroof platform (E-WOM), and Sadad secure payment (SP).

The overall objectives of the study are presented below:

- Identifying the current gaps in knowledge in SC research.
- Identifying the factors that impact the adoption of SC in Saudi Arabia.
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• Developing a conceptual model and associated hypotheses that could provide better understanding of SC adoption in the Saudi Arabia context.

The detailed activities of the study are presented below:

• Examining the relationship between all of the listed factors and SCI.
• Examining the impact of TR, SS, E-WOM, and SP on AT.
• Examining the impact of SS, E-WOM, and SP on TR.
• Explaining some of the relations in the model that needed more clarification.

These objectives were achieved by applying quantitative methods. A set of statistical analyses were conducted to validate and measure the above-mentioned objectives. However, another objective of the study was to search for an in-depth explanation into why some relationships were weak or insignificant. The selection of these relationships was done in accordance with the outcome of the analyses, and this is detailed in Chapter 6. The overall objective of this study is to broadly identify the predictors that play important roles in adopting SC and understand the connections some of these factors have with some other factors.

1.6 RESEARCH METHODOLOGY

A sequence of procedures was used in this research to achieve the desired outcomes through which the objectives of the research were fulfilled. The steps, tools, and procedures employed in this research are discussed in more detail in Chapters 3, 4, 5, and 6. However, this section provides a brief description of the overall methods used in this research. A mixture of methods was used in this research. That is, deductive and inductive reasoning were applied, where quantitative and qualitative methods were utilized. The research follows a pragmatic paradigm to achieve the desirable outcomes. Applying this paradigm allowed for
the selection of the most appropriate methods, with no strict rules that might be marked in other paradigms. For instance, paradigms that are associated mostly with one method (quantitative or qualitative) (Creswell & Plano Clark, 2017). The justification for this point is presented in detail in Chapter 3. The selected design for this study follows Creswell and Clark’s (2007) explanatory sequential design. Quantitative methods were applied first, followed by qualitative methods. This selection is justified in chapter 3 (Section 3.4 & Section 3.4.1). However, generally speaking, this selected design is consistent with the sequence of methods applied in this study as it started with and emphasized quantitative methods.

In the quantitative method, a survey technique was applied in a pilot study and in the data collection for the full-scale study. In the qualitative method, an interview approach was utilized to collect more data to explain certain circumstances that arose from the first quantitative study. The data analysis procedures varied for each method. Statistical analysis techniques, such as descriptive analysis, validity and reliability testing, and structural equation modelling (SEM) were used in the quantitative part; while the hybrid thematic analysis technique was used for the qualitative data analysis.

1.7 THESIS STRUCTURE

The remainder of this thesis is summarized as follows:

Chapter 2 presents the literature review, including the theoretical background and related studies, the knowledge gaps, and the framework of the study.

Chapter 3 offers a detailed overview of the methodology of the study, including the selection of research paradigm, research design, quantitative approaches, qualitative approaches, and the ethical considerations.
Chapter 4 covers two aspects: the procedures followed in this research for preparing and organizing the questionnaire for the quantitative study, and the preliminary study (pilot study) conducted before the full-scale-study.

Chapter 5 presents the data analysis procedures and findings for the full-scale study, including the data screening and preparation, descriptive analysis, measurement scale analysis, and the assessment of the study’s model.

Chapter 6 presents the qualitative part of this research. It redefines the qualitative questions, and provides an overview of the qualitative approaches, instruments, and procedures for the data collection. It also outlines the thematic analysis, specifically the hybrid thematic analysis, and concludes with the results of analyzing the interviews conducted with consumers and experts.

Chapter 7 presents the discussion of the outcomes of the quantitative and qualitative analyses. It begins by presenting the rationale and justification for the selected basis of the study’s model and discusses the study sample. Moreover, 15 hypotheses are discussed and compared with prior research.

Chapter 8 presents the conclusion of the research, where a summary of the research, the contributions and limitations of the research, and future studies are discussed.
CHAPTER TWO: LITERATURE REVIEW AND RESEARCH
THEORETICAL MODEL

2.1 OVERVIEW

Social commerce (SC) is a contemporary trend characterized as a subset of e-commerce (Afrasiabi Rad & Benyoucef, 2011). This study focuses on the adoption of SC. The purpose of this study, as detailed in Chapter 1, is to broadly identify the factors that influence consumers’ intentions to purchase via SC (SCI) in the context of Saudi Arabia. This research is expected to provide useful insights to small businesses and entrepreneurs in particular, and the Saudi Government and other businesses in general. It is expected to help deliver a broad, but deep, understanding of the factors that might influence consumers to adopt SC.

This research is an attempt to complement the Saudi Vision 2030 that is concerned with economic growth by diversifying income sources. Promoting entrepreneurship is one of the Saudi Vision 2030 initiatives (Vision 2030 - Kingdom of Saudi Arabia, 2019). Hence, in this research, a general overview of consumer behavior in SC will hopefully help online entrepreneurs in Saudi Arabia. In other words, the outcomes of the study will hopefully help small businesses, and businesses in general, to apply strategies and tactics to increase their revenues by understanding consumers’ behavior in SC. This will in turn benefit the overall goal of the Saudi Vision 2030. There will also be a theoretical contribution, where the study presents a broad model that investigates SC adoption from multiple perspectives.

This section presents the layout of the current chapter. The primary aim of this chapter is to identify the knowledge gaps and explore the factors that influence consumers to adopt SC. Thus, reading through and reviewing the literature was the inevitable first step. The
This chapter explores and analyses the interrelated literature relevant to this study to identify the gaps in the knowledge. As illustrated in Figure 2.1, this begins with an explanation of the concept and definitions of SC, followed by the foundation and the
evolution of SC. The importance of government involvement and intervention in e-commerce are then presented and discussed. Subsequently, the theoretical background is presented, where a number of theories and theoretical frameworks utilized to examine the intention to buy on e-commerce and SC shopping are listed and highlighted. Within the theoretical background section, studies that used the theories and models are reviewed and the suitability of factors or constructs for this current study are assessed. The hypotheses of the nominated factors included in the study’s model are articulated and presented within the same sections.

Each theory and the studies related to them are presented under the same section. That is, the theory of reasoned action (TRA), theory of planned behavior (TPB), technology acceptance model (TAM), and unified theory of acceptance and use of technology (UTAUT) are reviewed in different sections. Under each section, all of the relevant studies that utilized the theory are listed and reviewed. Other additional factors important to this study are also discussed with the related studies in different sections (see Figure 2.1). The hypotheses linked to the selected factors are discussed after each argument related to the factors. After presenting the theoretical background and related sections, the gap in the literature is discussed and the research questions are presented.

However, the hypotheses are outlined in a different section because they are categorized under a different classification more aligned with the structure of this study. That is, factors are either classified as individual-related, social-related, or governmental-related. Thus, within the section that presents the theoretical model of the study, the hypotheses are presented where they align with this classification. It is important to note that the selection of a theory, as a base for this study’s model, and the factors to be included in the study’s model depended on the level of relevance to the aim and scope of this study. The outcome of
the steps articulated above helped in determining the most suitable theory to serve the aim of investigating SC from a broad perspective. Finally, the chapter concludes with a recap of the chapter and a description of the following chapter.

2.2 DEFINITIONS

As a multidisciplinary subject, SC has no universally agreed or united definition (Huang, Yoon, & Benyoucef, 2012; Sun, Zhao, & Zhu, 2012). However, generally speaking, it is defined as the practice of commerce activities using social media networks (Curty & Zhang, 2011, 2013; Huang et al., 2012; Linda, 2010; Turban et al., 2010; Wang & Zhang, 2012). It is categorized as a subset or evolution of e-commerce (Afrasiabi Rad & Benyoucef, 2011). “It represents potential merchandizing opportunities that combine shopping and social networking activities through social media” (Wang & Zhang, 2012, p. 106). Stephen and Toubia (2010) claimed that SC refers to networks that link sellers with each other, and social shopping connects buyers with each other. Kang and Park (2009) also shared Stephen and Toubia’s (2010) opinion about the concept of social shopping and suggested that social shopping is a type of e-commerce. In contrast, SC and social shopping share the same definition and concept, where modern electronic shoppers recommend items, comment on them, rate vendors, and create a wish list (Leitner & Grechenig, 2008). Afrasiabi Rad and Benyoucef (2011) stated that the definition of SC should embrace both sellers who create networks of sellers and buyers who create networks of buyers. In the technical context, SC is defined as an e-commerce website that benefits from user-generated technologies such as blogs and wikis (Wang & Zhang, 2012).

Zhang, Zhou, and Zimmermann (2013) introduced a comprehensive and broad definition of SC consisting of the following key elements: “(1) commerce activities, such as
marketing, selling, comparing, curating, buying and sharing; (2) social media, including those that connect online and offline marketplaces and communities; (3) people representing community members, sellers and buyers, etc.; and (4) information, for example, about products and services” (p. 221).

In this study, the term “social commerce” is defined as a combination of online commerce activities and social interactions. It is concerned with performing e-commerce transactions, along with the involvement and participation of communities and individuals through interaction-enabling technologies that facilitate social interaction. The concept and definition of SC in this current study is not limited to purchasing goods from the internet through social media websites such as Facebook, Twitter and Instagram. Rather, it generally includes any type of online commerce platforms that offer social communication.

2.3 EVOLUTION

New and advanced web technologies, as well as internet security and payment systems, play an important role in advancing the functionality of the internet to be a commercial and marketing tool (Afrasiabi Rad & Benyoucef, 2011). Afrasiabi Rad and Benyoucef (2011) claimed that the emergence of Web 2.0, including technologies such as wikis, blogs and social networks, are changing the way people collaborate on the internet and making users more powerful and more sophisticated. As O'Reilly (2005) suggested, Web 2.0 refers to the technologies that contribute to significant changes regarding how the content of the web is generated and used.

Web 2.0 technologies have created new shopping trends that allow consumers to communicate and benefit from each other. “The increased interest in Web 2.0 technologies and their e-commerce applications has led to a new shopping trend where customers leverage
social networks to make more efficient and effective purchases” (Afrasiabi Rad & Benyoucef, 2011, p. 64). Shoppers in the traditional world are influenced by their friends and families when making decisions to buy products and services; the same applies in SC with technologies that support the production of content such as electronic word of mouth (Afrasiabi Rad & Benyoucef, 2011).

The term “social commerce” was coined in 2005, along with the wide acceptance and success of social networking sites (Stephen & Toubia, 2010; Wang & Zhang, 2012). It was first introduced in 2005 by Yahoo when they announced Shoposphere and Pick Lists as two tools for social collaborative shopping (Curty & Zhang, 2013; Wang & Zhang, 2012). However, Curty and Zhang (2011) claimed that the notion of SC has been in action since 1999, or perhaps earlier. That was when the e-commerce websites Amazon and Epinion adopted the referral shopping strategy when they respectively implemented “purchase circles” and rating “stars”, which have the same purpose of the current SC recommendation systems (Curty & Zhang, 2011).

In 2011, Curty and Zhang conducted a longitudinal study to examine the technological features in 15 e-commerce websites to illustrate the evolution of SC. The authors observed these websites from 1999 to 2010. Referral and recommendation systems were first offered in 1999 by Amazon and Epinion; thereafter, a mobile application for Amazon e-commerce website was launched in 2002. Afterward, in 2004, really simple syndication (RSS), a feature that allows users to retrieve summarized history and news from a chosen website without direct access, was introduced. All 15 observed websites benefited from this tool. In 2005, a tagging feature appeared in two websites: Wists and Etsy. From 2006 this was utilized by all of the websites under analysis. Furthermore, in 2006, Amazon
introduced a mobile version website. Meanwhile, video-based referral and recommendations were first used by Shop Wiki. Subsequently, in 2007, internal social networks were built by ShopStyle, Wists and Stylehive. Further, the study showed that Epinion provided internal social networks named “Epinion Experts” in 1999; as did Amazon in 2006, by offering “Amazon Connect”. In 2008, ThisNext and Etsy adopted Geolocators, which focus on providing reviews from users who are in closer location to the consumer. Consequently, Wish Pot integrated the Facebook like tool into the website’s interface in 2010, as well as signing into the website using Facebook login information (Curty & Zhang, 2011).

Another broader study of SC evolution was carried out by Wang and Zhang (2012). Based on academic and trade articles, the study traced the evolution of SC from 2005 to 2011. The authors analyzed the development of SC using four perspectives: people, management, technology, and information. People were represented by buyers, sellers, and communities who benefitted from the technologies. The management aspect concerned the policies, strategies, structures, and so forth. The technology component dealt with hardware, software, infrastructure, services, and so on. The information dimension discussed the creation, acquisition, publishing and using of the information in SC (Wang & Zhang, 2012).

On the people dimension, in 2005, consumers relied on other users’ generated content, while in 2006 consumers spent time socializing with other peers to generate clearer buying ideas (Wang & Zhang, 2012). In 2007, consumers fell into two categories: consumers driven by cognitive thinking, seeking trust and credibility from like-minded individuals, and consumers driven by positive emotions who ended up buying without cognitive planning. However, in 2008, consumers were not receptive to sellers’ marketing. Moreover, in 2009, shoppers were seen to be more powerful and are self-guided in looking for product
information, relying only on their social networks and not influenced by marketers’
information. In 2010, SC was seen as a chance to fight deflation and support individual’s
economic savings in Asian countries. Meanwhile, SC was seen as social fun for users in
Western countries. What is more, consumer’s decision processes were seen to be more
complicated in 2011 because shoppers are not always influenced by peer recommendations,
and they are driven by their interest in addition to their social network connection (Wang &
Zhang, 2012).

On the management dimension, in 2005 and 2006, start-up businesses were advised
to shift to a niche strategy, where consumers are satisfied by the quality and the price of the
product. This can be achieved by providing collaborative platforms, such as social media
networks, where consumers discuss shopping ideas that could be used by businesses to
deliver niche products to the market; therefore, the overall experience of the consumer is
improved. However, in 2007, benefiting from social networking sites to generate business
value was taken into consideration, for instance, utilizing Facebook shopping services that
lets users see what others in their networks purchased. This could therefore be exploited as
an advertisement channel. In 2008, bargain finding strategies took place, where niche
products were connected and advertised to shoppers. Afterwards, in 2009, the presence of
SC sites in social networking sites was launched; this feature was introduced in Facebook by
adding e-commerce in its newsfeed. In 2010, Tuangou, or group buying, became very popular
and it combined both online and offline retailers. Lastly, in 2011, integration of e-commerce
sites and social media sites occurred, for example, eBay paved the road to SC via Facebook
(Wang & Zhang, 2012).
Alrawi and Sabry (2009) reviewed the evolution of online shopping in the Arab region, with a specific focus on the Gulf countries. Their review found a high anticipation of a huge e-commerce market in Gulf countries. There are factors that contribute to the acceptance of e-commerce in the Gulf region, which may include the user’s education, IT skills, e-commerce awareness, and confidence in online transactions. In addition, a website’s security, usability, and integrity are other factors. Furthermore, information communication and technology infrastructure, law awareness for e-commerce, and payment systems authorized by online banking play important roles in e-commerce evolution and acceptance in the region. More importantly, government involvement is seen to be great motivator for e-commerce evolution and acceptance. More of the outcomes of Alrawi and Sabry (2009) study are highlighted in the next section.

2.4 GOVERNMENT INTERVENTION AND INVOLVEMENT

Andersen, Björn-Andersen, and Dedrick (2003) enriched the literature through their research focusing on the Danish practice of controlling e-commerce. The government of Denmark has established an e-commerce governance system in partnership with the private sector to promote business-to-business and business-to-consumer e-commerce. The governance model consists of four initiatives: knowledge diffusion, economic incentives, regulation and legislation, and electronic governance. Knowledge diffusion is primarily concerned with two aspects: creating awareness of the importance of effective information dissemination and developing IT skills through educational initiatives. Economic incentive involves direct subsidies that are assumed to be very important. For instance, investing in telecommunication infrastructure, determining favorable charges for internet services, and eliminating tax for personal computer purchases to increase the use of internet and
technology, therefore expanding the use of e-commerce. The third initiative, regulation and legislation, is related to the law in the information technology market. In other words, liberalizing and privatizing the telecommunication market, as well as utilizing the technical standards in business transactions, such as encryption and decryption. The last initiative, electronic governance, aims to monitor the process of the services provided to the public. These initiatives extensively contribute to the diffusion of e-commerce in Denmark. Acceptance and use of ICT and e-commerce increased in the public and private sectors as a result. In addition, the initiatives also increased the education and training of e-commerce and improved public access to e-services. However, Andersen et al. (2003) stated that these initiatives were inadequate to achieve a wide spread business-to-consumer e-commerce.

Scupola (2003) stated that SMEs desire institutional involvement to adopt e-commerce by delivering support and regulations. The required intervention should focus on three main aspects: 1) knowledge deployment, which generally refers to educating and training the population to be skilled in using e-commerce, including English language and e-commerce systems education; 2) subsidies, which represent government financial support and tax deduction; and 3) mobilization, which concerns raising awareness of technologies and educating people about the benefits of technologies, and how to use them.

Purnhagen and Binding (2011) attempted to examine the differences between e-commerce regulations in China and European countries, but from a consumer protection point of view. They argued that the regulations in use in the two regions were convergent. The authors indicated that, in China, operation agents engaged in online trading must obtain a license through a licensing system and then run their business according to the law. Moreover, items to be sold need special approval and must therefore be inspected by the
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concerned department. In addition, operation behavior law applies in cases of illegal practice, such as cybersquatting, selling fake or imitated goods, and selling trademarked items without permission. Furthermore, Chinese contract law, which encloses a full provision of electronic contracts, is to be obeyed because electronic contracts are monitored to fulfil consumer protection. China also considers intellectual property to be another important aspect in e-commerce governance, ensuring issues such as infraction of patents is enforced so that author’s rights and copyright are managed and controlled. Lastly, consumer protection generally deals with protecting consumers’ personal data. In this regard, the operator or the service provider is compelled to “safeguard collected information, to make fair use of it, keep it on file only for a given time period and delete it in an appropriate manner” (Purnhagen & Binding, 2011, p. 188).

In contrast with the Chinese e-commerce regulations, Purnhagen and Binding (2011) claimed that the European regulations are similar, to a certain extent, despite the different ways of conducting these regulations. The authors indicated that, in the European Union, there are no assigned agencies that manage the surveillance of e-commerce transactions. Instead, some agencies that monitor specific European Union markets, such as pharmaceuticals and food groceries, may act as e-commerce surveillants in regards to consumer protection within their legal mandate. These agencies primarily issue advice that may raise consumers’ overall awareness, such as warnings concerning purchasing imitated medicines. Although the European Union increased the number of agencies that supervise the traditional market, Purnhagen and Binding (2011) stated that there are no plans to do so in regards to the e-commerce market. However, the authors indicated that the European Union has enacted a few general rules and principles that formulate governing frameworks
to carry out e-commerce market surveillance by European Union Member States. Furthermore, the European Union legislation set up a network of public authorities responsible for monitoring the application of the law with regard to consumer protection in the European market. This cooperation covers a number of aspects related to consumer protection, such as unfair commercial practice, unfair contract terms, and more importantly to this research, e-commerce activities (Purnhagen & Binding, 2011).

In conjunction with the above-mentioned cooperation, the European Union allows individuals and organizations who have an interest in protecting consumers to take a role in market surveillance under national law (Purnhagen & Binding, 2011). Therefore, the Member States should provide provisions to be followed when an individual or organization wishes to contribute to consumer protection before the issue escalates to court or to the concerned department. In addition, self-regulation and co-regulation methods are adopted by the European Union as innovative regulatory approaches to compete with maintaining the technical issues that can arise from the rapidly changing e-commerce environment. Co-regulation is defined as the mechanism whereby a community legislative act authorizes bodies that are known in the field to govern the fulfilment of the objectives defined by the authority. On the other hand, self-regulation means that companies and non-governmental organizations and associations voluntarily self-govern themselves and arrange for their own European level guidelines on contemporary issues not covered by European Union law (Purnhagen & Binding, 2011).

In the context of Saudi Arabia, Sait, Al-Tawil, and Hussain (2004) set forth a number of directions to be accomplished, primarily by the government, to promote e-commerce acceptance in the country. The first recommendation was to build advanced connectivity
infrastructures and plan to lower the charges for internet connections. The second recommendation was to start campaigns that aim to raise awareness about e-commerce for both individuals and enterprises. The third recommendation was to increase business reliability and security by implementing technology solutions such as authentication systems. Finally, and more importantly, the fourth recommendation was to enact e-commerce law concerned with privacy and security issues (Sait et al., 2004).

A recent study by (Ahmad & Agrawal, 2012) investigated the problems in e-commerce implementation for businesses in Saudi Arabia. They argued that the lack of e-commerce law is a significant obstacle for e-commerce development. In addition, data security and privacy are seen to be substantial concerns in relation to e-commerce implementation. Furthermore, complications in integrating e-commerce systems to existing systems is another obstacle for the same matter. (Ahmad & Agrawal, 2012) study did not provide recommendations or solutions to overcome these issues.

However, Alrawi and Sabry (2009) stated that government interventions will grant a more coherent e-commerce environment in the region. “The governments’ role will be of great importance in promoting e-commerce in the region in terms of ensuring coherent ICT and e-commerce policy for consumer protection, transparency and predictability and an enabled environment through top level support, coordination, collaboration and cooperation” (Alrawi & Sabry, 2009, p. 522).

AlGhamdi and Drew (2012) stated that, in the context of e-commerce in Saudi Arabia, “it is not surprising for Saudis to seek government’s help. This is because Saudi government plays a central role and people have a tendency to trust what comes through the government” (p.241)
AlGhamdi, Drew, and Alkhalaf (2011a) addressed the importance of the Saudi Government’s support in the diffusion and acceptance of e-commerce. They argued that the support of the Saudi Government is “the highest and most influencing factor for online retailing growth as identified by both parties; retailers and potential customers in Saudi Arabia” (AlGhamdi et al., 2011a, p. 772). Government support, which involves setting regulations, facilitating, and controlling e-commerce, is what consumers and businesses demand to promote e-commerce adoption and growth (AlGhamdi et al., 2011a). Thus, government agencies should play a role in overcoming the obstacles of online shopping adoption and deliver tools and legislation to increase e-commerce and SC use.

Correspondingly, a number of studies have supported the idea that government involvement is a key factor for e-commerce adoption in the context of Saudi Arabia (AlGhamdi & Drew, 2012; AlGhamdi, Nguyen, Nguyen, & Drew, 2011b; AlGhamdi, Nguyen, Nguyen, & Drew, 2012b). Government involvement can be understood in two ways: first, by providing comprehensive law and guidelines, via playing an important role in consumer protection; and secondly, through implementing facilities that promote an increase in e-commerce adoption, such as setting up secure payment options and establishing a reliable mailing system (AlGhamdi & Drew, 2012; AlGhamdi et al., 2011b; AlGhamdi et al., 2012b).

AlGhamdi, Drew, and Alhussain (2012a) proposed a conceptual framework for the government to follow to widely encourage Saudis to utilize e-commerce. Their model comprises five parts. First, the government should provide safe and trusted payment options. Although the old Sadad system, which was introduced to enable online payment, is a good option, it is limited to a small number of billers because the registration cost associated with
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this service is high. Promoting the use of PayPal services could also be an excellent solution for secure payments. Second, it is essential to enact and enforce laws for consumer protection. As such, consumers’ confidence in e-commerce transactions will be achieved; therefore, e-commerce adoption can be easily attained. Third, in addition to consumer protection laws, online marketplace regulations should be clarified for all parties to understand their responsibilities and rights. Fourth, digital certification for online shops from a governmental body is required; as a result, consumers’ trust increases and the likelihood of performing online transactions with certified websites can be increased. Finally, as the mailing system in Saudi Arabia is not reliable enough for item delivery, it is important to establish more dependable delivery methods that would help to promote e-commerce among Saudis (AlGhamdi et al., 2012).

AlGhamdi (2014) presented several recommendations that should lead to e-commerce growth in Saudi Arabia. The study suggests that the government or any concerned department or agency should offer assistance to retailers to adapt to an online retailing environment. This could occur by offering educative programs that develop awareness about how beneficial online retailing is for both financial and managerial levels. AlGhamdi’s (2014) study also claimed that introducing more reliable payment methods is essential for e-commerce growth. In addition, enacting comprehensive laws and regulations for e-commerce is as important as the previous recommendations. Finally, introduction of robust and reliable mailing systems is crucial to promote the use of e-commerce (AlGhamdi, 2014).

However, AlGhamdi’s (2014) study investigated e-commerce adoption from retailers’ points of view and provided guidelines for businesses to be made internally. In addition, the mailing system nowadays is tremendously improved and can be reliable in
finalizing e-commerce transactions. In 2014, the Saudi Post attained the achievement award for electronic transactions of government, the Middle East award for Excellence in Electronic Services (Saudi Post, 2019), and the award of Best Project for Social Responsibility (Ministry of Communications and Information Technology, 2019).

The illustration and emphasis of government involvement and control in the context of e-commerce in the literature indicates its importance (AlGhamdi et al., 2011a; Scupola, 2003). However, to date, government involvement in the context of SC in Saudi Arabia has not been investigated. In order to understand whether intention to use SC can be influenced when the government is involved, this research examines government involvement in the framework of the study.

Government involvement investigation in this study is examined in two ways. First, by studying the effect of establishing and using an online secure payment system (Sadad) by the Saudi Arabian Monetary Authority. Second, by investigating whether an online community reviewing and recommendation platform (Maroof) initiated and maintained by the Ministry of Commerce and Investment influences consumers’ purchase intention on SC. In other words, establishing a secure payment system and building and maintaining an electronic word of mouth platform are considered two government-related factors. These two factors are discussed in detail in Sections 2.6.7 and 2.6.8

2.5 THEORETICAL BACKGROUND

To build a conceptual model for the study, theories and relevant studies that explain and investigate how users accept, adopt, and behave in SC are illustrated. In addition, because SC is considered a subset of e-commerce, theories that have been applied to e-commerce can be applied to SC (Gatautis & Medziausiene, 2014). Therefore, the TRA, the TPB, the TAM,
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the UTAUT, and social support theory are addressed because they are widely used in such related contexts. Moreover, factors that show significant influences in adopting e-commerce and SC are also discussed. For example, Trust (TR) (Hajli, 2013; Kim & Park, 2013), electronic word of mouth (E-WOM) (Balakrishnan, Dahnil, & Yi, 2014; Sheikh, Islam, Rana, Hameed, & Saeed, 2017) and secure payment (SP) (Afrasiabi Rad & Benyoucef, 2011; AlGhamdi et al., 2012b).

With every theory or factor listed below, studies that employed the theory or the factors are listed and discussed within the related section. In addition, the hypotheses are outlined within these sections depending on the outcomes of the literature. It is important to note that the below section includes studies that investigated the adoption and acceptance of e-commerce and SC, because e-commerce is the broader umbrella under which SC occurs.

The literature review process employed an iterative method that was applied to every theory or external factor reviewed in this study. Figure 2.2 simplifies the process undertaken to review the literature in the research.

![Diagram](image)

Figure 2. 2: The iterative process of literature review.
2.5.1 THE THEORY OF REASONED ACTION

The theory of reasoned action (TRA), a theory extensively used for behavior prediction, was developed by Martin Fishbein and Icek Ajzen (Fishbein & Ajzen, 1977). TRA emphasizes that an individual’s behavior can be predicted by the individual’s intention, which can be measured by the individual’s attitude (AT) and subjective norms (SN) factors (AL-Majali, 2011; Chi, Yeh, & Yang, 2011; Peslak & Bhatnagar, 2009; Teh & Ahmed, 2011). AT is an evaluative factor that refers to an individual’s positive or negative assessment of an object (Fishbein & Ajzen, 1977), and can be formed by both individual’s beliefs and evaluation of the outcomes of performing a particular behavior (Davis, Bagozzi, & Warshaw, 1989). SN is defined as the individual’s feeling about whether most of the people they deem important think they should or should not do something in regards to performing a behavior (Davis et al., 1989; Fishbein & Ajzen, 1977). SN deals with the social influence occurring in the individual’s environment, and “is determined by perceived expectations of specific referent individuals or groups, and by the person’s motivation to comply with those expectations” (Fishbein & Ajzen, 1977). Some studies that have used the TRA to investigate online shopping are outlined below.

Shim and Drake (1990) studied consumers’ intentions in apparel online shopping by applying the TRA model. The results imply that AT toward behavior and SN play important roles in predicting consumers’ intentions. Additionally, they found that beliefs and evaluations, as attitudinal components; and normative beliefs, as a subjective norm component, are important to predicting online shopping of apparel. In contrast, the second component of SN, motivation to comply, did not show any importance in predicting behavioral intentions. This could be a sign of the sufficiency of normative beliefs as one
element of SN. Moreover, their study aimed to develop a profile for potential online shoppers. The study found that potential online buyers appeared to be previous mail order shoppers, relatively young, fashion conscious, less satisfied with local shopping, less likely to enjoy shopping centers, and regular computer users (Shim and Drake (1990)).

Perhaps these findings that determine potential buyers indicate that there is a need to extend the TRA in order to gain a clearer vision of what other factors affect the adoption of online purchasing. For instance, buyers’ skills and ability, the availability of resources, or in a SC context, accessibility to information. Thus, examining the other factors related to users’ ability and skills was highly considered in the current study.

Teh and Ahmed (2011) integrated the motivation, opportunity, and ability model (MOA) with TRA to investigate SC adoption. Siemsen, Roth, and Balasubramanian (2008) defined motivation, opportunity, and ability as follows: motivation indicates the degree of individual’s readiness to act in particular situation, opportunity describes the situations and circumstances that enable an action to occur, and ability represents the skills and knowledge that an individual has in relation to an action. In the context of SC, motivation refers to an individual’s interest in and willingness to perform SC activities, while “opportunity is viewed as time and Internet connection availability”, and ability means the skills and aptitudes that make an individual capable of engaging in SC activities (Teh & Ahmed, 2011, pp. 1375-1376).

By integrating the two models (TRA and MOA) in Teh and Ahmed’s (2011) study, the results show that SC is influenced by individual motivation, ability, and normative norms. Consumers’ AT, on the other hand, does not influence SC intention to purchase. The results of the integration of the MOA model with the TRA comes as another justification for the
necessity to expand the TRA in such a context. That is, adding factors related to user ability is worthwhile in the study of SC adoption. Simultaneously, two questions were raised related to motivation. The first question is what could make a consumer motivated to intend to purchase via SC? The second question is whether the motivation factor confused the AT factor.

In relation to the first question, this current study examines other factors that can be related to motivation (i.e., government-related factors and social support). For the second question, because the definition of motivation indicates consumers’ interest (Teh & Ahmed, 2011), which may be thought of as part of attitude, there is a possibility that participants were confused about the concept of AT and motivation. This may be linked with the insignificance of AT in Teh and Ahmed (2011) study.

In summary, it seems that the TRA needs to be augmented to better explain and predict buying intention. The shortcoming of the TRA can be represented in the absence of examining users’ abilities and capabilities and other motivational factors that might help improve understanding of SC adoption. The ability factor, which investigates how capable and skilled a user is to perform a certain task, is a part of the general concept of perceived behavioral control, which was added to the TRA to become the TBP (Ajzen, 1985).

2.5.2 THE THEORY OF PLANNED BEHAVIOR

The TRA was eventually extended and further developed by Icek Ajzen (1991) to the theory of planned behavior (TPB), which is used to predict people’s actions and behavior in a particular situation. The TPB consists of three related factors to explain human intention to a specific behavior: attitude, subjective norms, and perceived behavioral control (PBC). The first two factors were adopted from the TRA, and form the foundation of TPB (Ajzen, 1991).
The third factor, PBC, refers to the degree to which a person believes that performing a specific behavior is easy or difficult, and includes the past experience and anticipated complications (Ajzen, 1991). When an individual’s perceived success and control over performing a certain behavior are high, then TRA and TPB are identical (Ajzen, 1985). However, if PBC is not in its optimal value, then intention to perform a particular behavior is better tested using the TBP (Ajzen, 1985). “A person who intends to perform a behavior may, upon trying to do so, discovers that he lacks the needed information, skills, or abilities” (Ajzen, 1985, p. 25). These issues fall under the internal factors that affect the performance of planned behavior; however, some outcomes can be changed through education and experience (Ajzen, 1985).

According to the previous concept, and in relation to the context of SC, information provided by sellers and buyers, whether this is support, descriptions, recommendations, ratings, or reviews of products, can change the PBC of an individual by overcoming the issue of lack of information. Consequently, this could influence the individual’s intention to adopt SC. Moreover, beyond the need for information, performing SC requires skills and abilities as well as resources (e.g. access to the internet and computers). Consequently, researchers should consider PBC when examining intention for online buying because “Internet shopping does require skills, opportunities, and resources, and thus does not occur merely because consumers decide to act” (Shim, Eastlick, Lotz, & Warrington, 2001, p. 413).

It is expected that the TPB, with the inclusion of PBC, will work better than the TRA to determine individual intention to perform SC, because it will provide insight about the relations between skills information, and experience and intention to SC. Therefore, the TPB could potentially be considered the foundation of the theoretical framework of this study.
The selection of TPB for this research is assessed within the coming sections, where it is compared with the TAM and the UTAUT. However, other important factors are subsequently discussed as they were deemed able to be added to the selected base model to better answer the research questions in a broad manner.

The literature comprises studies that have used the TPB as the main theoretical model to investigate online shopping acceptance and adoption (Crespo & del Bosque, 2008; Khalifa & Shen, 2008; Limayem, Khalifa, & Frini, 2000). In addition, some other studies have used the TPB in conjunction with other models, for instance, with the confidence model (Khalifa, Cheng, & Shen, 2012). Shin (2013) incorporated other scales with the TPB and replaced others. These studies are reviewed in detail below. However, it is important to mention that the review contains e-commerce studies because SC is considered a trend under its umbrella.

Khalifa and Shen (2008) investigated the adoption of using e-commerce on mobile phones. Their study complemented the TPB with perceived consequences as an additional construct, because they believed it effected, directly and indirectly, the intention to adopt and use m-commerce. More specifically, they believed that an individual’s intention to perform specific behavior is influenced by whether this behavior will induce the occurrence of positive or negative consequences (Khalifa & Shen, 2008). The perceived consequences in their study included cost, convenience, privacy, efficiency, and security. The results showed that the path between PBC and m-commerce adoption intention was insignificant. However, “The lack of significance of perceived behavioral control could be explained by the respondents’ familiarity with mobile devices and related applications” (Khalifa & Shen, 2008, p. 114). This is in line with the concept that TRA and TPB work identically if PBC is high (Ajzen, 1985). AT, on the other hand, was significant, and so was SN, but it was less
significant than AT (Khalifa & Shen, 2008). Furthermore, the results showed that all identified perceived consequences significantly affect users’ intentions of using m-commerce. The results indicated that TPB augmentation in the field of online shopping can be highly suggested.

Compared to Khalifa and Shin’s (2008) study, the current research particularly examines SC adoption using the TPB. However, interestingly, both studies intersect in examining the effect of cost and security on intention whether directly or indirectly. Nevertheless, the current study incorporates trust because it is believed to be an important element in SC (Section 2.5.5). The security element, which is found in both studies, is linked with trust in this study. This is further discussed and identified within the trust section.

A number of studies have added personal innovativeness (PI) to TPB as a supporting construct to better understand adoption. PI is a construct introduced by Rogers and Shoemaker (1971), and is defined as the degree to which a person is adept at using new innovations (Crespo & del Bosque, 2008; Rogers & Shoemaker, 1971). In a technology-specific domain, PI refers to the degree to which an individual has enough skills that makes them ready to use a new technology innovation earlier than others (Agarwal & Prasad, 1998).

Limayem et al. (2000) explained which factors could affect users’ decisions to buy from the internet, relying on the TPB as the main model and adding PI and perceived consequences as external constructs. The perceived consequences included in their study were cost, security, comparability, convenience, privacy, consumer services and time saving. The study showed that intention was significantly influenced by AT, SN and PBC. Interestingly, their study found that attitude was influenced by other factors. The study results imply that innovativeness influences attitude and affects intention directly and indirectly.
More specifically, an innovative individual is more likely to engage in online shopping than less innovative individuals. Likewise, perceived consequences noticeably influence attitude and intention. In addition, Crespo and del Bosque (2008) investigated the adoption of e-commerce and added PI as an external factor. They found that AT and SN had significant effects on the intention to shop online. In addition, PI was found to be significantly influential to initial e-commerce acceptance, and it has positive effects on AT (Crespo and del Bosque 2008).

These two studies (i.e., (Limayem et al., 2000) and (Crespo & del Bosque, 2008)) show how important it is to investigate the factors that affect attitude shaping. That is, Limayem et al. and Crespo & Bosque’s studies not only proves the need to amend the TPB, but also indicates that AT can be changed of formed by other factors. This interesting idea provoked investigation of the effect of related factors on AT besides intention. This was attempted in this research and is discussed later. These two studies also triggered the intention to add related factors to any selected base model in order to understand and answer the research question. However, in relation to PI, perceived behavioral control in the TPB is also concerned with the users’ abilities and the skills that determine whether an individual can perform a behavior or not. Thus, perceived behavioral control should suffice in the domain and scope of this research.

Khalifa et al. (2012) investigated the adoption of m-commerce using an augmented TPB. They coupled the TPB with a confidence model that moderated the relationship between attitude and intention. Their confidence model consisted of multiple factors, one of which was attitude confidence. Attitude confidence refers to how certain an individual is about their attitude. Khalifa et al. (2012) results suggest that confidence positively influences
and strengthens the relationship between attitude and intention. This is another instance that implies that there are antecedents that could form or shape one’s attitude. Consequently, this research investigates the literature and examines the factors (e.g. factors fit into the categories of factor in this research) that might influence attitude.

Shin (2013) added perceived usefulness (PU) and perceived enjoyment (PE) to the TPB and replaced PBC with perceived trust and perceived social support to investigate SC adoption. Shin (2013) claimed that perceived trust and perceived social support “are integral components characterizing s-commerce” (Shin, 2013, p. 54). The results of Shin’s (2013) study show a strong positive impact of trust and social support on the actual behavior of using SC. It also shows that attitude influences intention, as does subjective norms (Shin, 2013).

However, despite the strong effect of trust and social support on the behavior, Shin’s study abandoned perceived behavioral control. In this current research, it is highly agreed that social support and trust are the main players in the context of SC and their effect is investigated on intention, as will be discussed later. However, the integration of PBC is seen as being as important as these two components. This is because PBC can be changed in different situations (i.e., when information about specific product is or is not available), especially in SC cases, that could in turn change the intention towards the behavior (Ajzen, 1985). Hence, PBC should not be abandoned and ought to be included with other social and ability scales in the context of SC. In addition, PBC showed a significant impact on intention in a number of studies (George, 2004; Limayem et al., 2000; Pavlou & Fygenson, 2006).

The studies listed above show that incorporating additional factors with TBP improves online shopping intention. Thus, the upcoming sections provide an explanation of
more related factors of the current study. However, AT, SN and PBC are believed to be highly related to this study; thus, the following research questions were developed:

- Do consumer attitudes impact purchase intention via SC in Saudi Arabia?
- Do consumers’ subjective norms impact purchase intention via SC in Saudi Arabia?
- Do consumers’ perceived behavioral control impact purchase intention via SC in Saudi Arabia?

Having presented the results of the earlier mentioned studies, and in relation to the factors that are highly related to this study (i.e., AT, SN, and PBC), the following hypotheses were developed:

- Consumer’s attitudes have a positive influence on purchase intentions via social commerce.
- Subjective norms have a positive influence on social commerce purchase intention.
- Consumer’s perceived behavioral control has a positive influence on consumers’ purchase intentions via social commerce.

2.5.3 THE TECHNOLOGY ACCEPTANCE MODEL

The technology acceptance model (TAM) “has been widely applied to a diverse set of technologies and users” (Venkatesh, Morris, Davis, & Davis, 2003, p. 428). The original TAM includes two new factors not present in the TRA and TPB; perceived usefulness (PU) and perceived ease of use (PEOU). These two factors in the TAM are believed to influence attitude, which in turn influences intention. PU refers to "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis,
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1989, p. 320). In contrast, PEOU is defined as "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320). The studies related to the TAM are discussed below.

A number of studies have used the TAM or borrowed some factors from it to investigate the adoption of SC. Noh, Lee, Kim, and Garrison (2013) utilized the TAM to study SC adoption in South Korea. In their study, the TAM was incorporated with five collectivism measures because the authors believed that SC is a collectivist activity (Noh et al., 2013). In addition, the study included price consciousness as a key construct “because of the price sensitive nature of typical s-commerce users” (Noh et al., 2013, p. 248). However, only the moderating effects of price consciousness on the relationships between PU/PEOU and intention were measured, and they were significant. Shen (2012) also used TAM as one of the base models for their study. However, several external constructs, such as social presence and perceived enjoyment were added. The results showed significant effects of social presence on both perceived enjoyment and perceived usefulness (Shen, 2012), which are antecedents of attitude in TAM3 (Davis, 1986).

However, in these two studies, the AT factor was omitted from the models. This situation was also duplicated in two different studies linked to SC adoption (Biucky, Abdolvand, & Harandi, 2017; Teh & Ahmed, 2012). Omitting the attitude factor, as seen in these studies, contradicts the goal of the TAM. One of the TAM’s main goals “is to provide a basis for tracing the impact of external factors on internal beliefs, attitudes and intentions” (Davis et al., 1989, p. 985). This goal is endorsed and highly considered in the current research, which shares the same concept of the importance of including attitudinal factors, as
well as exploring antecedents of attitude, because it has been proved to have significant effect in a number of adoption studies discussed later.

A number of studies borrowed PU and included it as part of the theoretical model (Hajli, 2013; Hajli, 2014b). These studies examined the effects of PU on intention to investigate SC acceptance and adoption, and found that consumer’s PU of SC increases the intention to buy through SC websites (Hajli, 2013; Hajli, 2014b). However, it is important to recollect that PU is an antecedent of AT, which was not present in these studies. Shin’s (2013) study, on the other hand, showed that when integrated with the TPB, PU significantly and directly influences attitude and intention to buy via SC platforms, while the impact of AT on intention was also significant. In the current study, AT is considered a general umbrella for perceived usefulness, which is reflected and oriented to jobs and work.

As mentioned earlier, there is a high interest in the current study regarding measuring the effect of attitude on intention and including attitude antecedents that better fit the context of this research. Moreover, while this research investigates individuals’ adoption of SC, it is believed that the TAM is a more work/job oriented model. As clearly indicated in the definition of PU, “[it] enhances his or her job performance” (Davis, 1989, p. 320); thus TPB is considered a more general model and it therefore better aligned with the goal of investigating SC from a broader general perspective, which is the aim of this study. Moreover, in a SC context, consumers would care about other factors that fit within the context where social interaction and payment are central aspects. Furthermore, PBC in the TBP model would substitute for PEOU because it includes the indication of ease and difficulties in performing a specific behavior. As a result, the TBP was deemed a more comprehensive model that could be utilized as the foundation in this research. However, the
TAM shows that AT is indeed influenced by other factors and a key influencer on intention (Davis, 1989). This is another assertion that justifies the position of the AT factor and also the importance of exploring factors that influence attitude.

Later, the TAM was extended to the TAM2 (Venkatesh & Davis, 2000) and the TAM3 (Venkatesh & Bala, 2008). The extension of the TAM2 concerned understanding the determinants of PU to provide better insight to enhance users’ adoption of new system (Venkatesh & Davis, 2000). Notably, SN appeared as a determinant of PU, and more importantly, as a factor affecting intention (Venkatesh & Davis, 2000). This supports the argument for utilizing the TPB as the foundation of this research, as it is a more general model and includes SN as a social factor.

In contrast, the goal of the TAM3 extension was to incorporate the TAM2 with the determinants of PEOU to “presents a complete nomological network of the determinants of individuals’ IT adoption and use” (Venkatesh & Bala, 2008, p. 279). However, both the TAM2 and the TAM3 consist of factors or determinants that are irrelevant to the current study. For instance, voluntariness, which refers to "the extent to which potential adopters perceive the adoption decision to be non-mandatory" (Venkatesh & Davis, 2000, p. 188) and computer anxiety, which refers to the degree of fear or worry a user develops when “faced with the possibility of using computers” (Venkatesh & Bala, 2008, p. 279). Thus, the TPB was deemed most appropriate for the current study model.

### 2.5.4 THE UNITED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY

The unified theory of acceptance and use of technology (UTAUT) was developed to be a combination of eight prominent models that explain technology acceptance (Venkatesh et al., 2003). The UTAUT has four elements to assess technology acceptance: performance
expectancy, effort expectancy, social influence, and facilitating conditions. Performance expectancy refers to the degree to which a user believes that he or she would improve their job performance by using a particular system (Venkatesh et al., 2003). As for effort expectancy, it “is defined as the degree of ease associated with the use of the system” (Venkatesh et al., 2003, p. 450). “Social influence is defined as the degree to which an individual perceives that important others believe he or she should use the new system” (Venkatesh et al., 2003, p. 451). It is considered an equivalent factor to SN in the TRA and the TPB. Finally, facilitating conditions refers to the degree to which a user believes that organizational and technical infrastructures help and support them in using the system (Venkatesh et al., 2003).

Gatautis and Medziausiene (2014) utilized the UTAUT to assess SC acceptance in Lithuania and found that social influence had a strong impact on accepting SC. However, effort expectancy had a fair impact, while facilitating conditions and performance expectancy had the lowest influence on SC intention. The reason might be that facilitating conditions and performance expectancy are more job related, which is not applicable to the case in SC where it should be more consumer centered.

Subsequently, for the current research, it is suggested that the UTAUT does not generally and comprehensively explain which factors could influence intention to use a particular system from a consumer’s point of view. This is because, firstly, it focuses on technology acceptance from an organizational viewpoint, and the participants for validating the model were employees from multiple organizations (Venkatesh, Thong, & Xu, 2012). Secondly, Venkatesh et al. (2003) suggested that future research should examine “additional boundary conditions of the model in an attempt to provide an even richer understanding of
technology adoption and usage behavior” (p. 470). This can be done by testing the moderating effects of theoretically influencing factors, or in a different context, such as e-commerce and collaborative systems (Venkatesh et al., 2003).

Thirdly, and most importantly, the UTAUT does not include an attitudinal factor, in fact the AT was excluded from the model in (Venkatesh et al., 2003) study. Although omitting AT in the UTAUT was justified in the context of organizational performance, this is seen as a key limitation in the context of the study, because this one of the primary aims of this research is to examine the effect of users’ attitude on the intentions. Hence, while the TPB includes the attitude factor, it was deemed a better fit this research than the UTAUT. The rationalization for the importance and inclusion of the attitude factor in this study is discussed in Section 2.6.1.

Eventually, the UTAUT was extended to the UTAUT2 to accommodate the context of the consumer (Venkatesh et al., 2012). Three additional constructs were added to the extended UTAUT: hedonic motivation, price value (PV), and habit. Hedonic motivation refers to how pleasurable and entertaining the technology is (Venkatesh et al., 2012). PV is defined as “consumers’ cognitive trade-off between the perceived benefits of the applications and the monetary cost for using them” (Venkatesh et al., 2012, p. 161). Finally, habit is defined as the degree of the automaticity of performing behavior because of learning (Venkatesh et al., 2012).

Although hedonic motivation and habit sit out of this study’s scope, the construct of PV is considered important in the current research and it was included as an individual-related factor. However, the construct of PV, when identically reflected to this study, should be linked to the money the consumer pays to use SC systems. While there is no associated
cost the consumers pay for using SC systems, it would not be beneficial to include PV in the context (Abed, 2016). However, the construct of PV in this research is reflected on the cost of the items and delivering them, rather than linking it to the cost of using SC systems. In other words, this construct concerns the individual’s view of the associated cost of the buying and delivering the products and services via SC.

The concept of incorporating PV into this study’s model is highly relevance. Prices are not regulated and controlled for products and services that are sold via SC in Saudi Arabia. This is evident as some prices are exaggerated and consumers are complaining ("Ministry of trade prepares for the chaos on the electronic market," 2014). Therefore, the inclusion of price value as a factor influencing intention is believed to be essential and might provide valuable insights to address one of the boundaries of SC adoption. Furthermore, Venkatesh et al. (2012) stated that it is essential to consider price/cost-related factors to examine consumers’ use of technology. That was evident in a study that incorporated a price-related factor that positively influenced purchasing intention (Sheikh et al., 2017).

The following research question related to PV was developed:

- Does PV impact purchase intention via SC in Saudi Arabia?

Depending on the review of the related studies, it is assumed in this research that PV will be associated with the purchase intention; thus, the following hypothesis was developed:

- Price value has a positive influence on SC intention.

Two recently published studies concerning SC adoption in Saudi Arabia were captured. Both studies utilized the UTAUT2 as a foundation for the study frameworks. Facilitating conditions and price value were eliminated in the first study (Abed, 2016). Facilitating conditions act more like PBC (Venkatesh et al., 2012), which is essential in the
current study’s context, as justified in TPB section. The importance of including PV was also explained and discussed. Thus, this is believed to be a gap in the knowledge, which will be covered by this research.

The second study extended the UTAUT2 by incorporating two additional constructs: social support and SC constructs (Sheikh et al., 2017). The study substituted PV with price saving orientation. This interesting research followed the recommendation of Venkatesh et al. (2012), which suggested leveraging future contexts and ideas to add new constructs. The results of the impact of social support and SC constructs are discussed in different sections where the information is more relevant. However, Sheikh et al.’s (2017) study found that price saving orientation had a significant impact on intention. However, although their study is of value, it has some limitations. The data were only collected from male university students, with 310 responses, which may have affected the generalizability of the study. Additionally, trust, which is discussed later because it was included in the current study as a key factor, was not present in Sheikh et al.’s (2017) study.

The current research aims to overcome the shortcomings and gaps in the studies of Abed (2016) and Sheikh et al. (2017) by providing a more comprehensive view where price-related, social support, and trust factors are integrated in one study. In addition, a range of other factors and new relationships that attempt to resemble the order of cause and effect in a nomological manner are also incorporated.

2.5.5 TRUST

Trust (TR) is a critical component in the context of e-commerce (Pavlou, 2003). “The role of trust is of fundamental importance for adequately capturing consumer behavior in e-commerce” (Pavlou, 2003, p. 102). TR is also an essential element in SC (Hajli, 2014a). Hajli
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(2013) and Hajli (2014a) emphasized the issue of trust in SC and stated that trust directly and indirectly impacts the intention to purchase using SC.

The studies mentioned and discussed next not only show that trust is an important aspect in SC, it is also a continuing issue. “Trust is an on-going issue in e-commerce and also now in SC” (Hajli, 2013, p. 151). Furthermore, the studies listed in this section indicate that trust is indeed a central factor, where it not only influences intention, but can also be influenced by other factors.

TR and SC constructs were utilized to build frameworks for SC adoption in two different studies (Hajli, 2013; Hajli, 2015). These studies found that TR has a positive influence on buying intentions (Hajli, 2013; Hajli, 2015). Kim and Park (2013), identified SC characteristics in the Korean market; namely, reputation, size, information quality, transaction safety, communication, economic feasibility and word of mouth referrals. Their study showed that these characteristics, except economic feasibility, had significant influence on consumers’ trust. In addition, they suggested that trust significantly influences purchase intention.

Hajli (2014a) stated that SC purchase intention is affected by relationship quality, which refers to relationship strength, which is considered a key determinant of consumer loyalty. TR is a key measure of relationship quality (Hajli, 2014a). Hajli (2014a) claimed TR was one indicator of relationship quality that influences SC intention through relationship quality.

In the Saudi context, one study investigated the impact of TR on intention to buy in SC by using the modified UTAUT2 mentioned in the UTAUT section. Abed (2016) claimed that trust influences SC intention to buy in Saudi Arabia. However, the power of significance
was less than any other significant relationships in the model. That is, TR impacted behavioral intention at a 1.999 critical ratio and .046 P-value (Abed (2016)). Comparatively, in other studies, the level of significance from trust on intention scored higher path coefficients with high P-value (e.g. p < 0.001 or p <0.01) (Hajli, 2015; Kim & Park, 2013; Lu, Fan, & Zhou, 2016; Makmor, Alam, & Aziz, 2018). This could be because when TR is combined in a model that has large set of factors, the level of significance decreases as other factors explain more of the variance. In addition, the reason could be context sensitive, as in the Saudi context compared to another context.

Nevertheless, because the literature points to the importance and centrality of trust in e-commerce and SC, it was integrated into the current study as a key factor that might influence SC intention. Additionally, this research investigates how other sets of factors could possibly influence trust. As such, this study surveys whether government involvement in SC transactions influences trust or not. The possible existence of the impact of government-related factors and other social elements on trust are discussed in Sections 2.5.6, 2.5.7, and 2.5.8. The research question related to the relationship between TR and SCI developed for this study is:

- Does consumers’ trust impact purchase intention via SC in Saudi Arabia?

Having explored the related research in trust, this research postulates that:

- *Trust has a positive influence on consumers’ purchase intentions via SC*

However, because this research considers attitude formation to be a focus of attention, investigation of the association between TR and AT was thought to be insightful. Generally, in an online shopping context, “trust can be viewed as a significant antecedent belief that creates a positive attitude toward the transaction behavior” (Lu et al., 2016, p. 229). This was
shown in a study where trust directly influenced consumer’s attitude toward purchasing tickets online (Renny, Guritno, & Siringoringo, 2013). This is also in line with Ha and Stoel (2009), who found that attitude toward e-shopping was significantly affected by trust. As SC is considered a subset of e-commerce, this research reflects the significant relationships listed above on SC. Thus, the following research question regarding the association between TR and AT was developed:

- Does consumers’ trust impact consumers’ attitudes towards SC in Saudi Arabia?

Depending on the related studies, this research hypnotizes that:

- Trust has a positive influence on consumers’ attitude in the context of SC.

### 2.5.6 SOCIAL SUPPORT

Social support (SS) is defined as the experience of an individual regarding “being cared for, responded to, and being helped” by other individuals in the same social community (Liang et al., 2011, p. 70). SS consists of multiple constructs that can be applied differently in diverse contexts (Liang et al., 2011). It has been argued that emotional, instrumental, informational, and appraisal support are SS constructs in a work environment (House, 1981; Liang et al., 2011). However, in the context of SC, two of these SS constructs can be adopted. Because they fit into the nature of the online virtual environment, informational (ISS) and emotional support (ESS) constructs can be applied to the context of SC (Liang et al., 2011). Hajli and Sims (2015) stated that interactions in virtual-social communities create SS (e.g. ISS and ESS), which in turn is seen as an added value for SC. Hence, in this research, both ISS and ESS constructs are considered essential.

A number of studies have broached SS in a SC context, one of which is titled “What drives SC the role of social support and relationship quality?” by Liang et al. (2011). Liang
et al. (2011) found that SS, measured by ISS and ESS, has a significant role in users’ intention to use SC. Likewise, Zhang et al. (2014) suggested that SS greatly influences the intention to conduct SC. Moreover, Shin (2013) stated that the inclusion of social support as an external construct to the TPB is worthwhile because it shows significant influence on SC behavior.

In addition, Hajli and Sims (2015) supported the above-mentioned findings and found a significant influence of SS on SC intention. Additionally, other studies have made similar assertions to the studies mentioned above, because in these studies, SS positively influenced SC intention (Hajli, 2014a; Sheikh et al., 2017; Zhang et al., 2014). Moreover, in the context of SC adoption in Saudi Arabia, a study suggested that social support influences behavioral intention (Sheikh et al., 2017).

The studies listed above show the importance of SS in an online social environment such as SC. This justifies and supports incorporating SS into the theoretical framework of the current research. Thus, the social support construct, inclusive of informational and emotional support, was included in the model of the study in an attempt to understand whether it influences SC intention and trust or not in the Saudi context. The research question related to this section is as follows:

- Does SS impact purchase intention via SC in Saudi Arabia?

Depending on the results presented above, this research hypothesizes that:

- *Social support has a positive influence on SC intention.*

The association between SS and TR in the context of SC has also been investigated. Makmor et al. (2018) found that SS was not the only influence on purchase intention, TR also mediates the relationship between both ISS and ESS with SC intention. “Social support will reduce consumers stress and anxiety by providing advice and information support that
influence trust and purchase intention at the end” (Makmor et al., 2018, p. 576). In fact, Hajli (2014a) stressed the previous point when he claimed that SS influences relationship quality, which in turn impacts trust, which is a variable of relationship quality. Thus, relationship quality can be enhanced by SS, both ISS and ESS, and TR in turn increases because it is an indicator of relationship quality (Hajli, 2014a).

In another interesting study, and unlike the previous studies, trust transfer constructs were employed as mediators to SC intention (Chen & Shen, 2015). Trust transfer was split into two constructs, trust towards community and trust towards members (Chen & Shen, 2015). Chen and Shen (2015) found in this study that both ISS and ESS influenced trust towards members.

The studies listed above demonstrate the importance of SS in SC settings, because it not only influences purchase intention, but also TR. This justifies and supports investigating the relation between SS and TR in the theoretical framework of the current research. The research question associated with the relation between SS and TR was developed as follows:

- Does SS impact consumers’ trust in SC in Saudi Arabia?

Having presented the impact of SS on TR in the previous section, this research postulates that:

- Social support has a positive influence on trust in a SC context.

Additionally, in this research, attitude formation in the context of SC is a key point of interest. As shown in the studies listed under the TPB section, it is clear that AT is a main player in adoption. In addition, listed in the same section, a number of studies investigated the factors affecting attitude, because it is an important factor affecting intention. Thus, the current study investigates the connection between SS and AT.
In the context of SC, in general, SS can be seen as an antecedent of AT. For instance, Sarason, Levine, Basham, and Sarason (1983) stated that optimistic ATs can be seen in people who are high in SS. In addition, Bohner and Wänke (2002) emphasized this point when they stated that where SS is present, people interestingly tend to develop positive ATs. Furthermore, providing information, because it is a form of SS, increases the certainty of the AT (Petty & Krosnick, 1995). Finally, in a social media purchasing context, Wang, Yu, and Wei (2012) found that peer communication, which can be a form of SS, directly and indirectly influences AT and intention to buy. Thus, this research asks:

- Does SS impact consumers’ attitude towards SC in Saudi Arabia?

In light of the related studies reviewed, the research study postulates that:

- Social support has a positive influence on users’ attitudes in a SC context.

### 2.5.7 ELECTRONIC WORD OF MOUTH

For many years, word of mouth has been recognized and considered a noticeably influencing factor on what people know, feel, and do (Buttle, 1998). It refers to informal conversations between consumers about particular goods and services (Westbrook, 1987). It has a huge influence on how consumers behave (Berger, 2014). Electronic word of mouth (E-WOM), on the other hand, is defined as commentaries about products or services disseminated on networks and generated by consumers (Yan et al., 2016). More broadly, E-WOM communication is defined “as any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet” (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004, p. 39).
In the context of SC, E-WOM is produced by social interactions via SC constructs (Hajli, Lin, Featherman, & Wang, 2014). The dimensions of SC constructs are recommendations, referrals, ratings, reviews, forums, and communities (Hajli et al., 2014). However, among all innovated social interaction tools, reviews, ratings, and recommendations became very popular technologies in social shopping platforms because they are easy to use for sharing experiences and evaluations (Amblee & Bui, 2011). This study aims to measure the effect of Maroof in SC in Saudi Arabia given the importance of E-WOM as stated above. However, in this study, the E-WOM dimensions selected are reviews and ratings. One reason for this selection is because reviews and ratings are within the most popular SC constructs. The second reason is that the platform tested in this study, which shoppers use to produce and browse E-WOM, only supports ratings and reviews. The following discussion highlights some of the studies that have considered the role of E-WOM in the context of online environments.

Amblee and Bui (2011) examined the influence of E-WOM on short e-books readers. The entire Amazon market for short e-books was included in the study. The study showed that E-WOM is seen as a conveying tool for product and brand reputation. The authors stated that E-WOM should not be neglected by online sellers nor online consumers. It should be considered “the first and perhaps primary source of social buying experience” (Amblee & Bui, 2011, p. 109).

Park et al. (2007) study interestingly showed that buying intention increases when the number of the reviews increases. This is an indication of the popularity of the product. The results also showed that although some consumers care about the quality of the review more
than the quantity, they consider review quantity as a useful sign of the popularity of the product (Park et al., 2007).

Gauri, Bhatnagar, and Rao (2008) investigated the role of E-WOM on consumer loyalty. Their study found that positive reviews from consumers had a significant influence on repurchase intention. They suggested that the existence of a review system, even with higher prices, makes Amazon perform better than Half.com, as the latter does not have an E-WOM system (Gauri et al., 2008). Similarly, Balakrishnan et al. (2014) stated that E-WOM is “effective in promoting brand loyalty and product purchase intention through company website and social media platforms” (p.177).

Moreover, in the context of Saudi Arabia, a study suggested that SC constructs that include rating and reviews influence purchasing intention (Sheikh et al., 2017). The following research question was therefore developed:

- Does Maroof have an impact on consumers’ purchase intention via SC in Saudi Arabia?

In light of the review of the related studies, this research postulates that:

- The Maroof E-WOM platform has a positive influence on consumers’ purchase intentions via SC.

Furthermore, a number of studies have shown the indirect influence of E-WOM on intention to buy through SC platforms (Hajli, 2013; Hajli et al., 2013; Hajli, 2015; Hajli et al., 2014; Kim & Park, 2013). E-WOM influences consumers’ intentions to buy indirectly though TR. As evident in these studies, TR increases through the impact of SC constructs, that is, ratings, reviews, forums, communities, recommendations and referral (Hajli, 2013; Hajli, 2015).
In other words, TR is positively affected by E-WOM. In another study, Hajli et al. (2013) claimed that social word of mouth, which can be produced through SC constructs, raises the level of TR on new products. Furthermore, Yan et al. (2016) emphasized the importance of E-WOM because it directly influences consumers’ TR and behavior. Consequently, the following research question was developed:

- Does Maroof have an impact on consumers’ trust in SC in Saudi Arabia?

In light of the above reviewed studies, this research hypothesizes that:

- The Maroof E-WOM platform has a positive influence on consumers’ trust of SC.

In addition, E-WOM systems were found to impact consumers’ attitude in an online purchase environment. Attitude is affected by reviews, especially if E-WOM about a product is positive (Jeong & Koo, 2015). In line with this, Tabbane and Hamouda (2013) claimed that E-WOM indeed influences attitude toward products. However, in this research, the effect of E-WOM is examined based on the consumers’ attitudes about SC in general.

As illustrated in the above-mentioned studies, it seems that E-WOM is an influencing and significantly important factor, especially when it comes to online social environments. Thus, this study aims to consider this influencing factor and incorporate it into the theoretical model. It is expected that the inclusion of E-WOM is valuable and will provide beneficial insights. The research question related to the association between Maroof and AT is as follows:

- Does Maroof have an impact on consumers’ attitude towards SC in Saudi Arabia?

Having discussed the impact of E-WOM on AT in the previously mentioned research, this study proposes that:

- Maroof has a positive influence on consumers’ attitudes towards SC.
2.5.8 **SECURE PAYMENT**

In the context of SC, little attention has been paid to security issues (Busalim & Hussin, 2016). This is, perhaps due to the overwhelming social aspects that accompany the SC environment. However, a considerable number of firms have failed to successfully incorporate SC as consumers complain about security matters (Liang & Turban, 2011). Martín and Camarero (2008) also considered lack of payment security to be an inhibitor of online shopping.

The current literature presents the importance of payment security to consumers in SC. For example, Huang and Benyoucef (2013) claimed that a high-quality payment systems equipped in SC websites can boost better sales. In addition, Saundage and Lee (2011) suggested that incorporating well-known and popular payment gateways (e.g., PayPal) may be associated with successful adoption of SC.

In the Saudi context, AlGhamdi et al. (2012b) and AlGhamdi et al. (2011b) believed that consumers do not favor paying by credit card when they shop online. This is linked to consumers’ mistrust in the payment methods (AlGhamdi et al., 2011b; AlGhamdi et al., 2012b). In contrast, Makki and Chang (2015) believed that the use of credit cards for online payment is increasing in Saudi Arabia compared to the past. However, their interesting results show that consumers’ most preferred payment method for future purchases in Saudi is cash on delivery (Makki & Chang, 2015).

However, payment on delivery is considered a burden for online sellers, which may hinder the dynamics of the online shopping process. Allao (2017) reported that payment on delivery resulted in sellers being challenged with a number of drawbacks. For instance, being subject to forgeries, robberies, and lack of seriousness from consumers (Allao, 2017). In
addition, in the case of partnering with third-party delivery companies, online sellers experience delays in the collection of payment (Allao, 2017). These challenges could obstruct the process of smooth SC transactions from a seller’s point of view.

Nevertheless, research shows that using the Sadad gateway payment system for online shopping in Saudi Arabia is convenient and trusted because it was established and is monitored by the Saudi Government (AlGhamdi & Drew, 2012; AlGhamdi et al., 2012b). However, the Sadad payment system AlGhamdi et al. (2012b) referred to is an older version of the new payment system. “The old Sadad required consumers to log into their online banking systems and create bills using the details provided by online shops” (Alghamdi, Sandhu, & Houghton, 2017). This old system has not been used widely due to the associated high costs the seller had to pay for registration and tractions (AlGhamdi et al., 2012b).

However, the Sadad payment system referred to in this study is the Sadad 2, which was introduced by the Saudi Arabian Monetary Authority. Sadad is “an improved payment system for online shops that facilitates easy payments in a manner similar to PayPal” (Alghamdi et al., 2017).

In the current study, and as discussed above, secure payment systems are considered a vital enabler to adopting SC in Saudi. Thus, their inclusion in the study’s framework should contribute to a better understanding of SC adoption. Consequently, the influence of using a secure payment system (Sadad) in SC is tested in this study. The corresponding research question is as follows:

• Does the Sadad secure payment influence purchase intention via SC in Saudi Arabia?
Relying on the review of the literature related to secure payment presented above, this research hypothesizes that:

- **The Sadad secure payment system has a positive influence on consumers’ purchase intentions via SC.**

In addition to the studies listed above that show the importance of online secure payment systems, and specifically the Sadad payment gateway in the adoption of online shopping, one study was captured that showed it also has an influence on attitude as well. It found that safe or secure payment, as one example of safety cues, produces favorable attitudes (Noort, Kerkhof, & Fennis, 2008). The question is whether this is also the case in the current study. This research consequently asks:

- **Does the Sadad secure payment system influence consumers’ attitude towards SC in Saudi Arabia?**

In light of Noort et al.’s study, this research hypothesizes that:

- **The Sadad secure payment system has a positive influence on consumers’ attitudes towards SC.**

In addition to the effect of SP on SCI and AT, some research indicates that it also impacts consumers’ TR. Some research, as indicated earlier, has indicated that Saudis favor and trust the Sadad payment system because it is a government initiative (AlGhamdi & Drew, 2012; AlGhamdi et al., 2012b). Moreover, Kim and Park (2013) claimed that SP increases TR from consumers. Furthermore, Bai, Yao, and Dou (2015) suggested that implementing third-party payment systems increases consumers TR. Believing that this could be reflected in the current study, this research asks:
• Does the Sadad secure payment system influence consumers’ TR in SC in Saudi Arabia?

Taking the above related studies into account, this research postulates that:

• The Sadad secure payment system has a positive influence on consumers’ trust of SC.

2.6 GAPS IN THE LITERATURE

Upon reviewing the interrelated literature, gaps in the knowledge were identified. The main and most important gap is that SC, as a sophisticated and complex behavior (Wang & Zhang, 2012), has previously been investigated primarily from limited points of view at the same time. As SC is such a complicated phenomenon, it is essential to widen the angles and number of perspectives to view it and understand it in a better way. This is, in fact, the main aim of this current study. Thus, as the previous sections presented the important role of government involvement in e-commerce, as well as the importance of a wide verity of different factors affecting the adoption of SC, this research aims to incorporate different factors related to multiple categories to study SC adoption. As such, SC adoption is viewed from different point of views simultaneously, making it possible to view it from a broader angles, with the aim of closing this gap.

Accordingly, the research model incorporated three types of factors: individual-related, social-related, and governmental-related. In this way, SC is not merely viewed from social-related factors while ignoring other important individual and governmental-related factors. The classification and organization of the factors under each category are listed and discussed in Section 2.7.2.
Other gaps in the literature were also found, for instance, omitting or neglecting factors that are logically influencing. For example, research that omitted AT from their studies or replaced it with other factors. The rationale for the importance of AT is discussed in Section 2.7.1. Other studies replaced or excluded other important factors such as PBC and PV. These two factors were discussed earlier, and their importance was deliberated.

Moreover, this study not only covers the mentioned knowledge gaps, but also introduces a network of relations between the factors in the model (Section 2.7.2). This is an attempt to understand not only what impacts SCI, but also what impacts other factors that influence SCI. In this fashion, the complexity of SC is better expounded and understood.

Furthermore, as previous research was overwhelmed by and focused on the social aspects of SC, the factors related to security have been neglected in most studies. Thus, SP that can be considered a security factor is incorporated in this research. In addition, there is an unexplained episode of the case of SN in the Saudi context where the impact of it was significant in one study and insignificant in another on SCI (Abed, 2016; Sheikh et al., 2017). This study therefore aims to explain this interesting finding.

2.7 RESEARCH QUESTIONS

This research aims to answer the following primary question:

What are the key factors that influence consumers’ adoption of SC in Saudi Arabia?

Because this study examines the impact of these factors on consumers’ intention to buy and the impact of some of these factors on consumers’ attitudes and consumers’ trust, sub questions were also formulated. These sub questions are as follows:
• What are the key factors that influence consumers’ intention to buy via SC platforms in Saudi Arabia?
• What are the factors that influence consumers’ attitude towards SC in Saudi Arabia?
• What are the factors that influence consumers’ trust in SC in Saudi Arabia?

In order to answer these questions, an extensive and critical review of the literature (this current chapter) was performed to capture a broad picture of factors impacting SC adoption in Saudi Arabia. Consequently, the predictors that fit into the factor categorization of this study were investigated. These categories included individual-related factors, social-related factors, and government-related factors. Upon the identification of the key impacting factors, questions were framed that reflect the cause and effect between the factors. As a result, 15 questions were formulated for this study. These questions are stated in detail in Chapter 2. However, the following is a summary of these questions:

• Do individual-related factors, social-related factors, and government-related factors, identified in Chapter 2, influence SCI in Saudi Arabia?
• Do government-related factors, TR, and SS influence consumers’ AT towards SC in Saudi Arabia?
• Do government-related factors and SS influence consumers’ TR in SC in Saudi Arabia?

Following analysis that examines whether or not there is an impact in each relationship, additional questions were answered inductively using qualitative methods. These questions are described in Chapter 6, as some relationships provoked additional enquiries that required
further explanation. The supplementary answers of these enquiries will in turn help to achieve a broad understanding of the inhibitors and the enablers in SC in a Saudi context.

2.8 THEORETICAL FRAMEWORK BUILDING AND JUSTIFICATION

The dependent variable of this study is SCI. The dependent variable in this study is defined as the intention of an individual to perform an e-commerce transaction though social media websites or any platform that uses the SC constructs. The research seeks answers about consumers’ experiences and perceptions of SC intention in Saudi Arabia. In line with this, a theoretical framework and hypotheses were developed.

Järvinen (2012) suggested that a reality or a study can be described by a framework, model, or theory. In this study’s context, frameworks can be built by relying on the theories that concern users and computers (Järvinen, 2012). In the circumstance of this study, theoretical assumptions relevant to consumers and technology adoption are studied and compared. As a result, the TPB was chosen as the foundational theoretical framework for the study. The rationale for this selection is provided in the following section.

However, frameworks and theories sometimes do not fully describe a certain phenomenon (Järvinen, 2012). Thus, a framework is required, deductively or inductively (Järvinen, 2012). Therefore, the TPB was extended in this study to comprehensively understand SC adoption from social, individual, and regulatory angles. The factors added to the TPB include the following: TR, SS (i.e. ISS and ESS), E-WOM, SP, and PV.

This extension to the TPB was essential to better answer the research question. This extension was systematically carried out by identifying potentially influencing factors from previous related research. In addition, the model introduced new relationships to test the influencing effects among some factors. This strategy was adopted from Venkatesh et al.
(2012), who suggested that they accomplished the goal of extending the UTAUT through identifying related constructs from related studies, changing relationships in the original model, and appending new relationships.

The selected foundational framework (e.g., the TPB) and the other supporting theories and factors were discussed throughout this chapter. Furthermore, the selection of the TPB as the base model was summarily justified, along with the new proposed factors and relationships. However, a detailed justification is stated again in the following section to provide further clarity.

2.8.1 JUSTIFICATION OF SELECTING THE TPB AS A BASE MODEL

This research aims to provide a comprehensive overview of the adoption of SC. Because SC combines social and business activities, it involves people in groups or individuals, along with technology. As such, various issues concerning trust, support, security, prices, policies, and the level of users’ skills to perform SC may arise. Therefore, it is inadequate to interpret SC adoption from limited or similar points of view (e.g. studying it merely from a computer acceptance point of view). Thus, studying consumers’ behavior in a SC context from different points of view in this research should prove advantageous.

This research aims to explain SC adoption from three different points of view. The author of this current study believes that there are three main spheres or dimensions that one may think about when coming across the concept of SC: technology, e-commerce, and collaboration (see Figure 2.3). When thinking of technology dimension, topics such as difficulties encountered by users and skills required to use technology, trust in technology, and security and privacy can be thought of. When viewing e-commerce dimension, the topics mentioned within the technology dimension can also be considered, in addition to items’
prices and quality. When considering collaboration dimension, subjects like social support, social influence, groups and E-WOM may be present.

While the aim of this research is to provide a comprehensive understanding of SC adoption, three categories of factors were identified after a systematic review of the literature: individual-related factors (where topics like attitude and skills can be addressed), social-related factors (where topics like trust and social support can be addressed), and regulatory-related factors (where issues like government involvement or security can be addressed). This was suggested to serve the goal of exploring factors affecting SC adoption from different viewpoints.

The first step taken to achieve identifying a broader view of SC adoption was to explore the technology acceptance theories and the related studies, as suggested by Järvinen (2012). Four widely used technology adoption theories have been listed and discussed, namely the TRA, the TPB, the TAM and the UTAUT. These theories are commonly used in

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Figure 2. 3: Visualization of SC among different dimensions

While the aim of this research is to provide a comprehensive understanding of SC adoption, three categories of factors were identified after a systematic review of the literature: individual-related factors (where topics like attitude and skills can be addressed), social-related factors (where topics like trust and social support can be addressed), and regulatory-related factors (where issues like government involvement or security can be addressed). This was suggested to serve the goal of exploring factors affecting SC adoption from different viewpoints.

The first step taken to achieve identifying a broader view of SC adoption was to explore the technology acceptance theories and the related studies, as suggested by Järvinen (2012). Four widely used technology adoption theories have been listed and discussed, namely the TRA, the TPB, the TAM and the UTAUT. These theories are commonly used in
a technology acceptance studies and also in SC research. However, the TPB was deemed the most appropriate theory as a foundation to the research. This is because some theories are considered less general (i.e., TRA), some are considered context specific (i.e., computer acceptance as for TAM) and some do not fit in the context of this research (i.e., UTAUT as Attitude factor is substituted with irrelevant factors). The paragraphs below discuss, synthesize and justifies the selection of TPB as a base for the research framework.

A more general theory was utilized because the aim here is to understand SC broadly and from multiple points of view. Thus, the theories listed in this study were compared and the first comparison took place between the TRA and the TPB. The inclusion of PBC in the TPB is believed to be an added value in the context of SC; thus, the TPB was thought to work better than the TRA, because in a context like SC, consumers’ behavior may change depending on the consumers’ skills, abilities or information needed or provided for performing the behavior (Ajzen, 1985). In other words, Ajzen (1985) suggested that the TRA is a special case of the TPB and indicated that the TPB would work better than the TRA when consumer’s behavioral control is not at its optimum, which is believed to be true in context of this research.

On the other hand, one might suggest that the TAM may be a suitable substitute for TPB. However, there some factors were taken into consideration with considering the TAM as a foundational framework. First, the TAM was specifically introduced to investigate users’ reactions towards using computers at work (Davis et al., 1989). As mentioned earlier, SC does not merely concern using computers or technology, rather, it involves many aspects that should be investigated from various points of view. Second, the TAM uses the TRA as a foundational framework, and “is considerably less general than TRA” (Davis et al., 1989, p.
Because the TAM is less general than the TRA, and the TRA is a special case of the TPB, it can be concluded that the TPB as a more general model, which is considered superior for the purpose of this study.

While this is true, one might intuitively expect that the UTAUT, as newly developed unified model, is the best fit for this study. In fact, no one can claim that the UTAUT is not a powerful and valid tool for explaining technology adoption. However, for the context of this study, there is a limitation in the UTAUT, and as a result it may not be the best framework to explain the phenomenon of SC adoption. This limitation lies in the absence of the AT factor in the UTAUT. Although the omission of the AT factor was strongly justified in the UTAUT, it is still believed that the presence of AT in this study is indispensable.

Validation of the rationale for the impropriety of the UTAUT for this study contains many factors. First, the context of this research differs from the context where the UTAUT was originally developed. That is, the UTAUT targeted the use of computers in organizations, and the model was tested using data across two organizations (Venkatesh et al., 2003). This research requires a more general framework that is not specified to a special context. Thus, using the UTAUT may narrow the interpretation and explanation of SC adoption as merely technology adoption. As stated earlier, SC is an integrative phenomenon where technology is not the only component but rather is combined with social interaction and e-commerce activities.

However, although the AT construct was proved to be insignificant when validating the UTAUT, it was, in fact, the most significant predictor of intention in other cases (Venkatesh et al., 2003). This interesting circumstance (e.g., attitude being the most significant) occurs when constructs related to performance expectancy and effort expectancy
are not present in a model (Venkatesh et al., 2003). One might think it is a valid point of view to replace AT with performance expectancy and effort expectancy because they were defined in the UTAUT2, which concerns behavior with technology adoption from a consumer point of view. However, there are two main reasons that disprove this theory.

First, while performance expectancy was the strongest predictor in the UTAUT, it did not hold this position in the UTAUT2 (Venkatesh et al., 2003; Venkatesh et al., 2012). This may indicate that the inclusion of other factors (e.g. hedonic motivation) in a consumer context resulted in performance expectancy and effort expectancy being less important predictors of intention. Second, in a specifically SC context, these two factors were not the most important predictors. In fact, this was even evident in one study that used the original UTAUT without the inclusion of the newly added factors. Gatautis and Medziausiene (2014) found that social influence was a stronger predictor of intention than effort expectancy and performance expectancy. In point of fact, performance expectancy was the least significant in predicting intention (Gatautis & Medziausiene, 2014). In another case, where Abed (2016) used the UTAUT2 in SC adoption, performance expectancy was not the most significant predictor and effort expectancy did not predict intention.

In contrast, in several studies, AT was the most or amongst the most significant predictor of intention in online shopping even with the inclusion of other influencing factors. For instance, AT was the most significant factor, even when a model included PI and perceived consequences (Limayem et al., 2000), innovativeness new tech (Crespo & del Bosque, 2008), customer information quality and perceived social presence (Daliri, Rezaei, & Ismail, 2014), multiple social influence factors (Senthil Kumar, Ramachandran, & Panboli, 2015), or hedonic value (Kim, Sun, & Kim, 2013). It was also amongst the most significant
factors in intention in other studies (Hajli, Shanmugam, Powell, & Love, 2015; Khalifa et al., 2012). This is a strong indicator that AT is central in a consumer’s context.

However, in one study that yielded important results, AT was still significant but not amongst the significant predictors on intention, “This is probably because users want to confirm their intention with other factors” (Shin, 2013, p. 58). This should encourage researchers to continue to look for what other factors might affect users to adopt SC. Thus, in this research, different categories of factors were named in order to broaden our understanding of consumers’ behavior in SC. Consequently, upon completion of the literature review, several other factors believed to influence SC intention were derived and included in this study, as mentioned and justified in the Sections 2.5.1 – 2.5.8.

2.8.2 THE THEORETICAL MODEL OF THE STUDY

As presented, discussed, and justified in the previous sections, the TPB was selected as a base theoretical framework in this study. However, incorporating additional factors that show an impact on SC intention in the literature was believed to be essential in order to achieve the goal of understanding SC adoption from a consumer’s pint of view.

The theoretical model of the study therefore consists of the three factors that are theorized to influence intention in the TPB: AT, SN and PBC. The independent factors were classified into three categories; social-related, individual-related, and government-related. The individual-related factor category comprised factors that concern a consumer as an individual to adopt SC. AT, PBC and PV were classified under this category.

The social-related factors category included factors believed to be collective in nature were an individual is linked or communicated with groups. TR, SS and SN were classified under this category. TR was included in this group because its characteristics in a SC context
believed to be collective were an individual TR community, buyers, and sellers in a virtual space.

Finally, government-related factors consist of SP and E-WOM factors. These two factors are linked to the government because they are two facilitating features established and monitored by the Saudi Government. Although this is the case, SP and E-WOM can also be classified as security and social-related factors, respectively. Figure 2.4 presents the theoretical model of this research. Table 2.1 presents the hypotheses of the study, with an emphasis on the categorical organization of the factors mentioned above.
Figure 2.4: The research theoretical framework - AT = Attitude, E-WOM = Electronic Word of Mouth, ESS = Emotional SS, ISS = Informational SS, PBC = Perceived Behavioral Control, PV = Price Value, SCI = Social Commerce Intention, SN = Subjective Norms, SP = Secure Payment, SS = Social Support, TR = Trust.
### Table 2.1: Hypotheses of the study

<table>
<thead>
<tr>
<th>Category</th>
<th>Hypotheses Statements</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual-related factors</td>
<td><strong>H1:</strong> Consumer's attitude has a positive influence on consumers’ purchase intentions via SC.</td>
<td>AT → SCI</td>
</tr>
<tr>
<td></td>
<td><strong>H2:</strong> Consumer’s PBC has a positive influence on consumers’ purchase intentions via SC.</td>
<td>PBC → SCI</td>
</tr>
<tr>
<td></td>
<td><strong>H3:</strong> Price value has a positive influence on consumers’ purchase intentions via SC.</td>
<td>PV → SCI</td>
</tr>
<tr>
<td>Social-related factors</td>
<td><strong>H4:</strong> Trust has a positive influence on consumers’ purchase intentions via SC</td>
<td>TR → SCI</td>
</tr>
<tr>
<td></td>
<td><strong>H5:</strong> Trust has a positive influence on consumers’ attitude in the context of SC.</td>
<td>TR → AT</td>
</tr>
<tr>
<td></td>
<td><strong>H6:</strong> Social support has a positive influence on SC intention.</td>
<td>SS → SCI</td>
</tr>
<tr>
<td></td>
<td><strong>H7:</strong> Social support has a positive influence on trust in a SC context.</td>
<td>SS → TR</td>
</tr>
<tr>
<td></td>
<td><strong>H8:</strong> Social support has a positive influence on users’ attitudes in a SC context.</td>
<td>SS → AT</td>
</tr>
<tr>
<td></td>
<td><strong>H9:</strong> Subjective norms have a positive influence on SC purchase intention.</td>
<td>SN → SCI</td>
</tr>
<tr>
<td>Government-related factors</td>
<td><strong>H10:</strong> The Maroof E-WOM platform has a positive influence on consumers’ purchase intentions via SC.</td>
<td>E-WOM → SCI</td>
</tr>
<tr>
<td></td>
<td><strong>H11:</strong> The Maroof E-WOM platform has a positive influence on consumers’ attitudes towards SC.</td>
<td>E-WOM → AT</td>
</tr>
<tr>
<td></td>
<td><strong>H12:</strong> The Maroof E-WOM platform has a positive influence on consumers’ trust of SC.</td>
<td>E-WOM → TR</td>
</tr>
<tr>
<td></td>
<td><strong>H13:</strong> The Sadad secure payment system has a positive influence on consumers’ purchase intentions via SC.</td>
<td>SP → SCI</td>
</tr>
<tr>
<td></td>
<td><strong>H14:</strong> The Sadad secure payment system has a positive influence on consumers’ attitudes towards SC.</td>
<td>SP → AT</td>
</tr>
<tr>
<td></td>
<td><strong>H15:</strong> The Sadad secure payment system has a positive influence on consumers’ trust of SC.</td>
<td>SP → TR</td>
</tr>
</tbody>
</table>
2.9 SUMMARY

This chapter explored and presented the definition and evolution of SC. It also examined the involvement of governments in regulating and facilitating online shopping environments. More specifically, it presented the positive impact of the Saudi Government’s involvement in e-commerce, which justifies considering this in this research. The theories related to this study (e.g. theories that explain new technologies adoption) were then listed and thoroughly discussed and compared to determine which theory was the most suitable to form the foundation of this study.

The theories listed and discussed were the TRA, the TPB, the TAM, and the UTAUT. With every theory, a number of related studies were also listed and discussed. Other context related factors were identified from the literature and justifiably added to the mode, such as social support, trust, E-WOM, and secure payment. The two latter factors were linked to government involvement because they are tools that have been established and are monitored by governmental departments. Subsequently, the selection of the TPB over the other theories to be a foundational model for this study was systematically rationalized. Finally, this chapter concluded by presenting the theoretical framework of the research.
CHAPTER THREE: RESEARCH METHODOLOGY AND DESIGN

3.1 OVERVIEW

This research aims to investigate the factors that affect the intention to use SC in Saudi Arabia. In the previous chapter, the literature was reviewed to determine the key factors that influence the adoption of SC. The goal of this study is to investigate SC adoption from a wide angle, in which factors can be distinct and related to different disciplines and areas. This is because SC is considered a complex and multifaceted phenomenon (Wang & Zhang, 2012); thus, it should be studied from diverse points of view. Consequently, the conceptual model of this study was developed by following two interrelated steps: first, by reviewing key theories that have been utilized in investigating e-commerce and SC adoption; and second, by searching for the factors claimed in the literature to influence SC intention. The theory of planned behavior was selected because it serves the goal of studying SC from a broad view because it is a general theory not specified for a particular context, and it provides a good understanding of human behavior (Ajzen, 1991).

The literature review also helped to determine the key factors that are highly related to human intention to use SC. These factors were classified into three categories: government-related, social-related, and individual-related. The research question that is related to these categories is: What role do government, social, and individual factors play in influencing consumers to adopt SC in Saudi Arabia?

To answer this question, a research methodology and design must be articulated and justified. This chapter first sets forth the paradigm and the methodology that this research follows. Following this, the research design, the approach, and the data collection methods are presented. Figure 3.1 provides a pictorial overview this chapter.
3.2 RESEARCH PARADIGM

The term “research paradigm” refers to “a set of beliefs, values, and assumptions that a community of researchers has in common regarding the nature and conduct of research” (Johnson & Onwuegbuzie, 2004, p. 24). Research paradigms represent a number of beliefs, including ontological, epistemological, and methodological beliefs (Johnson & Onwuegbuzie, 2004). Ontology is concerned with the nature of reality, epistemology represents how we gain knowledge and “the relationship between the
researcher and that being researched”, and methodology represents the process of research (Creswell & Plano Clark, 2017, p. 38).

The aim of this research is to determine the role of social-related, individual-related, and government-related factors in adopting SC in Saudi Arabia. To provide the best answer for this enquiry, the idea of applying multiple approaches is appealing. “Many research questions and combinations of questions are best and most fully answered through mixed research solutions” (Johnson & Onwuegbuzie, 2004, p. 18). Thus, at the stage of the selection of philosophical paradigm for this research, the researcher took the concept of applying multiple methods to provide the best research outcomes into consideration.

Creswell (2014) listed four widely discussed paradigms, or as referred to in his book, worldviews: post-positivism, constructivism, transformative and pragmatism. As stated by Creswell and Plano Clark (2017), post-positivism is often associated with quantitative methods, and constructivism is often associated with qualitative methods. This narrows down the selection to transformative and pragmatic paradigms, as both of them, individually, are associated with mixed methods (Creswell & Plano Clark, 2017). A transformative paradigm is used when researchers need a philosophical worldview that is oriented to solving a political situation (i.e., gives importance to social justice) (Creswell & Plano Clark, 2017; Jackson et al., 2018; Mackenzie & Knipe, 2006).

Thus, pragmatism was the paradigm deemed to best fit this research, because both quantitative and qualitative methods could be applied (Creswell & Clark, 2007; Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2003). Johnson and Onwuegbuzie (2004) claimed that the pragmatic paradigm provides an environment where research approaches can be well combined. It employs “what works” by focusing on knowledge from both subjective and objective points of view (Creswell & Clark, 2007). Table 3.1
shows what the pragmatic paradigm, as a philosophical foundation, provides to and offers researchers.

Table 3.1: Characteristics of the pragmatism (adopted from (Creswell, 2014, pp. 10-11)

<table>
<thead>
<tr>
<th>#</th>
<th>Characteristics of pragmatism</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pragmatism is not committed to any one system of philosophy and reality. This applies to mixed methods research, in that inquirers draw liberally from both quantitative and qualitative assumptions when they engage in their research.</td>
</tr>
<tr>
<td>2</td>
<td>Individual researchers have freedom of choice. In this way, researchers are free to choose the methods, techniques, and research procedures that best meet their needs and purposes.</td>
</tr>
<tr>
<td>3</td>
<td>Pragmatists do not see the world as an absolute unity. In a similar way, mixed methods researchers look to many approaches for collecting and analyzing data, rather than subscribing to only one way (e.g., quantitative or qualitative).</td>
</tr>
<tr>
<td>4</td>
<td>Truth is what works at the time. It is not based in a duality between reality independent of the mind or within the mind. Thus, in mixed methods research, investigators use both quantitative and qualitative data because they work to provide the best understanding of a research problem.</td>
</tr>
<tr>
<td>5</td>
<td>Pragmatist researchers look to the what and how to research based on the intended consequences—where they want to go with it. Mixed methods researchers need to establish a purpose for this mixing, a rationale for the reasons why quantitative and qualitative data need to be mixed in the first place.</td>
</tr>
<tr>
<td>6</td>
<td>Pragmatists agree that research always occurs in social, historical, political, and other contexts. In this way, mixed methods studies may include a postmodern turn, a theoretical lens that is reflective of social justice and political aims.</td>
</tr>
<tr>
<td>7</td>
<td>Pragmatists believe in an external world independent of the mind, as well as that lodged in the mind. They believe that we need to stop asking questions about reality and the laws of nature.</td>
</tr>
<tr>
<td>8</td>
<td>For the mixed methods researcher, pragmatism opens the door to multiple methods, different worldviews, and different assumptions, as well as different forms of data collection and analysis.</td>
</tr>
</tbody>
</table>

Thus, pragmatism was the paradigm deemed to best fit this research, because both quantitative and qualitative methods could be applied (Creswell & Clark, 2007; Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2003). Johnson and Onwuegbuzie (2004) claimed that the pragmatic paradigm provides an environment where research approaches can be well combined. It employs “what works” by focusing on knowledge from both subjective and objective points of view (Creswell & Clark, 2007). Table 3.1
shows what the pragmatic paradigm, as a philosophical foundation, provides to and offers researchers.

Creswell (2014) pointed out, with a number of scholars including himself, that it is important in social science studies to aim attention at the problem of the research and then apply approaches that best work to create and derive knowledge. With reference to this statement, and upon reviewing what pragmatism can provide and offer to researchers (see Table 3.1), the pragmatic paradigm was chosen as a philosophical foundation for this research. This is because it best suited the aim of providing the best answers to the research questions. This can be done by applying potential approaches that the researcher thinks will best work for the research. As pragmatism was chosen for this research, the ontological and epistemological beliefs of pragmatists are further explained below.

Ontologically speaking, pragmatists argue that the nature of reality can be explained in two parts; there is an external singular reality that is “independent of our minds”, while truth, on the other hand, cannot be extracted only once (Tashakkori & Teddlie, 1998). Reflecting the pragmatism ontological point of view on this research, the relationship between SC intention (as a dependent variable) and social-related, individual-related, and governmental-related factors (as independent variables) was explored and explained by successively testing hypotheses – a singular reality – as well as looking for different standpoints about what has been explored – multiple realities.

Epistemologically speaking, pragmatism adopts both a dualism point of view and singularity viewpoint (Tashakkori & Teddlie, 1998). “Researchers may be both objective and subjective in epistemological orientation over the course of studying a research question” (Tashakkori & Teddlie, 1998). That is, the answers to the research enquiry can be gained objectively and subjectively. In regards to this research, the
employment of a quantitative method was undertaken first to gain objective answers. These answers were then further explored subjectively through a qualitative method.

### 3.3 RESEARCH METHODOLOGY

The research methodology concerns the overall process and methods used to answer a research question. Although the term “methodology” has been defined in many different ways, Mackenzie and Knipe (2006) suggested a general definition derived from the most common definitions in the literature. Generally, “methodology is the overall approach to research linked to the paradigm” (Mackenzie & Knipe, 2006, p. 198). In contrast, methods refer to the approaches and tools employed for data collection and analysis (Mackenzie & Knipe, 2006).

As the methodology is linked to the paradigm of the research, proper selection of a methodology aligned with the basics of pragmatism should be considered. Pragmatists tend to combine quantitative and qualitative methods in the research process. This combination helps researchers to conclude their research with remarkable results (Johnson & Onwuegbuzie, 2004). Thus, as this research follows the pragmatic paradigm, both quantitative and qualitative approaches were employed.

### 3.4 RESEARCH DESIGN

Research design refers to the whole process concerning all procedures used for data collection, analysis, and interpretation. Once the researcher decides on combining quantitative and qualitative approaches, the next step is to choose the most appropriate design that best answers the research question (Creswell & Clark, 2007). There are four major research designs for studies that employ both quantitative and qualitative approaches: triangulation, embedded, explanatory, and exploratory (Creswell & Clark, 2007).
The data for this research were first collected and analyzed using quantitative methods. Qualitative methods were then used to subjectively explain what needed to be explained from the results of the quantitative data. The purpose of doing this was to search for reality objectively and help explain this reality subjectively. This field of study is interdisciplinary and complex because it embraces people, behavior and technology (Wang & Zhang, 2012). Thus, a combination of methods might provide insight to address the research problems and provide a comprehensive answer. “Today's research world is becoming increasingly inter-disciplinary, complex, and dynamic; therefore, many researchers need to complement one method with another, … to provide superior research” (Johnson & Onwuegbuzie, 2004, p. 15).

Having clarified the use of both quantitative and qualitative methods, as well as the sequence of employing them, the design deemed to best fit this task was explanatory design. Explanatory design consists of two phases: the first is a quantitative study, and the second a qualitative study. The explanatory design is described in detail in the following section. Afterwards, a plan for data collection for the methods in the nominated design is discussed with justification next.

### 3.4.1 EXPLANATORY DESIGN

This section illustrates the process of the explanatory design along with its purpose, and then provides a brief discussion on data collection techniques. In the first phase of an explanatory design, quantitative data is collected, then qualitative data collection follows in the second phase (Creswell & Clark, 2007). The purpose of this design is that the data collected qualitatively and subjectively helps to further explain the data collected quantitatively and objectively (Creswell & Clark, 2007).

There are two models of explanatory design: the follow-up explanation model and the participant section model (Creswell & Clark, 2007). The follow-up explanatory model
was deemed to suit this study because it concerns collecting qualitative data for the sake of explaining the results of the quantitative data, with an emphasis on the quantitative data. Figure 3.2 presents the process used in the follow-up explanatory model.

Figure 3.2: Explanatory Design, Explanations Model (Creswell & Clark, 2007)

In the follow-up model, particular results quantitatively analyzed from the collected data that require further explanation are selected by the researcher (Creswell & Clark, 2007). Following this, the researcher selects participants who can best provide qualitative explanations for the selected quantitative results (Creswell & Clark, 2007).
The data collection techniques vary depending on the methods. However, according to Walliman (2011), there are techniques for collecting primary and secondary data. The data collected in this research are primary, so primary data collection techniques are discussed only. Surveying, asking questions as defined by Walliman (2011), is one technique that can be used in both quantitative and qualitative methods. In addition, this can be in two forms; close-ended and open-ended questionnaires. Interviewing is another technique that is primarily used when there is a need to obtain adequate information. This can be in a form of one-to-one interviews or focus group interviews. Also, it can be structured, semi-structured or unstructured. Another technique of data collection is observation, which means collecting data by observing without being involved instead of asking questions (Walliman, 2011).

In the first phase, it is important to get a large number of responses so that results can be generalizable. Thus, the questionnaire technique is the most suitable as it allows for getting many responses from participants who are located in a large geographical area (Walliman, 2011). In the second phase, the main goal is to obtain in depth information to explain certain facts that remain unexplained in the first phase. "Interviews are more suitable for questions that require probing to obtain adequate information" (Walliman, 2011, p. 99). These selected techniques are further discussed in Sections 3.5.1 and 3.6.1.

### 3.5 QUANTITATIVE APPROACH

The quantitative approach is a method of inquiry concerned with hypotheses testing (O'Leary, 2014). This approach uses deductive reasoning, where a search for answers can be obtained objectively by employing experimental designs (O'Leary, 2014). In social research, existing data and surveys are tools used to “capture reality of human population” (O'Leary, 2014). As this study can be classified as social research, it aims, with regards
to the quantitative phase, to search for reality and truth by employing surveys to gather primary data for the purpose of the study to confirm or falsify the research hypotheses.

This task involves a number of procedures indicated by O'Leary (2014). First, the population of the study needs to be defined, whereby it is made clear which community or participant the researcher wishes to collect data from to reflect the accurate answer to the research question (O'Leary, 2014). Second, the “sampling strategy with a goal of representativeness and generalizability” is chosen (O'Leary, 2014). Third, the right instruments for collecting the required data must be implemented (O'Leary, 2014). Fourth, a pilot study is implemented to validate the instrument (O'Leary, 2014). Finally, the data is analyzed “using statistics to analyze the data” (O'Leary, 2014). These procedures are discussed in detail in the following sections.

### 3.5.1 SURVEY

Surveying is a common research approach for obtaining data. It is the process of gathering data from individuals about their characteristics and thoughts via questionnaires (O'Leary, 2014). This research adopted a cross-sectional study technique, which allowed the researcher to collect data at a single period after identifying a sample of participants from the population, whereby the results could then be generalized to that population (O'Leary, 2014).

This research aims to describe the correlation between a number of categorized factors and SC intention. Thus, an instrument (i.e., a questionnaire) was developed and employed for this purpose. The goal of a survey is to describe the participant by gathering a number of different pieces of information, such as demographics and attitudinal information (O'Leary, 2014). The development of the instrument for this study was completed through a set of steps further elaborated in Chapter 4.
The questionnaire was self-administered and disseminated online. Self-administered online questionnaires are advantageous because they can be spread across a wide geographical area and provide the participants with a convenient environment where they can answer the questionnaire in their own time (O'Leary, 2014). The questionnaire was designed to be mobile friendly to allow for obtaining information from the highest possible number of participants.

The population of the study was defined first as suggested and mentioned above by O'Leary (2014). This current study was conducted in Saudi Arabia and it concerned using SC within the borders of Saudi Arabia. Thus, the population of the study was bounded to include only people who live in Saudi Arabia. However, people who were younger than 18 years old were excluded. This is because this study gained an ethical approval (see Section 3.8) where people who were 18 and older could participate.

A random selection strategy was used as the sampling strategy in this research. In this strategy, every single element of the population has the same equal chance of being selected (O'Leary, 2014). The benefit of utilizing this strategy is that it allows to “control for research bias, represent the population and generalize findings to that population” (O'Leary, 2014). The questionnaires were mainly disseminated via social media platforms (e.g., Facebook, Twitter, and WhatsApp) because they are popular in Saudi.

The sample size was determined by three pieces of information: the overall population, the confidence interval, and the confidence level. The population of Saudi Arabia is over 33 million ("General Information about The Kingdom of Saudi Arabia," 2016). The confidence interval is defined as the accepted range above and below the mean, whereas the confidence level represents how certain the researcher wish to be that the “findings are more than coincidental” (O'Leary, 2014). For the above-mentioned
population, a confidence interval of 5% and a confidence level of 95% required a sample size of 384.

### 3.5.2 PILOT STUDY

Before sending out the questionnaire, a pilot study is essential to ensure the quality of the collected data, as well as to ensure the data is responsive to analysis (O'Leary, 2014). This improves the chances of the research being a success (Van Teijlingen & Hundley, 2001). Hence, a pilot study was undertaken first. The process for the pilot study was derived from O'Leary (2014).

First, the questionnaire was sent out to a small number of participants. The participants were chosen at random to make sure that they represented the sample of the large-scale study. The second step was to identify any difficulties with the survey and make sure it was understandable. The third step involved getting feedback about the overall surveys, the layout and design, as well as the coversheet. Following this, the preliminary data were statistically analyzed to look for any issues. Finally, the survey was amended according to the pilot study’s findings. These steps are explained in detail in Chapter 4.

### 3.6 QUALITATIVE APPROACH

A qualitative approach is a method of investigation concerned with acquiring the truth or reality subjectively. In this method, subjectivities are appreciated and multiple realities are accepted (O'Leary, 2014). “The goal is to gain an intimate understanding of people, places, cultures, and situations through rich engagement” (O'Leary, 2014). Amongst the five qualitative approaches listed in Chapter 6, the case study approach was employed in this research.

The aim of this research was to then subjectively gain further understanding of the results from the qualitative data. For this purpose, an explanatory design was chosen for
this study (see Section 3.4.1). A case study was utilized as the qualitative approach because it is a suitable approach when the researcher wants to ask why and how questions (Yin, 2009). The use of the case study approach is elaborated in Chapter 6.

3.6.1 INTERVIEWS

In-depth interviews were employed as a data collection technique to accomplish this explanatory task. The reasons for choosing interviews as a tool for qualitative data are as follows. First, it allows the researcher to establish a connection with the participant, therefore building trust (O'Leary, 2014). Second, it delivers rich and deep information (O'Leary, 2014). Third, it is flexible and allows “for non-verbal as well as verbal data” (O'Leary, 2014, p. 217).

In interviews, it is important to learn the art of listening to maintain best practices in facilitating the interviews and obtaining insights from the interviewees (O'Leary, 2014). Hence, a number of points should be taken into consideration, for instance, the interview formality, the interview structure, and the number of interviewees who will be interviewed at a time. These points are listed and discussed in detail in Chapter 6.

3.7 A PLAN FOR DATA ANALYSIS

This section provides a brief outline of the data analysis plan for both the quantitative and qualitative data, further details are discussed and elaborated in Chapters 4, 5, and 6. It is important to mention that this study incorporates two separate, but related, stages of analyses. The explanatory sequential design comprised (as mentioned and illustrated in Section 3.4.1) a quantitative study as the first stage and a qualitative study as the second stage. As such, the method was broken down into two parts: one concerning the quantitative data, and the other concerning the qualitative data.

Because the quantitative study is the main focus in this research, more attention was paid to ensuring that the outcomes of this phase, which are also related to the second
phase, were reliable and valid. Thus, two analysis chapters are dedicated to the quantitative data analysis. Chapter 4 concerns the preparation of the questionnaire and a preliminary study. In short, selecting the items for the questionnaire, reviewing the procedures for translating the questionnaire, and checking the wording in the target language are the key aspects of this chapter. More importantly, conducting a pilot study and measuring the reliability of the questionnaire are the main focus of this chapter. Upon the results of the pilot study and the reliability assessment, necessary modification to the questionnaire was carried out before moving to the second part of the quantitative data analysis.

Information from the large-scale study is presented in Chapter 5. More specifically, data collection and screening procedures, descriptive analysis, exploratory factor analysis, and measurement model evaluation (i.e. reliability and validity) are discussed in this chapter. Moreover, structural equation modelling (SEM) was used to test the hypotheses of the study.

Chapter 6 details the second part of the analysis plan, which concerns qualitative data analysis. In this chapter, the qualitative research question is refined, because it was subject to the results that required further explanation from the quantitative stage. The qualitative research approach, instruments, and procedures are presented because they formed the underpinnings for the qualitative analysis. Following this, a thematic analysis technique is reviewed and a hybrid approach is presented, justified, and selected as an analysis method for the qualitative data.

### 3.8 ETHICAL CONSIDERATIONS

The researcher took research ethical conduct very seriously. Research ethical conduct and integrity were key fundamentals in the design of this study’s quantitative and qualitative elements. The researcher therefore made great use of the resources provided
by Griffith University for conducting ethical and integral research. Griffith University provides a manual to assist researchers in conducting human research and appoints an advisory team to help researchers in conducting their research in an ethical and integral manners.

All research that involves humans at Griffith University must gain an ethical approval and clearance. In accordance with university policy, an application for ethical clearance was submitted and underwent an ethical review. Upon the review of the submission, ethical clearance was gained with protocol number: GU Ref No: 2016/770 (see Appendix A). In addition, managing the research data, performing the analyses, and reporting and disseminating the results was accompanied with the highest levels of care, where honesty and integrity cannot be apart from the conduct of the research.

3.9 SUMMARY

This chapter provided a broad overview of the study’s methodology. The chapter started with a brief outline of the most widely discussed philosophical underpinnings in the literature. Pragmatism was selected as a research paradigm for this study because it provides a good philosophical grounding, where the research problem is given the most focus. This provides the researcher with the ability to apply multiple methods through which the research question can best be answered. This research utilized both quantitative and qualitative methods to provide a more reliable answer, which has both objective and subjective views. Explanatory sequential design was chosen for this study, where quantitative data was collected and statistically analyzed, and some results were then explained in more detail by employing qualitative methods. The chapter concluded with a plan for the analysis, which is presented in detail in Chapters 4, 5 and 6.
4 CHAPTER FOUR: QUESTIONNAIRE PREPARATION AND PRELIMINARY STUDY

4.1 OVERVIEW

In the previous chapters, the research problem was defined, the research questions were stated, and the literature was reviewed. The outcome of the literature review was a conceptual framework consisting of ten factors believed to influence SC adoption and 15 hypotheses that postulated that nine of these factors would influence SCI and also hypothesized that some other factors would be related. The relationships in the framework required statistical evaluation. As mentioned in Chapter 3, this research project employed an explanatory sequential design where quantitative and qualitative were utilized to obtain a comprehensive answer to the research enquiries. This chapter and Chapter 5 explain the quantitative study. This is because the quantitative study is the main focus of this research; thus, greater attention was paid to ascertaining that valid processes were employed for obtaining credible outcomes.

The primary aim of the work outlined in this chapter was to prepare the questionnaire for the participants in the full-scale study. The main sections in this chapter relate to the questionnaire preparation and preliminary study. The first part concerns building and organizing the questionnaire through a number of steps. The outcome of these steps was a ready-to-distribute questionnaire that was clear and comprehensible. The second part describes a preliminary study where a pilot test was conducted with a small number of participants to ensure high reliability, as well as strong correlation of the questionnaire items. The questionnaire was modified after the pilot study revealed clarity issues in one of the scales. Figure 4.1 presents a visual depiction of the chapter.
Figure 4.1: An overview of Chapter 4

4.2 QUESTIONNAIRE PREPARATION

Questionnaire preparation in this research required organizing and arranging the questionnaire to confirm that it was suitable and ready to be disseminated to participants. The four-stage questionnaire preparation is explained in the sub-sections below. These four stages included selecting the questionnaire items, translating the questionnaire, testing the content validity of the items after translation, and examining the Arabic wording with an expert specialized in Arabic language grammar and morphology. Figure 4.2 outlines the four steps employed in the questionnaire preparation.
After conducting these steps, the questionnaire was ready for the pilot study and preliminary analysis. These steps are elaborated further in the sections below.

4.2.1 SELECTING QUESTIONNAIRE ITEMS

The research model consisted of ten factors, as mentioned in Chapter 2. The items that represented or measured these factors were selected after an extensive investigation of the literature (Chapter 2). Because some constructs were quantitatively measured in the literature using different items, the researcher had to decide which items were more comprehensive and easier to be communicated to the participants. This process took place in a cooperative manner with five academics who were interested in the topic and were experts in the field. The questionnaire included 32 items allocated to the factors. Most factors had three items and two of the factors had four items. Table (4.1) illustrates the number and the source of the items, along with the name of the associated factors.
Table 4.1: Sources of items in the questionnaire.

<table>
<thead>
<tr>
<th>Factor</th>
<th>No. of items</th>
<th>Item source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>3</td>
<td>(Davis, 1986)</td>
</tr>
<tr>
<td>Subjective norms</td>
<td>4</td>
<td>(Fitzmaurice, 2005)</td>
</tr>
<tr>
<td>Perceived behavioral control</td>
<td>3</td>
<td>(Taylor &amp; Todd, 1995)</td>
</tr>
<tr>
<td>Electronic word of mouth “Maroof”</td>
<td>3</td>
<td>(Han &amp; Windsor, 2011)</td>
</tr>
<tr>
<td>Perceived security in the payment system – “Sadad”</td>
<td>3</td>
<td>(Chellappa &amp; Pavlou, 2002)</td>
</tr>
<tr>
<td>Trust</td>
<td>3</td>
<td>(Buttner &amp; Goritz, 2008)</td>
</tr>
<tr>
<td>Price value</td>
<td>3</td>
<td>(Venkatesh et al., 2012)</td>
</tr>
<tr>
<td>Emotional social support</td>
<td>4</td>
<td>(Hajli, 2014a)</td>
</tr>
<tr>
<td>Informational social support</td>
<td>3</td>
<td>(Hajli, 2014a)</td>
</tr>
<tr>
<td>Social commerce intention</td>
<td>3</td>
<td>(Davis, 1989; Shin, 2009)</td>
</tr>
</tbody>
</table>

The questionnaire also incorporated demographic information. These questions aimed to obtain information about the participants’ age, gender, and educational status. They also included questions about employment status, location, income, and experience using e-commerce.

4.2.2 TRANSLATING THE QUESTIONNAIRE

All questionnaire items adopted from the literature were originally in English. For the research to be conducted in Saudi Arabia, where the main and the most spoken language is Arabic, the questionnaire had to be translated to Arabic. A back-translation procedure was therefore performed by a certified and recognized translation agency (see
Appendix B). Back-translation refers to translating the instrument from the original language to target language by a translator, and for a second time from the target language to the original language by another translator (Chapman & Carter, 1979). If any inconsistencies between the two translations are found, modification and another back-translation is performed (Chapman & Carter, 1979). This method was combined with a process called decentering. Decentering refers to making any required changes to both versions of the questionnaire to resolve cultural and language complications (Chapman & Carter, 1979). Following these steps, the questionnaire was ready to be assessed at the next stage of questionnaire preparation. That is, the actual outcome of the translation process was a fully translated and comprehended questionnaire that can be evaluated further in the next stage.

**4.2.3 CHECKING CONTENT VALIDITY**

During this stage, the construct items selected in Section 4.2.1 were further examined. Content validity was conducted at this stage. Content validity is a process of reviewing instruments and concluding whether these instruments measure what is meant to be measured and represent the domain of the constructs (Bolarinwa, 2015). This is usually done by experts in the field of research (Bolarinwa, 2015). Although all items in the research questionnaire were adopted from previous studies and were already validated, this step was an additional process to ensure that following translation the questionnaire items were carefully interpreted to measure the intended constructs.

Informal interviews were held with five bilingual (English and Arabic) experts in the field. During the interviews, both versions were shown to the experts. Discussion took place where comparative processes between the two versions were conducted. The overall outcomes from this process were satisfactory and the comments received from the experts
about the questionnaire and its translated version were positive. The items of the questionnaire – the English version – are listed in detail below:

The attitude construct was abbreviated as AT, with the items as follows:

- **AT1**: Using social commerce in Saudi Arabia is a good idea.
- **AT2**: Social commerce in Saudi Arabia is beneficial.
- **AT3**: I have positive feeling towards using social commerce in Saudi Arabia.

The subjective norms construct was abbreviated as SN, with the items as follows:

- **SN1**: Most people who are important to me think I should use social commerce.
- **SN2**: The people who I listen to could influence me to use social commerce.
- **SN3**: Close friends and family members think it is a good idea for me to do this activity.
- **SN4**: Important people in my life want me to do this activity.

The perceived behavioral control construct was abbreviated as PBC, with the items as follows:

- **PBC1**: I would be able to use social commerce.
- **PBC2**: Using social commerce is entirely within my control.
- **PBC3**: I have the resources and the knowledge and the ability to make use of social commerce.

The electronic word of mouth construct was abbreviated as E-WOM, with the items as follows:
• *E-WOM1*: I feel Maroof ratings and reviews are generally frank.

• *E-WOM2*: I feel Maroof ratings and reviews are reliable.

• *E-WOM3*: Overall, Maroof ratings and reviews are trustworthy.

The perceived security in payment systems construct was abbreviated as SP, with the items as follows:

• *SP1*: I believe the payment information I provide to Sadad will not be manipulated by inappropriate parties.

• *SP2*: I am confident that the private payment information I provide to Sadad will be secured.

• *SP3*: I believe inappropriate parties may deliberately view the information I provide to Sadad.

The trust construct was abbreviated as TR, with the items as follows:

• *TR1*: Social commerce in Saudi Arabia is a reliable social network.

• *TR2*: I can count on social commerce in Saudi Arabia to protect my privacy.

• *TR3*: Social commerce in Saudi Arabia can be relied on to keep its promises.

The price value construct was abbreviated as PV, with the items as follows:

• *PV1*: Items on social commerce platforms in Saudi Arabia are reasonably priced.

• *PV2*: Social commerce platforms in Saudi Arabia provide items with good value for money.

• *PV3*: At the current prices, social commerce platforms in Saudi Arabia provide items with good value for money.
The emotional social support construct was abbreviated as ESS, with the items as follows:

- **ESS1**: When faced with difficulties, some social commerce sellers and users in Saudi Arabia are on my side.
- **ESS2**: When faced with difficulties, some social commerce sellers and users in Saudi Arabia comfort and encourage me.
- **ESS3**: When faced with difficulties, some social commerce sellers and users in Saudi Arabia listen to me talk about my private feelings.
- **ESS4**: When faced with difficulties, some social commerce sellers and users in Saudi Arabia express interest and concern in my well-being.

The informational social support construct was abbreviated as ISS, with the items as follows:

- **ISS1**: Some social commerce sellers and users in Saudi Arabia offered suggestions when I needed help.
- **ISS2**: When I encountered a problem, some social commerce sellers and users in Saudi Arabia gave me information to help me overcome the problem.
- **ISS3**: When faced with difficulties, some social commerce sellers and users in Saudi Arabia helped me discover the cause and provided me with suggestions.

The social commerce intention construct was abbreviated as SCI, the items were as follows:

- **SCI1**: I think I will use social commerce in Saudi Arabia in the future.
- **SCI2**: I recommend others to use social commerce in Saudi Arabia.
• SCI3: I intend to continue using social commerce in Saudi Arabia in the future.

4.2.4 CHECKING ARABIC WORDING

This was the final step of the questionnaire preparation. In this stage, an academic who specialized in Arabic language grammar and morphology conducted a final review on the grammar and morphology. This step was performed to ensure that the questionnaire was clear and unambiguous for all participants. The aim of this step was also to ensure that the questionnaire did not have linguistic errors that might be seen as unprofessional by participants. The Arabic expert concluded her work with a table of corrected sentences and words (see Appendix C). Following this stage, the questionnaire was ready to be disseminated for a pilot study.

4.3 PRELIMINARY STUDY

The purpose of the preliminary study was to conduct a pilot study and preliminary analysis before conducting the full-scale-study. “The term ‘pilot studies’ refers to mini versions of a full-scale study, as well as the specific pre-testing of a particular research instrument, such as a questionnaire or interview schedule” (Van Teijlingen & Hundley, 2001). Van Teijlingen and Hundley (2001) claimed that pilot studies are very important for good research design. They increase the likelihood of success of the research (Van Teijlingen & Hundley, 2001). This informs the researcher about the responsiveness of the data to the analysis (O'Leary, 2014). Reliability tests, namely Cronbach’s alpha and item-total correlation, were conducted. This was done to ensure that all items within the scale were reliable and correlated. The questionnaire was modified because the results of the test showed a minor issue in the reliability tests. This issue is explained in the sections below.
4.3.1 OVERVIEW OF THE PILOT STUDY

The questionnaire was arranged as an electronic version and posted online using the LimeSurvey system, which was integrated with Griffith University research tools. LimeSurvey allow for the generation of a link so participants can easily access the questionnaire. Two links were generated: one link for the Arabic version of the study, the other for an English version for participants who preferred to participate using the English version. The links were then randomly distributed using social media platforms and the participants were able to opt for the Arabic or the English version of the questionnaire. LimeSurvey is powered with features that support accessing the questionnaire using smartphones. This is a great feature and it was thought that this might increase the participation level in the full-scale study.

The suggested number of participants in pilot studies varies in the literature. Researchers have suggested that 10-30 responses are sufficient for pilot studies (Hill, 1998; Isaac & Michael, 1995). On the other hand, Connelly (2008) and Treece and Treece (1977) suggested that the sample size for the pilot study should be 10% of the sample size calculated for the large scale study. The minimum sample size required for the main study was calculated as 384 (see Chapter 3). The aim was to involve 38 participants (10% of 384) for the pilot, but 44 complete responses were collected. After gathering the complete responses, the reliability and validity tests were conducted. Overall, the actual outcome of the pilot study was to prepare a valid and reliable questionnaire that can be used confidently in the large-scale study.

4.3.2 RELIABILITY TESTS

Reliability testing is a procedure that determines the quality of an instrument (Muijs, 2004). It means that items should consistently measure and reflect the factors or constructs they are intended to measure (Field, 2009). It concerns the internal consistency
The drivers of social commerce

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of a scale, which “refers to the degree to which the items that make up the scales ‘hang together’” (Pallant, 2013). Although all of the items and measures were used and validated in previous studies, the reliability tests were conducted to ensure these items and measures could confidently be used in the context of this study, namely SC in Saudi Arabia.

Reliability can be tested using split-half reliability, which is a method in which a sample is randomly split in two samples and “a score of each participant is calculated based on each half of the scale” (Field, 2009). In a reliable scale, the score of one participant should be the same or similar on both halves, and the correlation across other participants should be high (Field, 2009). As this method splits the data one time randomly, the results depend on the way the sample is split (Field, 2009). Cronbach’s alpha solves this problem by splitting the sample in half in every possible way and then calculating the correlation for each half (Field, 2009). For this reason, Cronbach’s alpha test was utilized in this research. Scholars state that a good alpha score should be above 0.7 (Field, 2009; Pallant, 2013). However, Table 4.2 shows the rules of thumb provided and used by other scholars (George & Mallery, 2007; Gliem & Gliem, 2003).

Table 4.2: Rule of Thumb for Alpha Score - adopted from (Gliem & Gliem, 2003)

<table>
<thead>
<tr>
<th>Alpha score</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 0.9</td>
<td>Excellent</td>
</tr>
<tr>
<td>Above 0.8</td>
<td>Good</td>
</tr>
<tr>
<td>Above 0.7</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Above 0.6</td>
<td>Questionable</td>
</tr>
<tr>
<td>Above 0.5</td>
<td>Poor</td>
</tr>
<tr>
<td>Below 0.5</td>
<td>Unacceptable</td>
</tr>
</tbody>
</table>

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If the alpha score is less than expected, then item-total correlation should be checked and if the score of an item is less than what is accepted, the researcher may consider deleting the item (Pallant, 2013). Item-total correlation score indicates the correlation between an item and other items within the scale, and for good correlation, the score should be above 0.3 (Field, 2009; Pallant, 2013).

The following sub-sections show the reliability test for all 10 scales and the results are highlighted and discussed. These 10 scales measured the following factors: attitude, subjective norms, perceived behavioral control, electronic word of mouth, perceived security in payment system, trust, price value, emotional support, informational support, and social commerce intention. The items used for each scale were mentioned in Section 4.2.1. Table 4.3 summarizes the alpha scores of the scales, and this is further elaborated in the coming sections.

Table 4.3: Summary of Alpha Scores for the Scales Used in the Research

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach’s alpha score</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>0.73</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Subjective Norms</td>
<td>0.64</td>
<td>Questionable</td>
</tr>
<tr>
<td>Perceived Behavioral Control</td>
<td>0.73</td>
<td>Acceptable</td>
</tr>
<tr>
<td>E-Word of Mouth</td>
<td>0.85</td>
<td>Good</td>
</tr>
<tr>
<td>Perceived Security (payment)</td>
<td>0.10</td>
<td>Unacceptable</td>
</tr>
<tr>
<td>Trust</td>
<td>0.73</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Price Value</td>
<td>0.90</td>
<td>Excellent</td>
</tr>
<tr>
<td>Emotional Support</td>
<td>0.76</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Informational Support</td>
<td>0.84</td>
<td>Good</td>
</tr>
<tr>
<td>Social Commerce Intention</td>
<td>0.87</td>
<td>Good</td>
</tr>
</tbody>
</table>

4.3.2.1 Attitude

This scale measured consumers’ attitudes towards using SC in Saudi Arabia and consisted of three items: AT1, AT2 and AT3. The alpha score of this scale was 0.73. Referring to Table 4.2, it can be said that the reliability of this scale was acceptable. The
scores of item-total correlation between each item and other items in the scale are shown in Table 4.4.

Table 4. 4: Item-Total Statistics for the Attitude Scale

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT1</td>
<td>3.77</td>
<td>2.738</td>
<td>0.590</td>
<td>0.627</td>
</tr>
<tr>
<td>AT2</td>
<td>3.66</td>
<td>1.997</td>
<td>0.689</td>
<td>0.466</td>
</tr>
<tr>
<td>AT3</td>
<td>3.61</td>
<td>2.475</td>
<td>0.427</td>
<td>0.808</td>
</tr>
</tbody>
</table>

All correlations in the corrected item-total correlation column are above 0.3, indicating good correlation; thus, the attitude scale was reliable and all items in the scale were highly correlated.

### 4.3.2.2 Subjective Norms

Four items measured the subjective norm construct: SN1, SN2, SN3, and SN4. The alpha score of this scale was 0.64. This score fell into the questionable score range shown in Table 4.2. Thus, it was important to examine the correlations between each item and other items within the scale. Table 4.5 shows the item-total statistics for the items included in the scale.

Table 4. 5: Item-Total Statistics for the Subjective Norm Scale

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>SN1</td>
<td>6.80</td>
<td>2.818</td>
<td>0.517</td>
<td>0.490</td>
</tr>
<tr>
<td>SN2</td>
<td>6.93</td>
<td>3.786</td>
<td>0.314</td>
<td>0.633</td>
</tr>
<tr>
<td>SN3</td>
<td>7.14</td>
<td>3.283</td>
<td>0.549</td>
<td>0.493</td>
</tr>
<tr>
<td>SN4</td>
<td>6.61</td>
<td>3.126</td>
<td>0.336</td>
<td>0.642</td>
</tr>
</tbody>
</table>

Pallant (2013) suggested deleting items that do not correlate with other items if the score is less than 0.3. All items in this scale correlated well with each other. The smallest item-total correlation score in Table 4.5 was 0.31, which was still above 0.3. By
examining the Cronbach’s alpha if the item was deleted column, the overall alpha score would not improve if any of the items were deleted. All items were therefore included in the full-scale study and from there a decision was made regarding whether any items should be deleted before analyzing the data.

### 4.3.2.3 Perceived Behavioral Control

Three items made up this scale: PBC1, PBC2, and PBC3. The alpha score for this scale was 0.73, which indicates acceptable reliability. Table 4.6 shows that the alpha score would improve and consequently, the status would be better if PBC1 was deleted.

Table 4.6: Item-Total Statistics for the Perceived Behavioral Control Scale.

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBC1</td>
<td>4.11</td>
<td>4.429</td>
<td>0.372</td>
<td>0.819</td>
</tr>
<tr>
<td>PBC2</td>
<td>4.02</td>
<td>2.813</td>
<td>0.718</td>
<td>0.412</td>
</tr>
<tr>
<td>PBC3</td>
<td>3.91</td>
<td>3.015</td>
<td>0.591</td>
<td>0.586</td>
</tr>
</tbody>
</table>

However, the scores in item-total correlation column are above 0.3. Therefore, while the alpha score was acceptable and correlations between items were above the accepted score, all items were included in the final study.

### 4.3.2.4 Electronic Word of Mouth

The electronic word of mouth scale construct consisted of three items (E-WOM1, E-WOM2 and E-WOM3) with an alpha score 0.85. This scale’s reliability was acceptable according to Gliem and Gliem (2003). Further, the correlation between each item and other items in the scale was high, ranging from 0.66 to 0.76. Table 4.7 shows the item-total correlation statistics for this scale.
Table 4. 7: Item-Total Statistics for the Electronic Word of Mouth Scale

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-WOM1</td>
<td>6.30</td>
<td>4.353</td>
<td>0.739</td>
<td>0.771</td>
</tr>
<tr>
<td>E-WOM2</td>
<td>6.16</td>
<td>4.183</td>
<td>0.656</td>
<td>0.849</td>
</tr>
<tr>
<td>E-WOM3</td>
<td>6.09</td>
<td>3.899</td>
<td>0.763</td>
<td>0.742</td>
</tr>
</tbody>
</table>

4.3.2.5 Perceived Security “Payment System”

This construct measured by this scale comprised three items: SP1, SP2 and SP3. The score for the reliability test for this scale was very low. Cronbach’s alpha was 0.1, which indicates a problem in the scale or some items. Gliem and Gliem (2003) stated that any Cronbach’s alpha score lower than 0.5 is unacceptable (see Table 4.2). A detailed examination of the item-total statistics table for this scale (Table 4.8), showed that the third item, SP3, was problematic.

Table 4. 8: Item-Total Statistics for the Perceived Security in Payment Scale

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP1</td>
<td>6.00</td>
<td>4.093</td>
<td>0.214</td>
<td>-.305</td>
</tr>
<tr>
<td>SP2</td>
<td>6.16</td>
<td>4.369</td>
<td>0.323</td>
<td>-.409</td>
</tr>
<tr>
<td>SP3</td>
<td>3.93</td>
<td>4.484</td>
<td>-0.186</td>
<td>0.876</td>
</tr>
</tbody>
</table>

First, if SP3 was deleted, the scale’s alpha score would dramatically improve and the statuses would change from unacceptable to good (see Table 4.2). Further, if one of the first two items (SP1 and SP2) were deleted, Cronbach’s alpha scores would be minus, violating the reliability assumptions.

In such a case, Pallant (2013) suggested looking for negatively worded items, if there are any, as the scores of these items should reversed coded. Figure 4.3 shows the three items used in this scale that measured consumers’ perceived security in the payment system (Saddar) established and maintained by the Saudi Government. SP1 and SP2 items
were positively worded. However, the SP3 item was negatively worded. Thus, reverse
coding was used and the alpha and item-total correlation scores were calculated again.

**Table 4.9: Item-Total Statistics for the Perceived Security in Payment Scale (after reverse
coding)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP1</td>
<td>5.77</td>
<td>5.342</td>
<td>0.499</td>
<td>0.234</td>
</tr>
<tr>
<td>SP2</td>
<td>5.93</td>
<td>6.158</td>
<td>0.525</td>
<td>0.290</td>
</tr>
<tr>
<td>SP3</td>
<td>3.93</td>
<td>4.484</td>
<td>0.186</td>
<td>0.876</td>
</tr>
</tbody>
</table>

This may be because the negative wording confused some of the participants. This
was evident because SP3 had a similar meaning to SP2, yet the data showed a noticeable
variance between the scores for the two items for some participants, even after performing
the reverse coding procedure. Thus, it was concluded that the SP3 item should not be
included in the full-scale study, because the confusion from negative wording may extend
to participants in the full-scale study. An alternative solution is included in Section 4.3.3.
4.3.2.6 Trust

The trust scale construct comprised three items: TR1, TR2 and TR3. The Cronbach’s alpha value was acceptable at 0.73. The scale also showed good correlation (above 0.3) between items. Table 4.10 illustrates the item-total statistics for this scale.

Table 4. 10: Item-Total Statistics for the Trust Scale

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR1</td>
<td>6.09</td>
<td>3.433</td>
<td>0.524</td>
<td>0.677</td>
</tr>
<tr>
<td>TR2</td>
<td>5.93</td>
<td>2.577</td>
<td>0.551</td>
<td>0.637</td>
</tr>
<tr>
<td>TR3</td>
<td>5.84</td>
<td>2.555</td>
<td>0.589</td>
<td>0.582</td>
</tr>
</tbody>
</table>

4.3.2.7 Price Value

The price value scale comprised three items (PV1, PV2 and PV3) and had the highest Cronbach’s alpha score among all other scales, scoring 0.90. Moreover, the Cronbach’s alpha if any item was deleted did not increase, and all item-total correlation values were very high, showing good relationships between items in this scale. Table 4.11 illustrates the item-total statistics for this scale. This scale was included in the full-scale study with high confidence and no item-associated issues.

Table 4. 11: Item-Total Statistics for the Price Value Scale

<table>
<thead>
<tr>
<th>Item-Total Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV1</td>
<td>6.50</td>
<td>5.326</td>
<td>0.827</td>
<td>0.835</td>
</tr>
<tr>
<td>PV2</td>
<td>6.70</td>
<td>6.678</td>
<td>0.776</td>
<td>0.871</td>
</tr>
<tr>
<td>PV3</td>
<td>6.48</td>
<td>6.581</td>
<td>0.806</td>
<td>0.847</td>
</tr>
</tbody>
</table>

4.3.2.8 Emotional Support

The emotional support scale consisted of four items: ESS1, ESS2, ESS3 and ESS4. Cronbach’s alpha was 0.76 for the four items. Table 4.12 shows that the alpha score would increase from acceptable to good if ESS3 was excluded from the scale.

Table 4. 12: Item-Total Statistics for the Emotional Support Scale
### Information Support

The information support construct was measured using a scale consisting of three items, ISS1, ISS2, and ISS3. The alpha score was 0.84, as mentioned in Table 4.3. This score therefore fell into the good range of alpha scores suggested by Gliem and Gliem (2003). Correspondingly, correlations between items were higher than 0.3, as shown in Table 4.13.

Table 4.13: Item-TOTAL Statistics for the Informational Support Scale

<table>
<thead>
<tr>
<th>Item-TOTAL Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-TOTAL Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISS1</td>
<td>6.09</td>
<td>4.410</td>
<td>0.561</td>
<td>0.906</td>
</tr>
<tr>
<td>ISS2</td>
<td>6.11</td>
<td>3.219</td>
<td>0.819</td>
<td>0.662</td>
</tr>
<tr>
<td>ISS3</td>
<td>6.16</td>
<td>3.300</td>
<td>0.759</td>
<td>0.725</td>
</tr>
</tbody>
</table>

As with the previous scales where the alpha score improved when one of the items was deleted, in this case, if ISS1 was deleted the alpha score increased by 0.07 and the status of the scale changed from good to excellent. However, item ISS1 was included in the final study because the change in the alpha score was not significant.
4.3.2.10 Social Commerce Intention

The social commerce intention construct was measured using a three-item scale (SCI1, SCI2 and SCI3) with a score high alpha (0.87) and these items correlated very well with each other, as shown in Table 4.14 in the corrected item-total correlation column. Thus, all items in this scale were included in the full-scale study because there were no issues in the alpha score or item correlation scores.

Table 4.14: Item-Total Statistics for the Social Commerce Intention Scale

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCI1</td>
<td>4.36</td>
<td>2.981</td>
<td>0.714</td>
<td>0.862</td>
</tr>
<tr>
<td>SCI2</td>
<td>4.00</td>
<td>1.953</td>
<td>0.828</td>
<td>0.753</td>
</tr>
<tr>
<td>SCI3</td>
<td>4.09</td>
<td>2.457</td>
<td>0.757</td>
<td>0.809</td>
</tr>
</tbody>
</table>

4.3.3 QUESTIONNAIRE MODIFICATION

The scales items included in the questionnaire were adopted from other studies and validated in a number of studies in the literature. Most of the scales in the questionnaire performed well in the pilot study, as demonstrated in the reliability and item-total correlation tests. Although some items showed less significant correlations, such as SN2 and ESS3, a decision was made to include them in the full-scale study because the item-total correlations were still above 0.3 and alpha scores were in acceptable ranges.

However, there was a problem in the scale that measured perceived security in the Sadad payment system. Two options were proposed to solve the issue: 1- deleting the item that caused the problem (SP3) and 2- finding an alternative item that may act suitably with the first two items (SP1 and SP2).

If the first option was implemented, the scale would be measured with two items. It was noted that this may cause future problems with the full-scale study, as an additional reduction of an item in the scale could also occur. The second option appeared more
appropriate and was therefore implemented. However, this procedure had to be carefully applied to avoid encountering a similar problem in the full-scale study.

Item SP3 was worded negatively, as shown in Figure 4.2. The other two items were positively worded. The confusion amongst participants probably occurred due to the negative wording. This issue was evident because the alpha score improved if the item was deleted before and after reverse coding. Therefore, a positively worded alternative item was used instead.

An item from Ranganathan and Ganapathy (2002) was adopted to replace SP3. The new item had a similar meaning to SP3 and was positively worded. The item phrase was “I think Sadad has mechanisms to ensure the safe transmission of users’ payment information”. The four steps used earlier for the questionnaire was also performed on the new SP3. Starting with selecting the item carefully from the literature, translating the item following the back-translation procedure, checking the item for content validity, and finally, checking the Arabic wording.

4.4 SUMMARY

This chapter contained two main sections. The first concerned the preparation of the questionnaire, which included a four-stage method, which was proposed by the author of this research, to get the best results in the preparation. The second section concerned the pilot study performed before collecting the data for the full-scale study. Reliability tests were completed, along with examining the correlations between items within scales. A minor issue in the questionnaire was discovered with item SP3. The item was therefore replaced with a more appropriate item. The questionnaire was then determined to be ready for the next stage.

The questionnaire was used in the large-scale study which is presented in Chapter 5, which contains data collection, screening, and preparation for analysis. It also contains a
sequence of analyses including descriptive analysis, exploratory factor analysis, confirmatory factor analysis, hypotheses testing and structural model assessment.
5 CHAPTER FIVE: DATA ANALYSIS AND FINDINGS

5.1 OVERVIEW

The previous chapter outlined the steps undertaken to ensure the questionnaire was ready for the full-scale study. The preparation of the survey went through four steps before the final survey was ready. A pilot study was conducted to ensure any issues would be solved before conducting the large-scale study.

This chapter concerns the analysis of the main study. It is divided into five main sections, beginning with the first stage, where the data were prepared for analysis. This was followed by the descriptive analysis of the sample. The third section provides an overview of structural equation modelling (SEM), because SEM is used in multiple stages throughout the chapter. The fourth section discusses the validity and reliability of the scales used in this study, including exploratory factor analysis (EFA), where factor structures are explored. This is followed by assessing the validity of the scales in a confirmatory manner, which includes assessment of convergent validity, as well as discriminant validity, where factor structure is confirmed using SEM. The last section assesses the structural model, where the hypotheses testing took place utilizing partial least square SEM. Figure 5.1 presents a pictorial overview of this chapter.
Prior to analyzing the data, data screening and preparation processes were conducted on the collected data. Pallant (2013) stated that data screening is an essential process that a researcher should perform. Levy (2006) affirmed the importance of data screening and mentioned some reasons why it is necessary, such as examining the accuracy of the collected data, detecting outliers in the data set, treating the missing data, and managing the issues accrued in the responses.
The issue of missing data is a common impediment to data analysis in social research (Tabachnick & Fidell, 2007). Therefore, it is a fundamental step to manage this issue prior to starting the analysis (Hair, Black, Babin, Anderson, & Tatham, 2006). In this research, the number of questionnaire responses was 1,663. However, the number of complete questionnaire responses was 1,012. The remaining incomplete responses were discarded to avoid multiple problems that would occur in the analysis. Thus, 651 incomplete responses were excluded from the analysis process and only the complete responses were analyzed. This decision was taken because the number of the complete responses was adequate for the analyses because they exceeded the required number of responses mentioned in Chapter 3.

Assessing the normality of data distribution of the variables formed part of the data screening and preparation. Normality assessment refers to the distribution of the data and its accordance to normal distribution (Hair et al., 2006). Normal distribution is a description of a symmetrical and bell-shaped curve (Pallant, 2013). It can be assessed graphically or statistically with the use of the two components of normality: skewness and kurtosis (Tabachnick & Fidell, 2007). The participants were asked to respond to the variables utilizing a 7-point Likert scale (7 = strongly agree, 6 = agree, 5 = somewhat agree, 4 = neither agree nor disagree, 3 = somewhat disagree, 2 = disagree and 1 = strongly disagree). An initial inspection of the data indicated that the responses were negatively skewed, as no more than 5-25% of participants responded negatively or neutrally. In other words, the vast majority of the participants either strongly agreed, agreed, or somewhat agreed. This style of responding resulted in a highly skewed distribution where values of skewness exceeded the normal range (-1 to +1), as suggested as a rule of thumb by (Hair, Hult, Ringle, & Sarstedt, 2014).
This issue was discussed with a high profile expert statistician to propose a suitable solution. Dr Grimbeek (personal communication, 20 October, 2018) suggested that this style of response can be interpreted in two ways. First, it might occur in certain cultures where the participants want to give polite responses so they do not disagree. The issue of polite responses in some cultures, or so called extreme responses by some researchers, has been addressed in a number of studies (Albaum, 1997; Albaum & Murphy, 1988; Clarke, 2001; Hui & Triandis, 1989; Javeline, 1999). Second, this might indicate that participants confidently and definitely made these choices.

Two different options were available to deal with the data normality issue in this research. The first solution proposed by the expert was to use a form of transforming the variables, borne of the practicalities of the research data set. This is called collapsing response categories to use Likert scales that do not include negative responses so the participants are always in agreement. In other words, the 7-point Likert scale becomes 4-point Likert scale where neutral and negative responses are collapsed into one category. The scale categories then become “strongly agree”, “agree”, “somewhat agree” and the last category is “neutral and disagree”. “The reason for transforming a variable is almost always to more closely approximate a normal distribution or the non-parametric equivalent thereof. This normalization has the virtue of simplifying interpretation of analysis outcomes amongst other things” (personal communication, Grimbeek, 20 October, 2018). This solution was supported and applied in a number of studies found in the literature (Barnieh et al., 2009; Grimbeek, Bryer, Beamish, & D'Netto, 2005; Harzing, 2006).

The second proposed solution was to use non-parametric statistics where there are no distributional assumptions to be met. Hair et al. (2014) claimed that partial least squares structural equation modelling (PLS-SEM) has no such assumptions about data
normality and applies non-parametric measures. The researcher had to decide which of these solutions to apply. Applying the first option could cause concerns, especially when examining the issue of losing some of the data during the process of collapsing. Furthermore, the issue of the data being manipulated could also cause issues in that the findings may be inaccurate as a result of collapsing the data. The second option seemed more appropriate given that normality of distribution does not matter and the excellent characteristics of PLS-SEM, which will be briefly mentioned in Section 5.4 of this chapter. Thus, PLS-SEM was utilized to evaluate the validity and reliability of the measures, as well as assessing the hypotheses of this study.

5.3 DESCRIPTIVE ANALYSIS

This section provides a detailed descriptive analysis of the sample. As mentioned earlier, the sample size was 1,012. The purpose of presenting the descriptive analysis is to show the reader from whom the data were collected as well as the quantity of the collected data. This is important as it is highly related to the issue of generalizability of the results. This current study takes the matter of generalizability very seriously, so that results are reliable and valid. In the discussion chapter (Section 7.3), further elaboration that is related to descriptive analysis is presented. Table 5.1 shows a general overview of the demographics of the sample. The variables (gender, age, education, location, employment status, monthly income, and e-commerce experience) are then explained in detail and illustrated in figures.
Table 5.1: Overview of demographics (N=1012)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Classification</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>400</td>
<td>39.5%</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>612</td>
<td>60.5%</td>
</tr>
<tr>
<td>Age</td>
<td>20 or below</td>
<td>66</td>
<td>6.5%</td>
</tr>
<tr>
<td></td>
<td>21 - 30</td>
<td>263</td>
<td>26.0%</td>
</tr>
<tr>
<td></td>
<td>31 - 40</td>
<td>272</td>
<td>26.9%</td>
</tr>
<tr>
<td></td>
<td>41 - 50</td>
<td>248</td>
<td>24.5%</td>
</tr>
<tr>
<td></td>
<td>51 - 60</td>
<td>131</td>
<td>12.9%</td>
</tr>
<tr>
<td></td>
<td>Over 60</td>
<td>32</td>
<td>3.2%</td>
</tr>
<tr>
<td>Education</td>
<td>Secondary or below</td>
<td>147</td>
<td>14.5%</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>94</td>
<td>9.3%</td>
</tr>
<tr>
<td></td>
<td>Bachelor</td>
<td>528</td>
<td>52.2%</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>243</td>
<td>24.0%</td>
</tr>
<tr>
<td>Location</td>
<td>Large city</td>
<td>779</td>
<td>77.0%</td>
</tr>
<tr>
<td></td>
<td>Small city</td>
<td>186</td>
<td>18.4%</td>
</tr>
<tr>
<td></td>
<td>Village</td>
<td>45</td>
<td>4.4%</td>
</tr>
<tr>
<td></td>
<td>Rural area</td>
<td>2</td>
<td>0.2%</td>
</tr>
<tr>
<td>Employment status</td>
<td>Student</td>
<td>164</td>
<td>16.2%</td>
</tr>
<tr>
<td></td>
<td>Working at a governmental department</td>
<td>452</td>
<td>44.7%</td>
</tr>
<tr>
<td></td>
<td>Working at a private sector</td>
<td>138</td>
<td>13.6%</td>
</tr>
<tr>
<td></td>
<td>Self-employed</td>
<td>51</td>
<td>5.0%</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>89</td>
<td>8.8%</td>
</tr>
<tr>
<td></td>
<td>Retired</td>
<td>118</td>
<td>11.7%</td>
</tr>
<tr>
<td>Monthly income</td>
<td>Less than or equal to 5000</td>
<td>263</td>
<td>26.0%</td>
</tr>
<tr>
<td>(in Saudi Riyals)</td>
<td>5001 - 10000</td>
<td>182</td>
<td>18.0%</td>
</tr>
<tr>
<td></td>
<td>10001 - 15000</td>
<td>266</td>
<td>26.3%</td>
</tr>
<tr>
<td></td>
<td>15001 - 20000</td>
<td>201</td>
<td>19.9%</td>
</tr>
<tr>
<td></td>
<td>More than 20000</td>
<td>100</td>
<td>9.9%</td>
</tr>
<tr>
<td>E-commerce experience</td>
<td>Never used e-commerce before</td>
<td>276</td>
<td>27.3%</td>
</tr>
<tr>
<td></td>
<td>Less than one year</td>
<td>186</td>
<td>18.4%</td>
</tr>
<tr>
<td></td>
<td>1 - 3 years</td>
<td>256</td>
<td>25.3%</td>
</tr>
<tr>
<td></td>
<td>3 - 5 years</td>
<td>125</td>
<td>12.4%</td>
</tr>
<tr>
<td></td>
<td>More than 5 years</td>
<td>169</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

5.3.1 Gender

Figure 5.2 illustrates the participants’ gender with an approximate percentage. Six hundred and twelve participants were males, forming slightly more than 60% of the sample. The percentage of female participants in the sample was close to 40%.
5.3.2 AGE

As illustrated in Figure 5.3, there was a range of age groups for the participants, with the percentages relatively evenly distributed for the 21-30, 31-40 and 41-50 groups. However, the other three groups represented a smaller proportion of the sample. In particular, those less than 20 years (6.5%, N=66), those in the 51-60 years age group (12.9%, N=131), and those more than 60 years of age (3.2%, N=32).
5.3.3 EDUCATION

Figure 5.4 represents the distribution of education of the sample. Of the 1,012 participants, slightly more than half had completed a bachelor degree (52.2%, N=528) and another 24% (N=243) had completed a postgraduate degree. Fewer than 15% (14.5%) had completed secondary school at most, and fewer than 10% (9.3%) had completed a diploma.

![Education Distribution Chart]

Figure 5.4: Participants’ Education

5.3.4 LOCATION

Figure 5.5 illustrates the four location groups: large city, small city, village, and rural area. More than three quarters (77%, N=779) lived in a large city, another 18.4% lived in a small city. Fewer than 5% of the participants lived in a village (4.4%) or a rural area (.2%).
5.3.5 **EMPLOYMENT STATUS**

As illustrated in Figure 5.6, the largest percentage of the 1,012 participants worked in a government department (44.7%), smaller percentages were students (16.2%) or worked in the private sector (13.6%). Just over 10% were retired (11.7%), less than 10% were unemployed (8.8%), and 5% were self-employed.
5.3.6 INCOME

As illustrated in Figure 5.7, the largest percentage of the 1,012 participants reported a monthly income of 10,001-15,000 Saudi riyals (26.3%, N=266), and the smallest percentage a monthly income of more than 20,000 Saudi riyals (9.9%, N=100). Roughly even percentages of participants reported earning 5,001-10,000 riyals (18%) or 15,001-20,000 riyals (19.9%).

![Monthly Income Chart]

Figure 5. 7: Participants’ Income

5.3.7 E-COMMERCE EXPERIENCE

As illustrated in Figure 5.8, participants were more likely to report that they had never used e-commerce before (27.3%, N=276), and they were least likely to report that they had used e-commerce for 3-5 years (12.4%, N=125) or over five years (16.7%, N=169).
5.4 OVERVIEW OF STRUCTURAL EQUATION MODELLING (SEM)

Because structural equation modelling is discussed in the confirmatory factor analysis (CFA) section under measurement scale analysis and in the hypotheses testing, this section provides an overview of SEM. Moreover, it provides a brief overview of the benefits of using PLS-SEM.

SEM is a set of related statistical techniques and models that help a researcher quantitatively test a theoretical model (Schumacker & Lomax, 2004). There are two types of SEM: covariance-based SEM and variance-based SEM (PLS-SEM) (Astrachan, Patel, & Wanzenried, 2014). SEM examines the relationships between variables by estimating the magnitude of path coefficients (Byrne, 2010). SEM incorporates two primary elements; namely, the measurement model and structural model (Hair et al., 2006). The measurement model demonstrates how variables (or items) are combined to represent factors, while the structural model shows how the constructs (of factors) are correlated to each other (Hair et al., 2006).
There are benefits of using SEM for data analysis. Gefen, Straub, and Boudreau (2000) recommended using SEM for information systems behavioral studies. Furthermore, SEM outperforms traditional multivariate analysis techniques because it follows confirmatory methods rather than exploratory methods that are used by traditional multivariate techniques (Byrne, 2010). Moreover, SEM measures the correlations between variables more accurately than other statistical techniques (e.g. regression and factor analyses) (Hair, Black, Babin, & Anderson, 2010).

In this study, SEM, with its two components (measurement model and structural model), was used as the analysis method. For the measurement model, which concerns validity and reliability, CFA, which is considered a technique of SEM (Byrne, 2010; Hair et al., 2010), was utilized. The CFA technique was also conducted to confirm the results of exploratory factor analysis (EFA). Furthermore, for the structural model, SEM was used to assess the 15 hypotheses postulated in this study. These analyses were conducted based on the recommendations stated by Hair et al. (2014).

It is important to note that SEM requires a large sample size (Hair et al., 2010). The model tested in this study contained a large number of factors (10 factors), each with three or four items. For this set of data, Hair et al. (2010) suggested that the minimum sample size is 500. The whole sample (1,012) was processed for CFA, exceeding the minimum suggested above. Furthermore, the whole sample was used for the hypotheses testing. That is, 1,012 samples were used, and as such, the requirement for SEM regarding sample size was met.

PLS-SEM was utilized in this study. The most important justification for using PLS-SEM was related to the issue addressed in Section 5.2, the issue of normality. As mentioned earlier, PLS-SEM does not assume that the data to be analyzed are normally
distributed (Hair et al., 2014). That is because it uses non-parametric techniques for data analysis (Hair et al., 2014).

Furthermore, there are great characteristics of using PLS-SEM that made it a favorable option for data analysis in this research. For instance, the precision of the estimates increases with large sample sizes, which is reflected in this study, as a large sample size was utilized (i.e., 1012). Moreover, it robustly handles models that are complex and consist of a large number of relations (Hair et al., 2014). Having this particular advantage is useful, because this research comprised a large number of constructs (10 constructs) with a large number of relations between them (15 relations). In addition, it has multiple criteria for evaluating measurement models (i.e., validity and reliability) (Hair et al., 2014). Finally, PLS-SEM algorithm is efficient, even with complex models, because it converges after a small number of iterations (Hair et al., 2014).

5.5 MEASUREMENT SCALE ANALYSIS

This section reports the validity and reliability of the questionnaire measures. Although the measures and items were validated and used in previous studies, the main purpose of this section is to confirm that those measures are valid and reliable in the context of this study, specifically in the field of social commerce adoption in Saudi Arabia.

Factor analysis was used for the purpose of validation. Specifically, a cross validation approach was applied where both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were employed. According to Floyd and Widaman (1995), factor analysis is a widely and commonly used technique for the purpose of evaluating and developing measures. Furthermore, it is a popular tool for measuring validity (Turocy, 2002).
In this study, EFA was used to determine the factor structure across the 32 items. The main objective of using CFA was to confirm the hypothesized factor structure that resulted from using EFA. “EFA provides insight into the structure of the items and may be helpful in proposing the measurement theory” (Hair et al., 2010, p. 703). However, EFA does not assess the theory so it cannot be used alone to validate a measurement model; therefore, “CFA should be used to test the measurement model” (Hair et al., 2010, p. 703).

According to Dik, Eldridge, Steger, and Duffy (2012), utilizing both EFA and CFA “allows for cross validation of the final factor structure” (p. 248). Moreover, other scholars have affirmed the benefits of using CFA after EFA. For instance, Floyd and Widaman (1995) mentioned that using CFA is beneficial nowadays because it is easy to use, flexible, and enables testing the hypothesized structure of EFA. Stoffel, Reis, Schwarz, and Schröder (2013) also stated that CFA can be used for confirming, revising, and refining the structure of the factors.

On the other hand, the whole sample was used to examine reliability. Relying on the argument outlined in Chapter 4, which showed that Cronbach’s alpha is better than the split-half reliability method, the former method was used for assessing the internal consistency. The table summarizing the rule of thumb of acceptable alpha scores in Chapter 4 was used to assess reliability. Item-total correlation was also reported.

5.5.1 VALIDITY

5.5.1.1 EXPLORATORY FACTOR ANALYSIS (EFA)

EFA is a technique employed in data analysis to explore the possible structure of factors in observed variables (Alshehri, 2013; Child, 1990). It is used to test and develop research instruments (Costello & Osborne, 2005). Alshehri (2013) suggested that it is beneficial to use EFA to evaluate variables relationships and to test the validity of
constructs. In this study, EFA was applied to explore the structure of the factors represented by the 32 items.

The purpose of carrying out an EFA analysis in this study was “to establish that the measurement items converge into the appropriate number of theoretical factors” (Gefen & Straub, 2005, p. 92). Even though the items were validated in previous studies, this was thought to be a required phase in the analysis because this study integrates a large number of factors from multiple different theories and studies. EFA is crucial for two reasons: to determine that measurement items are related to only one factor where they load with a high coefficient, and to explore that a set of theoretically related items converge together with the same factor (Gefen & Straub, 2005).

While factor analysis in PLS is confirmatory in nature (Gefen & Straub, 2005), EFA cannot be done using software that employs PLS algorithms. Thus, IBM SPSS was used for this task. EFA is done by performing two steps: factor extraction and factor rotation (Pallant, 2013). The whole sample was used to undertake EFA. More specifically, IBM SPSS v25 dimension reduction’s principal component analysis (PCA) plus varimax rotation (orthogonal) were utilized. Tabachnick and Fidell (2001, p. 612) stated that PCA’s goal “is to extract maximum variance from the data set with each component”. It is a useful method when used initially in EFA “as it reveals a great deal about maximum number and nature of factors” (Tabachnick & Fidell, 2001, p. 612). It is a good choice if the researcher’s goal is to reduce a large number of variables or items to a lesser number of components (Tabachnick & Fidell, 2001). On the other hand, Field (2009) suggested that varimax rotation should be used at first because it is a good general method that simplifies factor explanation. Furthermore, Hair et al. (2006) stated that varimax rotation separates factors in a clearer manner. The number of components was initially set to the maximum theorized (10) as suggested by Gefen and Straub (2005), and then to a lesser
number of components if necessary. However, before performing EFA, confirming that
the sample was adequate for EFA was performed first.

SPSS dimension reduction includes two tests of sampling adequacy: Kaiser-Meyer-
Olkin (KMO) and Bartlett’s test of sphericity. In order to confirm sampling adequacy, the
value of KMO is considered superb if above 0.9 and Bartlett’s test of sphericity should
be significant (Field, 2009). With the value of KMO (.929) and Bartlett’s test of sphericity
(value = 21875.928; sig p<.001) shown in Table 5.2, the sample was confirmed as
adequate and items were factorable.

Table 5.2: Sampling adequacy tests - KMO and Bartlett’s test of sphericity

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
<td>.929</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>21875.928</td>
</tr>
<tr>
<td>df</td>
<td>496</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

Given the ample sample size, a threshold value of .400 was set for component
loadings, with the aim here to identify a component solution that was simple where items
loaded at or above the threshold on only a single component and were intelligible (i.e.,
component clusters make sense). This is supported by some scholars who have suggested
that any loading value less than 0.4 is considered low and should be discarded (Field,
2005; Hair et al., 2006)

An initial 10-component analysis was performed. However, only one item was
included in the 10th component. As such, the 10-component analysis was set aside until
performing an analysis with a lesser number of components. A follow-up nine-component
solution mirrored the theorized factor structure with precision, except that ESS and ISS
merged to form a single component. This merging was, in point of fact, expected, because
they (i.e., ESS and ISS) represented and measured the second order factor – SS. The
multi-factor EFA produced a viable nine-component solution with nine intelligible clusters of component items.

As indicated in Table 5.3, the 32 items loaded onto nine components, with seven items loading on the first component representing SS (i.e., emotional and information support), three items loading onto the second component representing PV, three items loading on the third component representing SP (Sadad), three other items loading on the fourth component representing AT, four items loaded on the fifth component representing SN, three items loaded on the sixth component representing E-WOM (Maroof), three items loaded on the seventh component representing SCI, three items loaded on the eighth component representing PBC, and three items loaded on the ninth component representing TR.

All items loaded on one component with values of loading greater than the threshold suggested above. However, informational support and emotional support are considered in the next stage, which is CFA, as dimensions of SS (i.e., first order factors) as performed in previous SC studies (Hajli & Sims, 2015; Liang et al., 2011).
Table 5.3: Rotated nine-component matrix of 32 Likert scale items

<table>
<thead>
<tr>
<th>Component Matrixa</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT1</td>
<td>0.791</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT2</td>
<td>0.833</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT3</td>
<td>0.733</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

In summary, the EFA test returned an intelligible nine-component solution that explained 75.85% of the variance. The KMO value was above 0.9 and Bartlett’s test was
significant. In the next section, and based on this multi-factorial solution, CFA was used to confirm the validity of this factor structure.

5.5.1.2 **CONFIRMATORY FACTOR ANALYSIS (CFA)**

CFA is a method that tests the extent of measured variables in representing a lesser number of factors or constructs, and it is done using SEM (measurement model) (Hair et al., 2010). Hair et al. (2010) suggested that CFA is the most direct method to confirm and validate the structure resulting from performing EFA. It is used to assess and validate the hypothesized structure of the factors (Hair et al., 2006). It is also an appropriate method in studies where pre-validated measures are used (Alshehri, 2013; Bhattacherjee & Premkumar, 2004). The entire sample of 1,012 responses was used to undertake CFA. More specifically, Smart PLS was used to perform CFA because factor analysis in this tool is confirmatory in nature (Gefen & Straub, 2005).

In CFA, the evaluation of convergent validity and discriminant validity are examined (Gefen & Straub, 2005). *Convergent validity* refers to “the extent to which a measure correlates positively with alternative measures of the same construct” (Hair et al., 2014, p. 102). *Discriminant validity*, on the other hand, refers to “the extent to which a construct is truly distinct from other constructs by empirical standards” (Hair et al., 2014, p. 104). To evaluate convergent validity, and as suggested by Hair et al. (2014), average variance extracted (AVE) as well as the outer loading of items were assessed. The outer loading for each item should exceed a threshold of 0.70 and the value of AVE should be above 0.50 (Hair et al., 2014). However, if the outer loading value is between 0.70 and 0.40, removing the item is suggested if the AVE value will be improved above the threshold (Hair et al., 2014). Table 5.4 shows the results of convergent validity consisting of outer loadings, as well as AVE values. It also shows composite reliability (CR) values where they should exceed 0.70 for each construct (Nunnally, 1994).
All loading of items exceeded the threshold, except for the item SN2 loading value, which was below 0.70; however, the CR and AVE values were above the minimum suggested thresholds (0.70 & 0.50). Thus, there was no need to remove this item.

Table 5.4: Convergent validity of the constructs

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<th>Factor</th>
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<th>Loading</th>
<th>CR</th>
<th>AVE</th>
</tr>
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Overall, the results show that the criteria suggested for adequate convergent validity were met. As a result, it can be concluded that the assessment of convergent validity was satisfactory.

To evaluate discriminant validity, the assessment was done by comparing the square root values of AVEs with the correlation between constructs. Hair et al. (2014) claimed that for discriminant validity to be met, the square root AVE value of a construct should be higher than any other correlations between the same construct and any other constructs. Table 5.5 shows the results of discriminant validity, where the bold values on the diagonal represent the values of square root of AVEs and the other values represent the correlations between constructs.

As shown in Table 5.5, all of the bold values, which represent square root AVE for the constructs, were higher than the highest correlation values for each construct. This suggests that the criteria of satisfactory discriminant validity was met. In summary, the analysis of CFA yielded credible assessment of convergent and discriminant validities.
Table 5.5: Discriminant validity of the constructs

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<th>ESS</th>
<th>ISS</th>
<th>PBC</th>
<th>PV</th>
<th>SCI</th>
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5.5.2 RELIABILITY

This section reports the Cronbach’s alpha scores of the scales, the correlation between the items, and the overall reliability as measures for scale reliability and internal consistency.

The argument provided in Section 4.3.2 was used to support the results of the reliability test. The reliability tests were done on the factor structure (ten factors) confirmed and shown in Section 5.5.1.2. Table 5.6 summarizes the results of the reliability test for the 32 items that represent ten factors.

Overall, the reliability test for the scales yielded better scores than the test done in the preliminary study, ranging from 0.76 and 0.91. All alpha scores approximated good and excellent statuses compared with Table 4.2 (see Chapter 4). Furthermore, all correlation scores between items were above the threshold (0.30). The alpha score for all 32 items was excellent. These scores are regarded as consistent with the discussion in Chapter 4 (see Section 4.3.2). Thus, it can be concluded that the reliability tests show high scores with no problems.
Table 5.6: Cronbach’s alpha, item-total correlations and overall reliability scores

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<th>BC</th>
<th>PV</th>
<th>WM</th>
<th>SP</th>
<th>TR</th>
<th>EES</th>
<th>ISS</th>
<th>SCI</th>
</tr>
</thead>
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<td>0.76</td>
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</table>

<table>
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<th>Item-Total Correlations</th>
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<td>SCI_I3</td>
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</table>

Overall reliability score for the 32 items = .940
5.6 STRUCTURAL MODEL ASSESSMENT

This section concerns the testing of the hypotheses (path model) of the study, as well as evaluating the structural model. PLS-SEM was used for these tasks and the entire dataset (N=1012) was used to test the hypotheses and assess the structural model. First, path coefficients, $t$-statistics and $p$ values were used to assess the study’s hypotheses. Path coefficients exhibit the postulated relationships between constructs showing a value between -1 to +1 where values close to 0 denote weaker relationships (Hair et al., 2014). These values offer evidence of the direct effect of independent variables on dependent variables (Hair et al., 2006).

The significance of the relationships can be demonstrated by calculating the values of $t$ values and the significance level ($p$ values) (Hair et al., 2014). The $t$ values are often called critical ratio values, and these values should be greater or equal to 1.96 for each path to demonstrate significant relationships. The values of $t$-statistics must be equal or greater than 2.58 for the relationship to be significant at a 99% level, or between 1.96 and 2.58 for the relationship to be significant at 95% (Byrne (2010). The study hypotheses were previously presented in Table 2.1 (see Chapter 2). Table 5.7 shows the results of hypotheses testing by reporting path coefficients, $t$-statistics and $p$ values. Additionally, Figure 5.9 depicts a visualization of the study’s model with path coefficients and $p$ values.
<table>
<thead>
<tr>
<th>H#</th>
<th>Relationship</th>
<th>Path coefficients</th>
<th>t-Statistics</th>
<th>p Values</th>
<th>Significance level</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>AT → SCI</td>
<td>0.299</td>
<td>9.029</td>
<td>0.000</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>PBC → SCI</td>
<td>0.162</td>
<td>4.161</td>
<td>0.000</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>PV → SCI</td>
<td>0.142</td>
<td>4.788</td>
<td>0.000</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>TR → SCI</td>
<td>0.072</td>
<td>2.059</td>
<td>0.040</td>
<td>*</td>
<td>Supported</td>
</tr>
<tr>
<td>H5</td>
<td>TR → AT</td>
<td>0.231</td>
<td>5.967</td>
<td>0.000</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H6</td>
<td>SS → SCI</td>
<td>0.155</td>
<td>5.217</td>
<td>0.000</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H7</td>
<td>SS → TR</td>
<td>0.285</td>
<td>8.481</td>
<td>0.000</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H8</td>
<td>SS → AT</td>
<td>0.079</td>
<td>2.241</td>
<td>0.025</td>
<td>*</td>
<td>Supported</td>
</tr>
<tr>
<td>H9</td>
<td>SN → SCI</td>
<td>0.055</td>
<td>1.856</td>
<td>0.064</td>
<td>NS</td>
<td>Rejected</td>
</tr>
<tr>
<td>H10</td>
<td>E-WOM → SCI</td>
<td>-0.007</td>
<td>0.257</td>
<td>0.797</td>
<td>NS</td>
<td>Rejected</td>
</tr>
<tr>
<td>H11</td>
<td>E-WOM → AT</td>
<td>0.076</td>
<td>2.205</td>
<td>0.028</td>
<td>*</td>
<td>Supported</td>
</tr>
<tr>
<td>H12</td>
<td>E-WOM → TR</td>
<td>0.243</td>
<td>6.879</td>
<td>0.000</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H13</td>
<td>SP → SCI</td>
<td>0.134</td>
<td>3.760</td>
<td>0.000</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H14</td>
<td>SP → AT</td>
<td>0.254</td>
<td>6.710</td>
<td>0.000</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H15</td>
<td>SP → TR</td>
<td>0.303</td>
<td>9.830</td>
<td>0.000</td>
<td>***</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Note: * = p < 0.05; *** = p < 0.001; NS = not significant.
As shown in Table 5.8, all hypothesized relationships were supported, except for H9 and H10. The path between SN and SCI, as well as the path between E-WOM and SCI were not significant. In term of significance level, all other supported hypotheses were positively significant at 0.001 level, except for H4, H8 and H11. That is, the three paths from TR to SCI, SS to AT and E-WOM to AT were positively significant at 0.05 level, indicating weaker relationships.

Amongst the factors that positively influenced SCI, AT was the most significant, with a 0.299 path coefficient and 9.029 t value. This was followed by the effect of PBC, SS and PV, where they had a relatively even influence on SCI with the following coefficients: PBC= 162, SS= 155, and PV= 142. Furthermore, the Sadad secure payment system (SP) had a direct positive effect on SCI, with a path coefficient = 0.134. The factor with the weakest influence amongst all factors on SCI was TR, with a 0.072 coefficient at a 0.05 level of significance.
Figure 5.9: PLS analysis results

* $p < 0.05; \text{*** } p < 0.001; \text{ n.s not significant. AT = Attitude, E-WOM = Electronic Word of Mouth, ESS = Emotional SS, ISS = Informational SS, PBC = Perceived Behavioral Control, PV = Price Value, SCI = Social Commerce Intention, SN = Subjective Norms, SP = Secure Payment, SS = Social Support, TR = Trust.}
The relationships from some of the factors to AT were significant. SP had the most significant effect, with a 0.254 coefficient value. This was followed by the effect of TR on AT, with a coefficient value of 0.231. The path coefficients of E-WOM and SS on AT show that their effects were less significant (SS = 0.079 and E-WOM = 0.076). Additionally, the effect of SP, SS and E-WOM on TR were significant at the 0.001 level, with SP being the most significant, followed by SS and E-WOM coefficient values of 0.303, 0.285 and 0.243, respectively.

For evaluating the structural model, Hair et al. (2014) claimed that the coefficient of determination value ($R^2$) is the most commonly used measure. Acceptable values of $R^2$ vary depend on the research area. Values of 0.20 are considered high in consumer behavior research (Hair et al., 2014), which was also the case in this study. Table 5.8 shows the $R^2$ values with $t$ and $p$ values that demonstrate that $R^2$ values were significant. These values accounted for about 52% of the variance in SCI, approximately 26% of the variance in AT, and around 40% of the variance in trust (TR). These values indicate that the model had a high level of predictive accuracy for the field of consumer behavior (Hair et al., 2014).

Table 5.8: Coefficient of determination ($R^2$)

<table>
<thead>
<tr>
<th></th>
<th>R²</th>
<th>$t$-Statistics</th>
<th>$p$ Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>0.256</td>
<td>8.346</td>
<td>0.000</td>
</tr>
<tr>
<td>SCI</td>
<td>0.518</td>
<td>19.374</td>
<td>0.000</td>
</tr>
<tr>
<td>TR</td>
<td>0.404</td>
<td>13.997</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**5.7 SUMMARY**

This chapter provided a comprehensive analysis of the quantitative phase of this research. It included five stages, which were followed to perform a complete analysis of this study. The chapter began with information about screening and preparing the data for
the analyses. In this stage, incomplete responses were discarded, giving the ample count of the complete ones. This was followed by descriptive analysis of the sample. Gender, age, education, location, employment status, income and e-commerce experience were described and illustrated. Following this, an overview of SEM was provided because it was used to perform CFA in the measurement model (convergent and discriminant validities), structural model, and hypotheses testing. EFA was used to explore a nine-component structure merging two first order factor ESS and ISS in one component that represent SS factor. This structure (leaving the first order factors as theorized) was confirmed by CFA.

Moving from the measurement model to structural model, $R^2$ values showed high values, indicating a high level of the predictive accuracy of the model. The hypotheses were tested by calculating path coefficients, $t$ values, and $p$ values. Ten hypotheses were supported at the 0.001 significance level, and three hypotheses were supported at the 0.05 level of significance. Two hypotheses were rejected because both hypotheses involved relationships with SCI. In other words, the effect of SN and E-WOM on users’ intention to conduct SC was insignificant.

Following this, Chapter 6 presents a qualitative study that attempted to explain why the effect of E-WOM and SN factors were insignificant. The qualitative data also explains why the impact of TR on SCI was week. Qualitative data were collected by employing interview approach, and thematic analysis was employed for analyzing the data.
6 CHAPTER SIX: QUALITATIVE DATA COLLECTION, ANALYSIS AND FINDINGS

6.1 OVERVIEW

In the previous two chapters, the quantitative analysis, and preliminary and actual procedures were presented. As the statistical results yielded two unsupported hypotheses, these results were chosen to be investigated using a qualitative method. That is, the impact of E-WOM and SN on SCI were insignificant, and as such, the qualitative study is an attempt to explain why these relationships were insignificant. In addition, the relationship between TR and SCI was amongst the weakest relationships in the study. While this was not the case in the literature (in most studies), qualitative investigation was used to broaden understanding regarding why this occurred in the current study.

This chapter presents the qualitative data procedures and analysis. The main purpose of this qualitative study was to look for in-depth explanations of the quantitative results mentioned above. The chapter begins with a review of the design of the mixed methods chosen for this study. The qualitative research questions were refined as the selection of the results that needed more explanation was carried out after the analysis of the quantitative data. Overviews of qualitative approaches, data collection techniques, and procedures are then presented. Following this, because a thematic analysis with a hybrid approach was applied in this research, an outline of these methods with justification for using them is delineated. The results are presented next and the chapter concludes with the chapter summary. Figure 6.1 provides a visual representation of this chapter.
6.2 QUALITATIVE METHOD

6.2.1 MIXED METHOD DESIGN AND THE REFINED QUALITATIVE RESEARCH QUESTION

This section presents the research design this study follows. An explanatory sequential mixed methods design was adopted in this study, as presented earlier in Figure 3.1 (see Chapter 3). This design consisted of two different phases where quantitative and qualitative methods were employed (Creswell, 2014). The purpose of this design was to obtain the qualitative data in the second phase to explain results from the quantitative
phase in more detail (Creswell, 2014). It is important to note that the results obtained from analyzing the data in the first phase determined or refined the questions asked in the second phase (Creswell, 2014; Plano Clark & Badee, 2010).

In an explanatory sequential design, and after collecting and analyzing the data in the first phase, the researcher determines the results to be explained and refines the research questions for the qualitative phase accordingly (Creswell & Plano Clark, 2017). Thus, the results chosen to be explained are as follows:

- The insignificant relationship between electronic word of mouth (E-WOM) and social commerce intention (SCI)
- The insignificant relationship between subjective norms (SN) and SCI, and
- The weak relationship between trust (TR) and SCI

In the first two relationships chosen, an attempt took place to explain in more detail why the results in this study did not align with the previous studies. In addition, understanding of why TR was not among the most strongly influencing factors on SCI was extended through the current qualitative phase as it occurs in this current study and in other two studies that were conducted in Saudi Arabia (Abed, 2016; Sheikh et al., 2017). Hence, the refined questions for this phase were:

- What caused the insignificant relationship between electronic word of mouth (E-WOM) and social commerce intention (SCI)?
- What caused the insignificant relationship between subjective norms (SN) and SCI?
- What caused the weak relationship between trust (TR) and SCI?

To answer these questions qualitatively, a suitable approach, instrument, and procedures were reviewed, and their selection is justified in the sections below.
Furthermore, the techniques normally utilized for the form of qualitative data collected for this study are reviewed, with the most suitable technique chosen and then justified.

### 6.2.2 QUALITATIVE APPROACH

Creswell (2007) listed five approaches for qualitative inquiry: narrative research, phenomenological research, grounded theory research, ethnographic research, and case study research. Among these approaches, a case study was deemed an appropriate approach for this research because it “is a good approach when the inquirer has clearly identifiable cases with boundaries and seeks to provide an in-depth understanding of the cases” (Creswell, 2007, p. 74). Yin (2009) also stated that case studies are the preferred method when the research has little control over a phenomenon, the focus of the study is around a real-life event, and the types of questions asked are in the form of why and how questions.

Case studies are methods of doing social science research where how and why questions are being asked over a contemporary behavior or event (Yin, 2009). In case study research, a matter, an issue, or an event is investigated and explored via collecting data from one or multiple cases where a bounded setting or context is shared (Creswell, 2007). These aspects stated above show that a case study was a suitable approach that fit this study’s purpose.

There are many forms of case studies, such as single instrumental case study and collective case studies (Creswell, 2007). This study applied a collective case study approach, where researchers focus on one issue to be investigated by two bounded cases (Creswell, 2007). More specifically, some of the relationships – as presented in the previous section – in the study’s framework that yielded interesting results in the context of SC are illustrated with SC consumers and experts in the field of SC in Saudi Arabia. The event or phenomenon here is SC adoption, and the cases are the people who shared
the same characteristics (e.g., Saudi SC consumers as the first case and experts in the field of SC in Saudi Arabia as the second case).

Yin (2009) claimed that it is vital to have a general analytic strategy that guides the researcher to tell the story of the case study. He listed four general strategies that the researcher must choose from or combine for the data to be analyzable (Yin, 2009). Among these strategies is a technique that combines the use of quantitative and qualitative data (Yin, 2009). In this strategy, quantitative data may reveal a concept, behavior, or an event that requires a qualitative explanation (Yin, 2009). Such a strategy fit the mixed method explanatory design adopted in this study. More technical information about this strategy is provided in Section 6.3.1.

6.2.3 QUALITATIVE INSTRUMENT (DATA COLLECTION TECHNIQUE)

Interviews were used as a source of data in this study. They are considered an important source of information for case studies (Yin, 2009). The selection of the interview method for this study was made because this technique allows the researcher to acquire information from participants in a friendly manner that provides insight into why certain events occur within certain cases (Yin, 2009).

As mentioned in Chapter 3, O'Leary (2014) suggested that the researcher should take a number of points into consideration before and while conducting interviews. For example, the setting while conducting them (i.e., formal or informal), the interview structure, and the number of participants interviewed at a time. In response to these points, the next section addresses the choices made by the researcher.

The interviews were informally conducted. This provided a relaxed environment where trust could be gained (O'Leary, 2014). In addition, in regards to the interview structure, this study followed a semi-structured format. This is because semi-structured interviews are more flexible, and allow the researcher to “deviate from the plan to pursue
interesting tangents” (O’Leary, 2014). Conducting semi-structured interviews in a friendly and comfortable settings facilitates interviewees contributing openly and honestly (O’Leary, 2014). Furthermore, the interviews occurred with one interviewee at a time to give the individual interviewees freedom to express their opinions and views (O’Leary, 2014). Questions were the open-ended in focused interviews type, where the researcher interviewed participants over short periods of time, following a predefined set of queries derived from already established facts (Yin, 2009), in this case, the results from the quantitative study.

### 6.2.4 PROCEDURE OF THE QUALITATIVE DATA

The data collection process followed Creswell’s (2007) data collection circle shown in Figure 6.2. These multiple activities may not be conducted in order, but the researcher should make sure the data collection procedures includes all of these steps (Creswell, 2007). In this study, the researcher began by addressing the strategy of purposeful sampling as the first step that to determine the flow of other activities. Purposeful sampling refers to selecting individuals who can deliver insights about a research phenomenon (Creswell, 2007). Criterion sampling was used in this study, where individuals who met some criteria were selected.
In this study, participants included individuals who were Saudi nationals and SC users. Experts who had adequate knowledge of SC in Saudi Arabia as sellers or providers of services and products for SC vendors were also invited to participate. The experts who participated in this study were two SC merchants (one female and one male) of well-known SC platforms, one vendor who provided technical products and services for Saudi SC merchants, and lastly, one vendor who provided logistic services for SC merchants and consumers in Saudi Arabia (both vendors were males).

In purposeful sampling, the second step is to locate individuals who fit into the proposed criteria and are within reach. A number of individuals who met the criteria and participated in the first quantitative study were approached and invited to participate, and also invited to facilitate approaching similar others. For the first case, because the participants were individual consumers, no issues were encountered in gaining access to them. Four males were interviewed face-to-face, and three females were interviewed by phone. Females were interviewed by phone as it was their preferred method of interviewing given their busyness and inconvenience of allocating time for commuting.
For the second case, the four experts were easy to approach because they were all members of an e-commerce online hub in Saudi Arabia, which the researcher is also member of. All experts were interviewed by phone given the boundary of geographical distance. There was a high level of cooperation, collaboration, and support from both consumers and experts in conducting the interviews in a smooth and a timely manner. All participants were sent a document that indicated the purpose of the study and defined some terminology related to the study (e.g., definitions of the factors (see Appendix D). All participants were granted anonymity and told that their participation was valued. This helped the researcher to establish a good rapport with them (Creswell, 2007).

Collecting data and recording information are concerned with what data are being collected and how to record this. The interviews were conducted in a conversational manner, where the researcher asked open-ended questions in a semi-structured way. The data therefore took the form of informal conversations recorded using recording devices. This was combined with note taking where necessary. No field issues were encountered that needed to be resolved; however, the participants were handed or emailed consent forms stating their voluntary participation and indicating their anonymity. The forms were signed by participants to indicate acceptance. The participants were also informed about the data storage procedures, which comply with the instructions stated in the ethical clearance granted by Griffith University for this study.

6.3 QUALITATIVE DATA ANALYSES

6.3.1 OVERVIEW OF THEMATIC CONTENT ANALYSIS

In qualitative methods, thematic analysis is a process in which patterns of meaning are captured, analyzed, and interpreted (Clarke & Braun, 2017). It “is a search for themes that emerge as being important to the description of the phenomenon” (Fereday & Muir-Cochrane, 2006, p. 82). In this section, a theme development process is explained because
two different processes were identified in the literature. Following this, the approaches of thematic data analysis are reviewed and the approach selected for this study is then justified.

Themes can be developed differently depending on two different methods used for theme conceptualization: domain summaries and shared meaning-based patterns (Braun, Clarke, Hayfield, & Terry, 2019). When patterns or themes are identified at the start of the analysis, thematic analysis follows the domain summaries method, whereas when themes are developed later building on the coding process, thematic analysis follows the shared meaning-based patterns method (Braun et al., 2019). This is elaborated similarly using different labels for the methods, for example, deductive and inductive content analysis (Elo & Kyngäs, 2008). Concepts are derived from the data in inductive content analysis, whereas in the deductive method, the analysis is structured based on theory or previous knowledge (Elo & Kyngäs, 2008).

Some research has used an integrated method of qualitative analysis that combines deductive and inductive approaches, called a hybrid approach (Fereday & Muir-Cochrane, 2006). This study utilized the hybrid approach because it allows the simultaneous use of deductive and inductive approaches. This approach allows for current views and facts to be deductively integrated into the process of qualitative analysis while granting that meanings and concepts can also emerge inductively (Fereday & Muir-Cochrane, 2006). More specifically, the deductive approach was first used to derive the general themes or categories from existing theories or previous knowledge, in this case, the results of the previous stage. The inductive approach, on the other hand, allows for new insights that may broaden understanding of why a phenomenon has occurred. This is aligned with the current study’s explanatory design, where themes or categories were derived from the first quantitative phase based on the outcomes of the study framework.
Sub-themes or sub-categories and codes were then excerpted inductively so that they fit into the predetermined themes, allowing for insightful information to be linked to the related themes, answering the related questions that arose from the first quantitative phase.

**6.3.2 HYBRID THEMATIC CONTENT ANALYSIS OF THE DATA**

The use of hybrid thematic analysis involves integrating deductive and inductive approaches. In the deductive approach, a template or a codebook is developed prior to analyzing the data based on a previous theoretical framework (Fereday & Muir-Cochrane, 2006). With such a method, the themes are defined and determined prior to commencing the analysis (Braun et al., 2019). This theory driven thematic analysis is constructed because researchers in explanatory sequential design seek explanations for specified results from the quantitative phase (Guest, MacQueen, & Namey, 2012). On the other hand, the application of the inductive approach allows for codes to be recognized and encoded (Fereday & Muir-Cochrane, 2006). This process organizes the data such that related themes can easily be identified (Fereday & Muir-Cochrane, 2006).

The first step of the hybrid approach in this study resulted in extracting three broad themes that were driven from the theoretical framework. As three relationships were selected to be explained in a qualitative way (Section 6.2.1), these relationships are – deductively – represented in three themes identified in the next section. Following this, the inductive step was conducted to extract codes and build sub-themes, if there were any. This second step was performed in accordance with the six-phase guide adopted from Braun and Clarke (2006). In short, the phases were as follows:

- The researcher became familiar with the data through transcribing, reading, and reading.
- Initial codes were generated and relevant data were collated to each code.
The drivers of social commerce

Chapter Six

- Relevant data were gathered and collated to associated themes.
- Themes were reviewed and collapsed and then separated into broad themes.
- Coherent descriptions were redefined and generated and themes names were created.
- The analysis report aligned with the research questions was produced.

6.3.3 RESULTS

This section and the following sub-sections present the results of the qualitative analysis. As mentioned earlier, the general themes were predetermined deductively. These three general themes are provided in Sections 6.3.3.1, 6.3.3.2, and 6.3.3.3. Sub-themes and codes were analyzed inductively using the six-phase guide mentioned earlier. The analysis generated a number of sub-themes for each general theme. The codes are presented with selected quotes from the interviewees. These themes, sub-themes and codes are summarized in Appendix E (for consumers) and Appendix F (for experts).

It is important to note that some responses reflected on specific SC platforms while other responses were about the SC phenomenon as a whole. This was advantageous because it provided the opportunity to acquire answers for the why questions from a micro as well as macro angle, allowing the researcher to see the entire picture of the phenomenon. The analysis of the responses related to the first case (referred to as consumers) is presented first in each section, with the analysis of the second case (referred to as experts) then following.

6.3.3.1 THE STATUS OF E-WOM (Maroof) IN SC

The participants shared their thoughts and explanations about the status of E-WOM. These thoughts are categorized under three sub-themes: the need for E-WOM, the impediments of using E-WOM, and the factors leading to better use of E-WOM. These sub-themes and examples of the related data are presented next.
6.3.3.1 CONSUMERS’ RESPONSES

The need for electronic word of mouth

Most consumers indicated that E-WOM in general is important when it comes to online shopping. However, the interpretation of some of the data shows that the need for E-WOM begins after the intention to buy has been formed and before the purchase happens. That could be an explanation why E-WOM does not influence intention to buy.

IH said:

The E-WOM, when I see it online, before I purchase any product, … for example if I heard about something and I want to buy it, I first go online and check the reviews [to see] whether if [sic] it’s negative or positive, and that really influences me [about whether] to purchase the products or not, and I do actually sometimes just get rid of the idea of purchasing something just because of too many negative reviews.

ZH also stated that “When I have intention, I read … I read the reviews, the stars, the rates [sic] … everything”. SH justified his purchases by going through E-WOM “to justify my purchase, I would read them”. Finally, BD said that he relied on E-WOM when he wanted to buy “something expensive”.

The impediments of using electronic work of mouth

In regards to inhibitors of using Maroof, the consumers provided rich and insightful data. The most significant issue shown in the data was consumers’ knowledge about the Maroof platform, with more than a third of the participants having no knowledge about the Maroof platform. BN said “I don't know about this actually [sic] platform, or about this website, but I know the WOM in a different social network”. Consumers being uninformed about the platform would obviously lead to it being insignificant in SC adoption.
However, there are other factors that might cause customers to abandon E-WOM. For example, AG said, “maybe because they already trust the website and the seller, so they don't need to read these reviews or ratings”, which was an indication that pre-existing trust can override the role of E-WOM. Furthermore, FM provided a comprehensive statement that indicated that the age, credibility, and reliability of the platform were important drivers. She said, “If it is a new e-platform… that platform doesn’t have enough trust within people”. She added that:

Amazon or eBay, they have been there for more than 10 years maybe, so they have built their trust with people gradually, with the consumers gradually. There are lots of e-platforms and applications nowadays, but it is hard for people to trust, and it’s just like the E-WOM, sometimes they review them positively to… to increase buyers, so I think people nowadays are aware of these fake reviews.

Furthermore, in a context like Saudi Arabia, SH thought SC was ill-structured, saying “I think it is context specific, the E-WOM, for example, in Australia is different from the one in Saudi … I would not rate the E-WOM as a trusted source”. Moreover, inadequate information on an E-WOM platform and competition with other platforms that can provide richer information can be an obstacle. Referring to the Maroof platform, BN said, “maybe it doesn't provide enough information about [a] specific product … it might be because people, they have some knowledge I think about specific products, maybe they gathered from different sites”. Finally, traditional WOM, where a consumer hears from close trusted friends, makes the role of E-WOM less important. BD said “So, I would rather accept the review from my friend, it would be faster and safer for me, and because I trust my friend, obviously, instead of go[ing] and find[ing] E-WOM myself”.

Factors leading to better use of electronic work of mouth
The consumers shared statements that gave an account of what would lead to a better use of Maroof. Branding seemed to be an issue with consumers. If the consumer was familiar with the E-WOM platform, they would make use of it. Furthermore, more than a third of the interviewees mentioned that the quantity of E-WOM in a platform was a significant deriver for using the platform. IH said, “If I have an idea about visiting a place, the first thing I do is [go to] Trip Advisor, OK? Because it is well-known and I have an idea it has a huge range of reviews”. Moreover, while some interviewees’ stories touched upon how reviews were sometimes made dishonestly and falsely in a way that misleads consumers, it is important that consumers adopt a strategy to correct these reviews voluntarily for E-WOM to be an influencing factor in SC. SH said, “I will come back to the E-WOM, I will say it is not [a] valid response, that one”.

6.3.3.1.2 EXPERTS’ RESPONSES

The need for electronic work of mouth

In the first sub-theme, one expert also indicated that E-WOM was important from an expert and seller point of view. LK commented:

We do use review websites … they are discount driven review websites, and of course, Apple, the reviews on Apple are important, but there is a website called Pricena that compares prices, we actually pay to be part of it, we get a lot of people who really trust Pricena.

She added:

I will make sure that some key moms in the industry are reviewing [the website’s name] on a regular basis, in fact, I have two full time employees [and] their job is to make sure key mom micro bloggers are reviewing [the website’s name] on a daily basis.
Despite perceiving Maroof as valueless, as will be mentioned later, LK mentioned she used Maroof’s badge anyway, “I put the Maroof stamp in the website, but just as a to-do-list”.

The impediments of using electronic work of mouth for Maroof

Experts added their views on the reasons behind the limited use of Maroof. All of experts negated the planning and execution of Maroof. LK said, “I don’t think it’s established yet, I do not think they [have] done what it takes to establish themselves, I don’t think there is enough gossip about them for them to become part of society”. She added “I’m not interested”, in an indication that she would not make an effort to make sure the website gets reviewed on Maroof. She elaborated “What is the ‘so what’ of Maroof? They haven't done that thing that elevated their pitch to be that trusted destination, nothing”. This was also elaborated by MR, who said, “The question is what [sic] Maroof is adding value to the potential customers”? Experts claimed that Maroof was only a way of authenticating sellers with a badge, but had not proved to be a trustworthy reviewing website. AA said “They didn't do the extra mile… sellers that registered with Maroof, [it] is just to identify that they are known”. Whereas MD stated that “You will just put the badge, the badge would say ‘we know that guy’… meaning this merchant is identified”.

Experts also attributed Maroof’s insignificant impact to the lack of awareness and familiarity with Maroof, the lack of well-defined criteria for Maroof, and the poor promotion of Maroof. MD stated that, “Maroof was not commonly used, it was only introduced four years ago – I think – so it’s not been used heavily by customers”. He also added, “I would contribute that to the lack of awareness in Saudi about Maroof”. MR agreed with MD, stating that “Maroof is poorly promoted as the first stop for the consumers to go [to] visit before they go and shop”. AA indicated the issue of not having
clear criteria, saying that “Maroof did not have clear criteria… there is no qualification that will add trust to the sellers that register with Maroof compared to the sellers that they did not register with Maroof”.

The experts also mentioned other factors that contributed to Maroof’s insignificant impact. These related to the low quantity of reviews and ratings, the mechanism for executing E-WOM authenticating badges, and the already established trust between consumers and sellers. MR expressed the issue of the low quantity of reviews, saying “then you go out there [and] you will not see a lot of comments. You see, this is [a] useless website”. MD explained his point of view on the shortcomings of the mechanism for showing the badge by saying, “with Maroof you have to click on the logo or badge to see the rating, unlike, for example, Trustpilot or other websites in Europe or other countries”. In addition, AA indicated that, “right now people, they really have more trust in the online shopping, so I think it might be … it's late in my opinion, it’s late, and should have been done, like, 10 years ago”.

Finally, there were technical and cultural factors that contributed to Maroof being insignificant. These factors were the complicated process for using Maroof, the issue of not knowing how to use it, and the cultural issue of being information consumers, not contributors. MD summed this up in his response:

Ratings in Maroof is [sic] quite complicated and it is not automated, for example, if I’m a merchant and registered in Maroof, I will have manually to go and send all of my customers to [the] Maroof website and ask them to do that for me, there is no incentive to do that for the customer and registration for me as a customer to rate the merchant is quite complicated. One last point, in our culture, we are more into consuming data, not to contribute, unlike other cultures, so this could be due to some cultural issue they do not want to be, for example, their identity to be revealed, or it could be due to [being] as simple as they don’t know how to the do ratings and reviews.
Factors leading to better use of electronic work of mouth

From the experts’ points of view, Maroof use would improve if certain corrective actions were undertaken. For instance, experts suggested that Maroof’s objectives and goals should be redefined. Experts made some suggestions for a simple guide to create aims and objectives for Maroof. MR stated that, “all we [are] getting from Maroof is online store suggestions, but the question is, what’s Maroof’s goal, so is Maroof’s goal to influence the consumers, is this what Maroof is aiming for, or it was made as a directory to find stores?”. This was also the case with AA, who asked “What is the motive for people to register with Maroof? What is the value? OK, this the first thing from a commerce prospective side. The second thing [is] how to make people engage? No one is engaging with Maroof actually”.

LK made clear suggestions, “So, you are talking about a world where everybody has very high expectations and Maroof is delivering something that maybe in the eighties was interesting, … they have to go viral; they have to impact change in a viral way”. LK also thought that because Maroof was established by a government authority, they should use their power by stating that “They didn't shut down any e-commerce site, so if tomorrow Maroof shuts down an e-commerce site, everybody would trust them, but they haven't done anything, what have they done?”.

The experts also provided technical solutions that may enhance Maroof’s image as a whole. When talking about other reviewing websites MD said, “they embed the score in the website itself, so they would say they have 5 out of 5, or, for example, 3, so I believe that would make the whole experience different, maybe”. AA indicated that the database needed to be continuously assessed and refreshed, so that sellers who were no longer active were not kept on the website. He elaborated “We tried to pull some data from Maroof, we pulled, like, around 1,000 sellers available at Maroof, ok, and we try [sic] to
use this data for some sales activities through our company, and out of this 1,000, we only could reach about 100, so most of the 900 are either dead or they are not real businesses … there is no update on the database that they have”. This technical issue could affect Maroof’s credibility, and as a result, decrease consumers’ use of it; thus, the experts believed that corrective actions were required.

### 6.3.3.2 THE STATUS OF SUBJECTIVE NORMS IN SOCIAL COMMERCE

It is interesting that even though the qualitative results showed that the effect of SN on SCI was insignificant, almost half of the consumers did not subjectively agree with this objective viewpoint. However, consumers and experts provided their understanding of why SN does not influence SCI. Two sub-themes were developed upon analysis of the data: factors hindering the influence of SN and moderators on the effect of SN.

#### 6.3.3.2.1 CONSUMERS’ RESPONSES

Factors hindering the influence of subjective norms

In regards to the factors that hinder the influence of SN, consumers indicated that SN would not have significant influence in some specific cases. For example, when a specific SC platform has a bad reputation, SN will not impact the intention to purchase from it. Talking about disreputable websites that she knew of, IH said “this actually has reduced the profit of that website, because the reputation, now it's become very well known that everything you purchase [from] it, it wouldn't become the same”. While she thought SN was an important factor that influenced her, she added “and I actually had experience in 2012 in online shopping, and everything I received wasn't the same as the picture, and I never shopped online after that, because of the bad experience that I had faced”. Likewise, SN will not have a significant effect if consumers perceive that SC is
not well-structured. SH said “I think because social commerce is not yet mature in Saudi, and [it] started ill-structured I guess”.

One consumer provided an interesting answer about why the effect of SN is not significant. Her response was related to females being stylishly unique, and as a result not being influenced by SN. AG said “maybe each woman in Saudi Arabia likes to be different and have special things to show from others… to be unique”. It can be understood that style uniqueness, which the interviewee thought was necessary in the Saudi culture, cannot be achieved with social influence from her female family members and friends. For instance, SN would lead to purchasing the same products, which contrasts with being unique.

**Moderators of the effect of subjective norms**

On the other hand, most consumers thought that there were moderators of the effect of SN. For example, consumers’ attitudes and personalities could be moderators on the effect of SN. The more positive the attitude consumers have toward SC, the greater the chance to be influenced by SN. ZH said “the people, they cannot put pressure on you to buy something if you didn't have [a] positive attitude”. FM added “it depends, I think, on people's personality and characters”.

However, if the consumer is inclined towards purchasing certain products, and is provided with a presentation of the products aligned with their taste, SN should be an influencing factor. FM said “sometimes, like 10%, I get influenced if I see something I like”. IH said:

If I sit with someone and he is recommending a website for me, and I would not really intend to purchase from that website, unless I see something in a [sic] real word. Like, when I saw my sister, I saw her clothes, and I test[ed] it myself, so that changed my mind.
AG also added that social media influencers are those who have the real impact to make consumers inclined to purchase, which can then eventually also be communicated by close friends and families, “Actually I get pressure to purchase from the Internet from social media advertisements more than from my friends and my family… yeah, from social media influencers who make some advertisements of specific products”.

In addition, most consumers indicated that when there is a need, SN should have a positive impact. Moreover, a few participants mentioned that the consumer’s budget can also be a moderator on SN. BN said, “I think it depends on the person's needs more than the subjective norms itself. If I need something to get it, I will get it”. SH, indicating monetary relation to SN, said “When it comes to decision making in the terms of making purchases of something, you are not going to spend your pennies because of something that you don’t need”. BD also said, “[the] reasons could be attributed to the budget, because some people will prefer to look to their budget first and then hear from friends or get influenced from [sic] friends”.

Lastly, moderators of SN can be experience, buying habits, and age. This might depend on who the purchaser receives pressure from, for example, experienced or non-experienced family members or friends. ZH said “If you are [sic] trust this group by the experience or they give you the experiences for buy[ing] something from this website, or like that, so [this] will give you [the] intention to do it”. Age and habit are also drivers that weaken or strengthen the effect of SN. SH said, “I think the age factor would be a factor, I mean a driver … and the buying habits is another factor”.

6.3.3.2.2 EXPERT’S RESPONSES

Factors hindering the influence of SN

Experts expressed both similar and different points of view to those expressed by consumers. They indicated that the factors hindering the influence of SN could be
attributed to multiple reasons. One expert thought these could be linked to three highly interconnected reasons: the desire to move away from tradition, innovativeness, and uniqueness. Another expert considered SN to not be applicable in the context of SC.

Referring to the Saudi society, LK said “you know girls now are climbing Everest … so people are breaking the traditional norms”. Breaking the traditions, in her opinion, was contrary to the idea of SN, where everyone is influenced by close ones and preforming the same behaviors, stating:

I’m just saying that if I’m going to use friends and family to behave like them and take [their] opinions and behaviors, I’m not realizing my dream of being individual, which all I’m trying to do is break away from them and show them I am different, so I do not want to be like my family, I just want to show them that I have my own ideas and I’m independent. (LK)

MR gave a detailed example to describe the inapplicability of SN, saying:

So, imagine that you are getting married and you are planning for your wedding, no one will come to you and tell you that you have to do a wedding, but there is a social pressure that you have to do a wedding and you can’t ignore to do that… if you do a [sic] shopping online, will you be having an influence, so you go and buy from a certain website because you feel that you are socially pressured?... I don't think this is yet happening.

**Moderators of the effect of subjective norms**

Three out of four experts extended and confirmed the view of one of the consumers in regards to the moderators of the effect of SN. More specifically, consumer AG mentioned that social media influencers had a real influence that could be communicated by friends and family members. This view was reiterated by three experts, for example, MD said:
Today what would cause one of your friends or family relatives to tell you about things? It is the influencer, so, you can track it back to the source of the origin of why people would talk about a store. Usually my brother would see it on one of those influencers snapchat accounts, he would come to me and say ‘Have you check[ed] out of [sic] this honey, or this gadget, or whatever’, the social norms will be generated by those influencers.

LK also said “the Saudi society is still hostage to other peoples’ opinions” referring to social media influencers. MR expounded this point of view when he said:

Let me put it in this way, that is actually interesting, if there is one influencer that is talking about a product, you can consider that as a social influence, but when all the influencers talk about the same product, this is where the composite social pressure happens … knowing that everyone is talking about it, you will be, like, ‘So I am missing out’ … everyone is talking about [it] and they do not want to have that feeling that they missed out”.

The fourth expert stressed other views that were elaborated by the consumers. AA stated that consumers’ positive attitudes, motivation, and desire were definitely moderators on the effect of SN. He said:

If there is any family or group of friends, that they are friends influencing each other, usually the people that they’re going to use social commerce, they already want to and [are] motivated to, while the other people, they don't have the desire to do so, so they will do it their own way.

6.3.3.3 **THE STATUS OF TRUST IN SOCIAL COMMERCE**

The participants were asked to provide their view on why trust was not highly correlated with the intention to buy. The analysis of the data indicated three sub-themes: *the unspecified meaning of trust, the effect of experience on the dynamics of trust, and factors moderating the effect of trust*. 

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6.3.3.3.1 CONSUMERS’ RESPONSES

The unspecified meaning of trust

In regards to the unspecified meaning of trust, and because the interviewer asked about trust, almost all participants promptly asked the researcher for clarification about the meaning of trust in this study. They were presented with the questions asked in the survey to have a better understanding of the meaning of trust. The participants indicated that trust was not specified nor well-clarified in the study. They indicated that trust in SC can be related to different elements within SC. For instance, it could be related to a seller or group of sellers, a platform or group of platforms, or regulation and regulators. Thus, the answers would differ depending on the specified type of trust. Otherwise, the meaning would be vague and interpretation of trust would not be the same from participants, which may affect the overall results. SH said, “I think trust is not being very well interpreted by buyers, what do I trust? Trust the regulators, trust the sellers, trust these societies? , who do I trust? … Trust is not very well-defined … I think that's why”.

The effect of experience on the dynamics of trust

However, there was another interpretation of why trust was not an influencing factor. Regarding the effect of experience on the dynamics of trust, the data showed that experience is what makes trust a factor in SC. For example, if a consumer tries SC for the first time, trust would not be an issue if he or she did not have a bad experience. SH indicated that, “trust is not going to be an issue ‘til later with the experience”.

Factors moderating the effect of trust

However, there were factors that played a role in moderating the effect of trust, as expressed by one consumer. IH stated that the issue of distrust could be elevated or reduced by the level of security standards of a website, the level of care shown to consumers, and whether the refund policy was clear or not. IH said, “I believe if a website,
for example, establishes something at a highest standard of security to the customer… this is [what] really would make me comfortable to purchase”. She also added:

Sometimes when you see that the website cares about you, your review and you being happy of [sic] purchasing something … if I want to cancel anything, they would have the refund [for] the whole amount straightaway, without any negotiation, and that really makes me trust them.

She elaborated more in regards to refund policies by saying:

Sometimes when I purchase something, once it is debited from my account you have a struggle to negotiate with the website if you would like to cancel, and that really makes me scared, and I feel like, why [do] they have to do that if they have good products?

6.3.3.3.2 EXPERTS’ RESPONSES

The unspecified meaning of trust

Some experts confirmed that consumers’ views about trust being unspecified would make it unclear for the participant in the survey. MR said, “I think that trust is a very broad concept”. He added “What makes me trust this website? Is it the liability of the products, is it the quality, or is it basically the presence of the whole company?”. This indicates a need to be specific about trust in academic studies. AA said “If you are relating to the trust of the products, it's really different than the trust of the social platform”, he also supplied a detailed example, saying:

“If I bought a product from x-website, that x-website is known for selling fashionable items, I will have a high trust of this social commerce platform … when we are talking about the products itself, let's talk about branded products, Apple iPhone, for example, it does not matter from where you bought it … I think people believe this question should be specified, it will make more sense to people”.
The effect of experience on the dynamics of trust

One of the experts discussed the experience of online shopping by stating that trust is not an issue nowadays. MD claimed that habit and experience in online shopping made trust an old concept that does not apply in today’s world:

“If we take this study four years ago, I would say yes, trust is very important, but today, especially here in Saudi Arabia … people are using smartphones, today we order online everything [sic] … this actually encourages people to trust everything”.

This statement made it clear that with experience, trust issues may be reduced.

Factors moderating the effect of trust

Experts contributed their knowledge regarding what makes trust an important or irrelevant factor when it comes to SC. Some believed trust was essential, others disagreed, and this depended on some other moderating factors. For instance, LK thought that trust cannot be ignored. She said, “I believe at the heart of what I do is trust. I believe that mums need trust because it's very difficult being a mother, the trust is important in e-commerce”. Because she worked in the mothers’ products industry, this is a clear indication that the effect of trust is moderated by the industry or the type of products. For instance, mothers who buy products for their children are more likely to consider trust, whereas if trust is not established, this would affect the intention to buy in a negative way. On the other hand, a buyer who intended to purchase decorative accessories, for example, might not consider trust in the same way as mothers do.

However, other experts stated that consumers trust would not be an issue when payment on delivery was an option. MR said:

I’m the guy who is running a logistics company, so we know that people order and choose cash on delivery, so in the ecosystem, we were thinking that people are demanding cash on delivery because they are either unbanked or they have no access to credit cards, that was the analysis, otherwise why you don’t [sic] go and pay
online, but what we found out is actually the consumers were having [sic] debit card (like mada), you can go and buy with it, but people are still preferring cash on delivery, why? The reason is the trust issue.

MD expressed the same view:

and [there is] another element, which is a lot of purchasing happening online they [consumers] use [the] cash on delivery option, so they do not have to pay anything in advance, the trust factor would not actually be considered here, why? I’m not going to lose anything, I will order and [a] good thing will happen, if it happened, I will pay, I can see it, I can judge it, I make sure it’s clear and nice and it’s [a] valid order, and if it’s not, I have not lost anything, I did not use my credit card, for example, or paid [sic] in advance”.

6.4 SUMMARY

This chapter presented the data from the qualitative study. As part of the explanatory sequential mixed method design elected for this research, this chapter presented the second stage of this research design. In particular, three results from the quantitative analysis chapter (Chapter 5) were chosen by the researcher for in-depth explanation. The qualitative research questions were refined and presented based upon this selection. An overview of the qualitative approaches and an explanation of the thematic hybrid analysis were presented.

The analysis of the data helped to group the participants’ responses into themes and categories through which the outcomes of the study were conveyed in a clear manner. The results of the analysis, along with the themes, sub-themes, and related codes were illustrated from both consumer and expert points of view.

Following this, chapter 7 presents the discussion of this study. It contains a discussion of the use of the theory of planned behavior as a base model in this current
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study, and discusses the representativeness of this study’s sample. It also discusses the quantitative and the qualitative results.
7 CHAPTER SEVEN: DISCUSSION

7.1 OVERVIEW

The main research question was “What are the key factors that influence consumers’ adoption of SC in Saudi Arabia?”. The previous chapters concerned reviewing the literature, determining all of the relevant factors that affect intention to buy, selecting the most appropriate research methods for answering the question, and analyzing the data. Both quantitative and qualitative data analysis techniques were employed in this research, as presented in Chapters 4, 5, and 6.

The results of the quantitative (statistical) analysis revealed that 13 hypotheses were accepted, while two hypotheses were rejected. In the qualitative analysis chapter, three relationships were selected for further investigation using interviews techniques.

This chapter first discusses the use of the theory of planned behavior as a base model for the study. Some aspects and characteristics of the sample used for this study are then described. The results of the statistical analysis are then presented and discussed. However, the results of the qualitative analysis are discussed within the related sections after presenting the main discussion of the quantitative results. The chapter summary is then presented. Figure 7.1 provides a pictorial overview of this chapter.
7.2 THE USE OF THE THEORY OF PLANNED BEHAVIOR AS A BASE FRAMEWORK FOR THE RESEARCH

This research raised questions about SC as an area of a study. Should researchers think of it as a technology, an activity, or a behavior performed with the aid of technology? Another enquiry was about whether SC is considered an interdisciplinary topic or a field of research connected to a single discipline. The answers to these questions guided the researcher in selecting the most appropriate theory to answer the main question of in this study.

As discussed in Chapter 2, SC is most appropriately examined as a multidisciplinary field. This is where a collection of different fields, such as technology and security issues, e-commerce, and government regulation and initiatives, social
collaboration, and individuals’ ability and attitude are interconnected. As a result, in this study, the researcher determined that such a vibrant topic should be investigated with a broad perspective that combines different related fields, which formed the main objective of the study.

To achieve this objective, a theory that supports explaining the adoption of SC from a wider angle was selected. Because a framework did not exist in the literature that supported SC adoption being investigated in a manner that served the objective of this study, the researcher had to determine a good starting point for conducting the study. This was done by reviewing the models in the literature related to and used for SC adoption. The most important criterion was employing a general theory that was not field specific. This was believed to be an important task leading to understanding SC from a broader view.

Considering the discussion above, and by reviewing the models and theories utilized for investigating SC, theories proposed for examining technology acceptance were eliminated. That is, the theory of acceptance and use of technology (UTAUT), UTAUT2, and technology acceptance model (TAM) were excluded because they are oriented toward technology acceptance. Taking the multifaceted nature of SC into consideration, it is inappropriate to deal with it as merely a technology. In this research, SC was considered a set of complex activities and behaviors mediated by technology. As such, SC was given a full profile and described with more coherent meaning.

This idea of dealing with SC as a set of behaviors mediated by technology was borrowed from previous sociocultural work, Vygotsky’s (1981) sociocultural theory. The concept of this theory is that human activities are mediated by tools (Vygotsky, 1981; Wertsch, 1991). In this study, these tools are represented as the technical means used to mediate SC. More specifically, the enabling technologies such as computers and internet
connections are the tools that facilitate SC activities. Consequently, SC cannot be defined as a technology, instead, it is a set of activities enabled and mediated by set of technology tools. In this sense, it would be insufficient and suboptimal to investigate SC using theories that were established for investigating technology acceptance.

The theory of reasoned action (TRA), on the other hand, is a special case of the theory of planned behavior (TPB), as the latter was proposed as an extension to the former. With an addition of perceived behavioral control (PBC), a factor that concerns ability and control of the behavior, the TPB appeared more general and broader than all of the other models reviewed. Moreover, the TPB, as a base framework for this study, not only benefited the study because it is a general broad model, but also because it was developed to explain complex human behaviors. Because SC is multidisciplinary, as mentioned earlier, it is thought of as complex behavior. The complexity of human behavior in SC was also indicated by Wang and Zhang (2012), and the suitability of the TPB for explaining complex behavior was stated by (Ajzen, 1985).

Moreover, as the TPB includes attitude as a factor, it was considered superior in the current study to models (i.e., UTAUT and UTAUT2) that eliminated attitude or substituted it with other factors. The importance of attitude was evident in the literature because it played a very important role in most of the reviewed e-commerce and SC studies. In contrast, the factors that substituted for attitude in other studies showed less importance, and in some cases, showed insignificant effects on SC. This was also evident in the current study, because attitude played the most important role in predicting SCI. The inclusion of attitude not only benefitted this research because of its highest significance, it further allowed for investigation of the factors that could affect consumers’ attitudes, as discussed further in multiple sections in this chapter.
Taking all of the aspects mentioned in the above argument and also in Chapter 2 into consideration, the decision to use the TPB was fruitful. However, selecting the TPB was the first step in building a broad model that would satisfy the aim of this study. The second step was extending this by incorporating related factors and building up new relations between these factors. This was performed as recommended by Venkatesh et al. (2012), who suggested extending current theories to optimally meet the goal of a study in a specific context. The effect of these factors on SCI and the newly proposed relationships are discussed further throughout this chapter.

7.3 THE CHARACTERISTICS OF THE DEMOGRAPHICS

The quality of a study is decided depending on the degree of generalizability of the data (Mills, Durepos, & Wiebe, 2010). The descriptive analysis of the demographics was presented in Chapter 4, with 1,012 people participating in the survey. This number represents more than double the number of participants required (2.63 x 384 \[\approx 1012\]) for the purpose of generalizing the results, as mentioned in the methodology chapter (Chapter 3). Mills et al. (2010) stated that a large sample size is a prerequisite for generalization in many statistical tests. In contrast, small sample sizes are inclined to lead to sampling errors (Mills et al., 2010). The large sample size in this study increased the confidence in obtaining generalizable results.

However, generalizability also depends on the sampling technique used in the study. Researchers have indicated that recruiting representative samples that can be generalizable can be achieved by applying a random sampling technique that allows every member in the population to take equal chance to be selected (Mills et al., 2010; Polit & Beck, 2010). This was taken into the highest consideration in this research, where the questionnaire was designed and disseminated in a way that ensured random sampling was well-employed. The use of a questionnaire that can also be distributed using electronic
means allows for achieving great outcomes. The questionnaire was distributed using social media, mainly using the WhatsApp communication application. The reason for using WhatsApp as a primary disseminating platform was its very high usage in Saudi Arabia. According to Statista, 73% of the population of Saudi Arabia are active users of WhatsApp (Clement, 2017). With the additional combined use of two well-known social media platforms (Facebook and Twitter), this allowed for distribution of the questionnaire to a broader audience, allowing for more effective random sampling.

Although measuring the effect of demographic data on the dependent or other independent variables was outside of the scope of this study, the above discussion is important because it reveals the great extent to which the results are generalizable. This is not only evident in the plentiful sample size, it is also apparent in the percentage of respondents in every classification. For example, in the study’s sample, the percentage of respondents in each classification related to the age variable approximated the percentage of the whole population when compared to the report published by the GAStat in Saudi Arabia (Appendix G). Another example is found in the male and female percentages, where in GAStat reported females represented 42% and males represented 58%, which correlated to the approximately 40% female and 60% male in the sample of this study. This shows the degree of representativeness of the data collected in this study, leading to a larger level of generalizability.

7.4 THE IMPACT OF INDIVIDUAL-RELATED FACTORS

This section presents the discussion of the three relationships associated with the individual-related factors. First, the relationship between attitude AT and SCI; second, the relationship between PBC and SCI; and last, the relationship between PV and SCI. All relationships in this category were positively significant and are discussed in the following sub-sections.
7.4.1 THE IMPACT OF ATTITUDE ON SOCIAL COMMERCE INTENTION

Attitude (AT) is defined as an assessment by an individual of a behavior, whether it is favorable or unfavorable (Fishbein & Ajzen, 1977). The research question related to AT was: “Do consumers’ attitude impact purchase intention via SC in Saudi Arabia?” It was hypothesized, depending on the literature review, that consumer’s attitudes have a positive influence on consumers’ purchase intentions via SC.

The results of the statistical analysis in Chapter 5 showed that this hypothesis was approved. In fact, the results indicated that not only was this postulation correct, but that AT also played the most important role in predicting consumers’ intention to purchase via SC platforms, with the highest values of path coefficient and t-statistics among all relationships directed towards SCI. This fact defends and supports the selection of TPB as the base model for this study, because it includes AT as a core factor affecting intention.

The result showing the positive significant effect of AT on purchase intention in this study is supported Shim and Drake (1990), Khalifa and Shen (2008) Limayem et al. (2000), Crespo and del Bosque (2008), Khalifa et al. (2012), Shin (2013), and Ha and Stoel (2009). However, this result contradicts Teh and Ahmed (2011), as the impact of consumers’ attitude on behavioral intention was insignificant in their study. The reason for this insignificant relationship could be attributed to the effect of individual’s perceived subjective norms, where attitude is changed because of the perceived pressure from friends and family to not perform a behavior, as stated by Teh and Ahmed (2011). It could also be attributed to the addition of motivation as a factor, which might be somewhat considered an attitudinal factor. However, the results of this study, as discussed later in this chapter, showed that subjective norms had an insignificant impact, which could explain the difference between this study and Teh and Ahmed’s (2011).
In this study, attitude was considered highly central, given its mediating effect on SCI from four different factors: trust, social support, E-WOM, and secure payment. These relationships are discussed in Sections 7.5.2, 7.5.4, 7.6.2 and 7.6.5. Thus, attitude must be taken into highest consideration when it comes to the diffusion and adoption of SC. Not only because of its high impact, but also because it allows researchers to investigate building a positive attitude by considering other factors that form consumers’ favorable attitudes. This was evident in Khalifa et al. (2012), where their confidence model formed better attitude towards intention.

7.4.2 THE IMPACT OF PERCEIVED BEHAVIOURAL CONTROL ON SOCIAL COMMERCE INTENTION

Perceived behavioral control is defined as the extent to the ease or difficulty perceived by an individual on doing a particular behavior, and the degree of control the individual has on doing a behavior (Ajzen, 1991). The research question related to PBC was: “Does consumers’ perceived behavioral control impact purchase intention via SC in Saudi Arabia?” It was hypothesized, depending on the literature review, that consumer’s PBC has a positive influence on consumers’ purchase intentions via SC.

The results of the statistical analysis in Chapter 5 showed that the relationship between PBC and SCI was significant, supporting the hypothesis stated above related to PBC. This indicates that the degree of ease and difficulty, as well as the extent of control an individual has over a behavior is a driving factor for the intention to buy via SC. The results in this study are supported by George (2004), Pavlou and Fygenson (2006), and Limayem et al. (2000). However, they contrast with the results of Khalifa and Shen (2008), because they stated that this could be explained by the familiarity and overall control of using mobile phones in performing online purchases.
Ajzen (1985) stated that within behavioral control, there are internal as well as external factors. Internal factors are related to the skills and information needed by an individual to perform a behavior. External factors, on the other hand, are related to the degree of control on the behavior (Ajzen, 1985). These two subfactors of PBC can be highly reflected on a SC environment. Skillful individuals who are competent in using technological means are likely to be driven by their competency to purchase via SC. This indicates the importance of computer literacy, whereas illiterate individuals are less likely to use computers, and therefore not driven to purchase via SC.

Furthermore, a lack of required information to make a purchase via SC can be considered a disturbing inhibitor. Required information or knowledge issue fall into the internal factors of PBC, while also falling into the external factors of PBC. For instance, the information required to log in and the knowledge about how to make online payments are examples of internal factors that are mastered by an individual. However, the information required for forming a purchase intention, for example, a full product description, is not an internal issue because it is controlled by merchants or sellers.

Thus, such factors (i.e., PBC), especially the external factors, should be highly considered by sellers using SC platforms. For instance, designing an effective user interface that creates an individual’s perception that they have the skills required to make an easy purchase. Moreover, the information required and published by the sellers (i.e., full product or service description) should be adequate to provide the buyer with a sense of having full control where intention can be created. In addition, improvements must be continuous to allow control over the behavior to be easily gained by consumers. For example, dependence on other people that creates incomplete control of behaviors must be minimized. In this sense, the delivery channels must be varied so that dependence on others is reduced. The availability of a delivery person, which can lead to delays and
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unfavorable experiences, is one example of external factors that can be solved with innovation in new methods for delivery that give individuals more control over a behavior.

The importance of PBC was presented above given the significant relationship. Yet, some studies have excluded or substituted this with other factors. For example, Shin (2013) published an interesting study utilizing the TPB with adding external factors such as trust and social support; however, PBC was excluded. In another example, Abed (2016), eliminated facilitating conditions factor because it served as PBC in the UTAUT (Venkatesh et al., 2012). In summary, it is highly recommended that SC studies should include PBC and other similar factors, because it plays a significant role, as discussed above.

7.4.3 THE IMPACT OF PRICE VALUE ON THE SOCIAL COMMERCE INTENTION

Price value is a factor related to cost and is defined as “consumers’ cognitive trade-off between the perceived benefits of the applications and the monetary cost for using them” (Venkatesh et al., 2012, p. 161). This factor was used in this study to investigate the relationship between the cost associated with the purchase and the delivery of items via SC because there is no cost associated with using SC systems. The research question related to PV was: “Does PV impact purchase intention via SC in Saudi Arabia?” It was hypothesized, depending on literature review, that price value has a positive influence on consumers’ purchase intentions via SC.

The results in Chapter 5 revealed that the effect of PV on SCI was positively significant, supporting the hypothesis. This result is supported by Sheikh et al. (2017), where they utilized UTAUT in the context of Saudi Arabia. This current study also compliments and confirms Sheikh et al. (2017) results, although it was limited in the sense
that only males were employed to participate in their survey, whereas this study included
male and female participants.

This relationship indicates that consumers nowadays are not fooled by the
fanciness of online shopping, or even by the collaboration occurring between shoppers in
SC platforms. It specifies the awareness and also the demand of consumers. For instance,
consumers are upset when items are presented with exaggerated and unrealistic prices
(Almaimoni, 2017). Shoppers are aware that some sellers buy items in bulk with
wholesale prices and sell them individually with an inflated price that equals the
wholesale cost multiplied by 10 ("Ministry of trade prepares for the chaos on the
electronic market," 2014). This is considered a real inhibitor for buying via SC.

Besides consumer’s awareness of such prices, sellers should consider competing
in prices as a goal to be achieved for retaining current consumers and acquiring new ones.
In such a competitive environment, where the number of online stores is dramatically
increasing, consumers will be advantaged by more options where monopoly with the high
prices is not an option for sellers. According to “Okaz”, a well-known and well-
established newspaper in Saudi Arabia, there are more than 20,000 online stores in Saudi
("Ministry of Commerce: 20 thousand online stores registered on "Maroof"," 2018). This
indicates the amount of competitiveness in SC in Saudi Arabia.

Online sellers should consider attracting buyers by introducing reasonable prices
because the traditional and physical way of selling and buying is still sufficient to invite
current and new consumers. This becomes a real issue when consumers need to inspect
the quality of an item, as their preference for online shopping can decrease. Thus,
competing on prices with traditional stores might lead to an increase in the intention to
buy via SC.
Such a factor appeared to be important, provided the significant relationship indicated earlier, yet a study in the Saudi Arabian context disregarded it. Abed (2016) eliminated PV when utilizing the extended UTAUT to study factors affecting intention. The rationale was that there was no cost associated with the use of SC platforms, which is true. However, it is recommended that such a factor is amended and modified to serve the goal of investigating SC adoption in such competitive environment where consumers have far more options of purchasing than in the past.

7.5 THE IMPACT OF SOCIAL-RELATED FACTORS

This section presents the discussion of the six relationships linked to the category of social-related factors:

- the relationship between TR and SCI;
- the relationship between TR and AT;
- the relationship between SS and SCI;
- the relationship between SS and AT;
- the relationship between SS and TR; and
- the relationship between SN and SCI.

All of the relationships in this category were positively significant, with the exclusion of the impact of SN on SCI, as discussed in detail the following sub-sections.

In addition, two of these relationships were investigated in more detail. That is, the insignificant relationship between SN and SCI, as well as the significant but weak relationship between TR and SCI were investigated qualitatively. The selection of these two relationships within this category was because the quantitative results raised questions regarding why these cases occurred. Detailed discussions are presented in the sections below.
7.5.1 THE IMPACT OF TRUST ON SOCIAL COMMERCE INTENTION

Trust (TR) is a central and critical factor in e-commerce (Pavlou, 2003) and in SC (Hajli, 2014a). The research question related to the relationship between TR and SCI was: “Does consumer trust impact purchase intention via SC in Saudi Arabia?”. It was hypothesized, depending on the literature review, that consumer’s trust has a positive influence on consumers’ purchase intentions via SC.

The results in Chapter 5 showed that the hypothesis was supported, with the impact of TR on SCI positively significant. This indicates that TR is certainly an important factor. This result was supported by Hajli (2015), Hajli (2013), Kim and Park (2013), Hajli (2014a), Lu et al. (2016), Makmor et al. (2018) and Abed (2016). However, the significance of the impact of TR on SCI in this current study was at 0.05 level, with a path coefficient equal to 0.072 and t-statistics equal to 2.059, indicating a weak relationship. This result is similar to the result in Abed (2016) study, which investigated the impact of trust on the purchasing intention, which was conducted in Saudi Arabia.

A comparison between the studies mentioned above revealed that the case of trust in Saudi Arabia, compared to other contexts, is noticeable. In particular, the comparison included two studies conducted in a Saudi Arabian context; that is, this current study and (Abed, 2016), and other studies in different contexts; that is, the UK (Hajli, 2015), Korea (Kim & Park, 2013), China (Lu et al., 2016), and Malaysia (Makmor et al., 2018). The comparison revealed that TR in the Saudi context was significant, but at a lower level of significance than the studies in the other contexts.

When taking a closer look at the frameworks of the studies conducted in the Saudi Arabian context, a large number of factors were incorporated to investigate their impact on purchase intention. On the other hand, far fewer factors were used in the other studies. Could this be attributed to the number of factors affecting intention to buy in a model? If
the answer is yes, then this could be an indicator that the impact of trust decreases with the inclusion of several different, and probably more important, factors. Consequently, this interpretation does not involve the context of Saudi Arabia in the discussion. In this sense, and if the interpretation is correct, researchers are encouraged to investigate purchase intention in SC using more factors at a time in their models. This is recommended given the complexity of a topic such as SC, where it cannot be investigated from a macro-level point of view, as claimed in this study.

However, if this interpretation is partially or entirely incorrect, what would be the reason for such instances to occur? To extend understanding of this particular case, a qualitative inquiry was employed. The result of the analysis of the interviews are discussed next, taking two different points of view into consideration: consumers and experts.

A number of participants, either consumers or experts, indicated that the reason could be linked to the unspecified definition of trust. Trust, as a general broad concept might have confused the respondents, leading them to interpret it in a different way. Consequently, the need for a clearly defined meaning of the concept of trust, preferably multiple types of trust represented in multiple separate factors, is necessary for a more valid result.

In addition, experience was a topic that the consumers and the experts touched upon. However, the interpretation from consumers’ point of view was different from experts. From a consumer perspective, trust is not an issue until buyers encounter problems with their purchases. From an experts’ viewpoint, habit is created through experience, where online shopping becomes part of the daily norms. Both points of view are valid and can be highly reflected on the relationship between TR and SCI. Consumers who order on a regular basis become more exposed to online shopping; thus, habit is
created. As such, the online shopping skills from the recurrent habit are raised, contributing to more consumer knowledge and experience in which fear and trust issues may shrink. If a consumer encounters a problem with a certain SC platform, the trust issue is raised with that certain website, not with the entire SC concept. This second point does not contradict the idea of trust being a less important factor for the entire experience of SC in general.

Moreover, participants from both groups attributed the reason for trust being less important to some moderators. When consumers perceive a low risk of conducting SC activities with high standards of security applied on a SC website, trust might not be an issue. On the other hand, when a website is presented with minimum security, consumers might perceive risk and trust issues may arise. In the current status of SC in Saudi, with more than 20,000 online stores, consumers might be placed into two groups; those who perceive low risk and others who perceive high risk in conducting SC activities. Trust will differ depending on the level of risk perceived. This could be an explanation for why trust might not be an entirely important factor for some consumers.

However, experts suggested that with the introduction of cash-on-delivery as a method of payment, trust is not a dilemma to any further extent. In the perspective of some experts, a question was raised: “Why should consumers fear or have trust issues while they have not lost anything?”. If a consumer goes through a process of online shopping where he or she does not pay until they receive, inspect, and validate the items, they should not have any trust issues. This view is another valid explanation for why trust is a less important factor on the intention to buy through SC in Saudi Arabia.

7.5.2 THE IMPACT OF TRUST ON ATTITUDE

The impact of TR, as a central and critical factor as mentioned earlier, was not only chosen to be investigated on purchase intention, but also on consumer attitudes. The
research question related to the relationship between TR and AT was: “Does consumer trust impact consumer’s attitude towards SC in Saudi Arabia?”. It was hypothesized, depending on the literature review, that consumers’ trust has a positive influence on consumers’ attitude towards SC.

The statistical analysis in Chapter 5 showed that the impact of consumers’ TR on consumers’ AT was positively significant. This supports the hypothesis on the relationship between TR and AT. This demonstrates the importance of TR in the SC context, supporting its criticality and centrality stated in the literature. Furthermore, this particular relationship shows that TR not only impacts the purchase intention, but also the attitude, which was the most significantly influencing factor on purchase intention in this study. This result is supported by the studies of Renny et al. (2013) as well as Ha and Stoel (2009).

Upon closer inspection, this significant relationship manifested two important aspects in the context of SC adoption. First, by examining the levels of the significance in two relationships, TR to SCI and TR to AT, an important aspect was uncovered. The impact of TR on SCI was nearly fully mediated by AT, given the high significant impact from TR to AT ($p < 0.001$, path coefficient = 0.231, $t$-statistics = 5.967) compared to the low significant impact from TR to SCI ($p < 0.05$, path coefficient = 0.072, $t$-statistics = 2.059). This shows the higher degree of centrality and importance of AT in the SC context. However, TR cannot be deemed inessential, rather a factor that should be placed in a different position when studying SC adoption. This is evident as clarified above, showing its much greater impact on consumer attitudes.

The second aspect is that consumer attitudes are affected by other factors. That is, favorable attitudes can be achieved and formed by other factors. This aspect is considered essential in this research because attitude plays the most important role. This fact is not
only observable from this relationship, but also from three other relationships discussed later in this chapter. From this fact, it can be stated that the formation of a positive attitude must be taken into high consideration from SC sellers. This is true because attitude was remarkably and positively associated with purchase intention. The goal here is to attract more buyers by creating favorable and welcoming attitudes towards SC. In summary, employing many different features and actions that help establish consumer trust must be the SC vendors’ goal, because this creates a favorable attitude in which purchase intention is highly predicted.

7.5.3 THE IMPACT OF SOCIAL SUPPORT ON SOCIAL COMMERCE INTENTION

Social support (SS) is a factor derived from sociology and is defined as the care and support an individual perceives in a social settings (Liang et al., 2011). The research question related to SS was: “Does SS impact purchase intention via SC in Saudi Arabia?”.

It was hypothesized, depending on the literature review, that social support has a positive influence on consumers’ purchase intentions via SC.

The statistical analysis in Chapter 5 showed that SS had a positive significant impact on SCI, accepting the hypothesis stated above. A number of studies that broached SS into SC adoption support this study’s finding, including Liang et al. (2011), Zhang et al. (2014), Hajli and Sims (2015), Hajli (2014a), Sheikh et al. (2017), and Makmor et al. (2018). This significance in the relationship infers that consumers do favor the provision of SS in SC.

Indeed, consumers demand SS in traditional trade settings every day, and because of the perceived provision of support, informational or emotional, the purchasing intention is formulated. For instance, a customer intends to enter a particular plant nursery to buy certain products; however, the shop provides multiple brands with different
qualities and prices. In such instances, consumers are likely to raise questions and ask for some advice, especially if they are less experienced, about which product best serves their purpose. However, if the consumer has a negative perception about the provision of social support in that particular shop, he or she might select different similar shops that can provide the required support.

SC settings are no different from traditional ones; in fact, SS should be increased in online shopping given the less social interaction consumers experience compared to the social interaction in traditional markets. Furthermore, consumers might face difficulties that could be technical, therefore it is not only informational support that is required here, emotional support is also required, where consumers also feel they are cared about and dealt with in a way that satisfies them.

Merchants should therefore be aware of the SS consumers’ demand in the SC environment. Provision of such a feature may lead to an increase in the purchase intention. However, it is not known, because it is outside of the scope of the study, which support is demanded more: informational or emotional. Moreover, it the preferred form of SS desired by consumers cannot be determined. In other words, how do consumers want SS to be delivered? This leaves a room for future research to investigate this topic. However, this study confirms the positive significant effect of SS and extends the study conducted in Saudi Arabia by Sheikh et al. (2017), where the participants were only males.

7.5.4 THE IMPACT OF SOCIAL SUPPORT ON TRUST

The impact of SS was also investigated on different factors, in this case, on TR. The research question related to this relation was: “Does SS impact consumers’ trust in SC in Saudi Arabia?” It was hypothesized, depending on the literature review, that *social support has a positive influence on consumers’ trust in SC in the context of Saudi Arabia.*
The statistical analysis conducted in Chapter 5 showed that this hypothesis was accepted because SS positively influenced TR. Generally speaking, this is supported by Makmor et al. (2018) and Chen and Shen (2015). However, trust in Chen and Shen’s (2015) was broken into two parts, trust towards community and trust towards members, and trust in this current study was not specified. In Makmor et al. (2018) and Chen and Shen (2015) informational support (ISS) and emotional support (ESS) impacts were measured separately. Thus, some considerations should be elaborated here.

First, the levels of significance differ in each path in Chen and Shen’s (2015) (i.e., ESS → trust towards community, ESS → trust towards members, ISS → trust towards community and ISS → trust towards members). This means that measuring the effect of ESS and ISS separately might provide a clearer and better interpretation of their effect on trust. There is also an indication that the concept of having a single generic trust factor in such a complex study is insufficient. This was elaborated and stressed in the qualitative analysis of the impact of trust as a general concept on SCI (Section 7.5.1).

Furthermore, in Makmor et al.’s study (2018), the impact of ESS and ISS on trust and intention to buy were measured separately. Their study showed that trust fully mediated the relationships between ESS and ISS with SCI. This could be an inference about the need to measure the impact of ISS and ESS on TR and SCI separately, where the mediating effect will be interpreted with precision. In summary, even though the impact of SS was measured on TR as a second order factor, and TR was a generic factor in this study, the result of this current study showed that trust is enhanced with the introduction of SS. It is recommended, even though more studies are needed, that sellers should take enhancing and establishing consumers’ trust into consideration by providing ISS and ESS.
7.5.5 THE IMPACT OF SOCIAL SUPPORT ON ATTITUDE

The impact of SS was lastly investigated on consumer attitudes. The research question related to this relation was: “Does SS impact consumers’ attitudes towards SC in Saudi Arabia?”. It was hypothesized, depending on the literature review, that social support has a positive influence on consumers’ attitude towards using SC in the context of Saudi Arabia.

The results of the analysis in Chapter 5 showed that this hypothesis was accepted because there was a positive significant impact of SS on AT. The concept of SS being an influencing factor on attitude was discussed in Chapter 2. Scholars have stated that positive attitude can generally be formed when SS is present (Bohner & Wänke, 2002; Petty & Krosnick, 1995; Sarason et al., 1983). This result is also supported by Wang et al. (2012). As they stated that peer communication enhances attitude towards online shopping via social media. Peer communication can be considered a method of providing SS, informational and emotional.

The results indicate that consumers’ attitudes can be positively changed or enhanced when consumers are offered support. That is particularly true in SC, where physical social interaction is not possible. The need to form a favorable attitude is necessary in SC because consumer attitudes is the most important factor influencing intention to buy. However, even though this particular relationship is significant, it was one of the weak significant relationships in this study.

This could be associated with consumer attitudes to SC. That is, consumers who participated in the survey may have formed positive attitudes prior to the need to introduce SS for them. Nevertheless, this significant relationship might change in the future as more consumers become interested in buying via SC. Thus, SC platforms that are equipped with SS features are likely to outperform those without. Another reason for
this relationship being weak is the form of SS that is provided by merchants; sellers are encouraged to employ forms of SS that are desired by consumers. This needs to be investigated separately in each market, because the characteristics of each market may differ. SS is therefore deemed to be important to change attitudes toward social shopping.

7.5.6 THE IMPACT OF SUBJECTIVE NORMS ON SOCIAL COMMERCE INTENTION

Subjective norms (SN) are defined as an individual’s perceived pressure from the important people in their social environment about performing or not performing a certain behavior (Davis et al., 1989; Fishbein & Ajzen, 1977). The research question related to SN was: “Do consumer SNs impact purchase intention via SC in Saudi Arabia?” It was hypothesized, depending on the literature review, that consumer’s SN will positively influence consumers’ purchase intentions via SC.

The analysis in Chapter 5 interestingly revealed that the hypothesis stated above was rejected. A number of studies contradict this finding (Crespo & del Bosque, 2008; Gatautis & Medziausiene, 2014; Khalifa & Shen, 2008; Limayem et al., 2000; Shim & Drake, 1990; Shin, 2013; Teh & Ahmed, 2011). In addition to these studies, there are contrasting views between two studies that investigated the effect of social influence as an equivalent factor to SN (Venkatesh et al., 2003) in the context of SC in Saudi Arabia.

One of these studies does not support the finding of this current study (Abed, 2016); however, the most recent study is in line with this finding (Sheikh et al., 2017). As such, this case raised a thought-provoking question. Why would the effect of SN on SCI differ in the same context in three studies that were conducted over a close period of time? The answer to this question can be explained in two ways. One possible answer is related to the study samples, the other potential answer is linked to Hofstede’s work, value survey
model (VSM). These two possible interpretations can be reflected on the insignificant impact of SN separately or combined together.

For exploring this phenomenon in more details, closer gazes at the samples of the studies were taken. In the first study, conducted in 2016, which contradicts the finding in this study, females dominated the participation in the survey, forming approximately 65% of participants. In the second study, conducted in 2017, which supports the finding of this study, the participants of the survey were only males. In this current study, around 60% of the participants were males. The first thought that comes into mind that female are more affected by the pressure in their social environment than males. That is, females are more likely to increase intention to purchase via SC as a result of the pressure from friends and family members.

The second possible answer is linked to work that has been done by Hofstede and other scholars using Hofstede’s VSM. Particularly, the concept of individualism and collectivism (IDV). Hofstede (2011) stated that in individualistic societies, individuals have a tendency to make decisions personally, “one person one vote” (p. 11). On the other hand, decisions are determined by group of people in collectivistic societies (Hofstede, 2011). Scores in the VSM range from 0 to 100, where scores closer to 0 denote collectivistic societies and 100 indicate individualistic societies. Four studies that used Hofstede’s measures in Saudi Arabia were reviewed.

The first study was conducted in 1980 and showed that the IDV score for the included Arab countries together with Saudi Arabia was 38, indicating societies in the studied country are collectivistic (Hofstede, 1980). The second study was conducted in 1990s for the Gulf Cooperation Council countries, where Saudi Arabia alone scored 41 (At-Twaijri & Al-Muhaiza, 1996). The third and fourth studies were conducted in 2006 and 2012, and used the updated version of VSM (version 1994). In the third study Saudi
Arabia scored 88.2 (Oshlyansky, Cairns, & Thimbleby, 2006), and in the fourth study, the score was 77 (Fischer & Al-Issa, 2012).

This contradiction in the studies signifies that Saudi Arabia transformed over that period of time from being a collectivistic society to being an individualistic society. This is strongly reflected in the case of the insignificant effect of SN on SCI. In fact, Hui and Triandis (1986) gave an explanation of this where they claimed that individuals in societies that are individualistic in nature are not likely to keep an eye out for social influence. They stressed that individuals make decisions based on whether or not there will be personal gains (Hui & Triandis, 1986).

Nevertheless, this interesting case of SN impact led to investigation of this result in more detail using qualitative methods regarding why SN has an insignificant impact on SCI. The analysis of the interviews showed that several reasons may have led to such an instance. Consumers and experts attributed the insignificant influence of SN to two broad reasons: whether there are factors hindering this effect or some other factors moderating its effect.

The impact of SN from consumer perspectives may be weakened if SC or SC platforms are disreputable. With prior knowledge of certain SC websites being dishonest or untrustworthy, for instance, any pressure from the close environment, would not have an effect. In addition, consumers cannot be subjected to pressure if they perceive that SC is not well-structured or they have been subject to bad experience. Moreover, the culturally important idea of uniqueness, especially with women, contradicts being influenced to act like others. How can individuals be unique if they conform to pressure in the social environment? This is a convincing point when it comes to purchasing the same product or from the same website. Nevertheless, this point may be invalid when applied to the adoption of SC in general. Thus, there is a possibility that when individuals
completed the survey, they interpreted SN in a similar way, understanding the meaning of it from a personal angle, where it showed insignificance.

Moreover, it is interesting that one of the interviewees from the consumer group indicated a point of view that was endorsed by three out of four experts. The viewpoint was about where the real influence comes from. In this era of social media, these participants thought that social media influencers, those with a high number of followers on social media platforms, have the real impact of social pressure. Although it was discussed during the interviews with the participants that pressure was defined in the study as being from the friends and family, an opinion was expressed that family members and close friends are those who convey and communicate the pressure. This point is not only interesting, but also indicates that advertising though social media influencers is, in fact, a strong moderator of the effect of SN. That might possibly mean that if a product is well-advertised via social media influencers, SN works straightforwardly. However, the effect of SN might go through another complicated process if the product is not advertised via social media influencers, and might in the end, be ineffective.

Furthermore, from a consumer’s point of view, moderators of the effect of the SN can be simply the need, inclination, and desire for the product. The interviewees indicated that even though SN sometimes cannot be deemed personally significant, it might work if there is a need or even an inclination to certain products or services. This case might work particularly with a combination of other different factors. For instance, lack of availability of an item in the conventional stores, better prices, better quality, and the possibility of item inspection if others have already purchased it. In addition, age, experience, and habits were found to be moderators.

Moreover, an interesting interpretation was provided by an expert who explained that breaking from tradition is the reason behind SN impact being insignificant. Breaking
from tradition is the opposite of being a part of a collective society. This is in line with the argument presented earlier, which linked individualism and collectivism to this particular case. However, the view of another expert that SN impact is not yet occurring in the context of SC is valid. This can be justified because SC is an activity that is not performed, or must be performed, publicly. A wedding, for example, is an act that is carried out publicly; thus, most people have weddings because they perceive the pressure on them if this is not carried out. On the other hand, SC activities are not done publicly, in which people witness the act and might produce pressure if activities are not witnessed. In this sense, individuals do not perceive social pressure if they do not purchase or intend to purchase via SC.

7.6 THE IMPACT OF GOVERNMENT-RELATED FACTORS

This section presents the discussion of the six relationships linked to the category of government-related factors. First, the impact of E-WOM on SCI, AT and TR is discussed, followed by the impact of SP on SCI, AT and TR. In the first part, the effect of E-WOM on SCI was insignificant while it was significant on AT and TR. All paths from SP were positively significant, declaring the importance of security in the context of SC.

In addition to the discussion of the quantitative results, one relationship was investigated qualitatively. This was the insignificant relationship between E-WOM and SCI. The outcomes of the interviews regarding why the effect of E-WOM (Maroof) was insignificant are provided from two perspectives: consumers and experts.

7.6.1 THE IMPACT OF ELECTRONIC WORD OF MOUTH ON SOCIAL COMMERCE INTENTION

Electronic word of mouth (E-WOM) refers to users’ positive or negative statements that are shared online about a product or service (Hennig-Thurau et al.,
The Maroof website was the E-WOM platform investigated in this research. The research question related to the relationship between E-WOM and SCI was: “Does Maroof have an impact on consumers’ purchase intention via SC in Saudi Arabia?” It was hypothesized, depending on the literature review, that the Maroof E-WOM platform has a positive influence on consumers’ purchase intentions via SC.

The statistical analysis in Chapter 5 showed that Maroof did not impact consumers’ purchase intention, rejecting the hypothesis stated above. A number of studies contradict the result of this study (Balakrishnan et al., 2014; Gauri et al., 2008; Park et al., 2007). The reason for the insignificance may be attributed to the platform itself (Maroof), as it maybe not effectively established or marketed. This case was investigated in more detail by conducting interviews with consumers and experts.

The analysis of the interviews provided understanding about why Maroof had no impact on SCI. The responses in the qualitative study were segmented into three subcategories: the need for E-WOM, the inhibitors of using E-WOM, and ways for improving the use of Maroof. However, interestingly, there was a consensus from all experts, and also some consumers that the establishment of Maroof was unsuccessful.

First, by presenting this result to consumers at the beginning of the conversation, the responses represent how surprised the consumers were about the insignificant effect of E-WOM Maroof. This is because they believed that E-WOM was indeed important in the context of online shopping. The importance of E-WOM was also stated by experts. However, by going into more detail as the conversations went on, some consumers talked about the process of forming intention and making purchases. It was revealed that the consumers first formed the desire and intention to purchase, then investigated E-WOM before actioning the purchase. In this sense, ratings and reviews will not form an intention, but will influence the action of purchase. From the consumers’ point of view, this can be
valid if this interpretation is linked to purchasing certain product or services, or purchasing from a certain website.

However, this view can be controversial when the responses are linked to the effect of the provision of E-WOM on influencing consumers to adopt the concept of SC. The question here is, would the idea of providing E-WOM platforms be favorable to consumers in the context of SC? The logical answer is yes, because consumers will probably perceive that they will have more knowledge about many aspects in SC such as markets, sellers and products. Thus, why does the provision of Maroof not influence consumers’ intention to buy? The answer lies in the responses categorized under the second sub-theme “the impediments of using E-WOM” presented in Chapter 6.

Consumers were asked whether they knew about Maroof during the interviews. As more than the third replied “No”, it is clear what the explanation is. The unknown would not influence what is already known. How could a certain platform influence consumers if they are uninformed about it? This is highly connected to what all experts highlighted about the poor establishment of Maroof. This could be related to the poor branding strategy, poor planning, and poor execution.

If Maroof was not well-established, the other impediments of using it would be highly correlated. Poor establishment leads to less use, which results in a low quantity of reviews and ratings, which can affect the credibility and the reliability of the platform. This occurs where there are multiple E-WOM platforms that consumers can use that are more reliable and trusted. Thus, what Maroof needs for success is a complete redefine, where consumers are then attracted by the remarkable added value.

7.6.2 THE IMPACT OF ELECTRONIC WORD OF MOUTH ON ATTITUDE

The impact of the Maroof E-WOM platform was also measured on AT. The research question related to the relation between E-WOM and AT was: “Does Maroof
have an impact on consumers’ attitude towards SC in Saudi Arabia?” It was hypothesized, depending on the literature review that the MARFOOF E-WOM platform has a positive influence on consumers’ attitude towards SC in Saudi Arabia.

The statistical analysis in Chapter 5 revealed that this hypothesis was accepted because Maroof positively influenced consumers’ attitude towards SC in Saudi Arabia. This result is supported by Jeong and Koo (2015) and Tabbane and Hamouda (2013). However, even though this relationship was significant, it was considered one of the weakest in this study, with a path coefficient of 0.076, t-statistics of 2.205, and significance level of 0.05. In fact, it is surprising that consumers’ purchase intentions were not affected by Maroof but consumer attitudes were.

This could be linked to consumers’ knowledge of Maroof. Because most consumers may not be aware of Maroof, they may perceive that having such an initiative from the government could lead to a favorable attitude towards SC. This view is convincing, because Saudi people are attracted to services supplied by the government (AlGhamdi et al., 2011b). Thus, it is recommended that SC merchants should consider E-WOM as a conveying tool to form positive attitudes. Nonetheless, the Saudi Government, represented by the Ministry of Commerce, should make an extra effort to enable the full potential of Maroof.

### 7.6.3 THE IMPACT OF ELECTRONIC WORD OF MOUTH ON TRUST

The impact of the Maroof E-WOM platform was also measured on TR. The research question related to the relation between E-WOM and TR was: “Does Maroof have an impact on consumers’ trust in SC in Saudi Arabia?”. It was hypothesized, depending on the literature review that the Maroof E-WOM platform has a positive influence on consumers’ trust in SC in Saudi Arabia.
The statistical analysis showed that this hypothesis was accepted, where Maroof positively and significantly influenced consumers’ TR in SC in Saudi Arabia. This result is supported by (Hajli, 2013; Hajli et al., 2013; Hajli, 2015; Hajli et al., 2014; Kim & Park, 2013). Unlike the relation between E-WOM and AT, this relationship was significant, at a greater than 0.001 level. This shows that E-WOM indeed establishes better trust and also shows the centrality of trust in SC settings.

Furthermore, this particular relationship conveys that consumers trust the words of other consumers. This is an indication that trust in the SC environment can be related to different entities, in this example, trust in communities. This stresses the need to differentiate between types of trust and clearly specify them in SC studies. Future studies should investigate the effect of different types of trust on SCI, and investigate what could affect these types of trust as well, following the initial work published by Chen and Shen (2015).

### 7.6.4 THE IMPACT OF SECURE PAYMENT SYSTEM SADAD ON SOCIAL COMMERCE INTENTION

The impact of the Sadad secure payment (SP) system on SCI was also measured. The research question related to the relationship between SP and SCI was: “Does the Sadad secure payment system influence purchase intention via SC in Saudi Arabia?”. It was hypothesized, depending on the literature review, that the Sadad secure payment system has a positive influence on consumers’ purchase intentions via SC.

The statistical analysis revealed that the hypothesis stated above was accepted, with a significance level greater than 0.001. This is in line with a number of studies that have stressed the importance of secure payment systems in online shopping (Bai, Yao, & Dou, 2015; Huang & Benyoucef, 2013; Saundage & Lee, 2011). There is no doubt that
security in online shopping is vital; however, it is under researched in SC because researchers tend to pay attention to the social aspect of SC.

SP is essential to increase consumers’ intention to purchase. Indeed, consumers perceive that if an online business has a secure payment system it means they are identified to authorities, which provides a sense of security. On the other hand, consumers are not going to spend their money on online shopping where they are skeptical of being subject to theft. Third-party, well-known, and in this case, governmentally initiated secure payment systems must therefore be incorporated in SC platforms to increase consumers’ SCI.

**7.6.5 THE IMPACT OF SECURE PAYMENT SYSTEM SADAD ON ATTITUDE**

The impact of SP was also measured on consumers’ AT. The research question related to the relationship between SP and AT was: “Does the Sadad secure payment system influence consumers’ attitude towards SC in Saudi Arabia?” It was hypothesized, depending on the literature review, that the Sadad secure payment system has a positive influence on consumers’ attitude towards SC in Saudi Arabia.

The analysis of the collected data showed that SP had a positive significant impact on AT, confirming the hypothesis. Noort et al. (2008) study supports this finding, because they reported that safety cues, such as safe payment, can produce favorable attitudes. This result shows that SP not only influences AT, but also that the impact of SP on SCI is mediated by AT.

This is a clear indication, again, of the centrality and importance of consumers’ attitudes in SC studies. In addition, the provision of secure payment systems, such as Sadad, is another way of forming better attitudes. Researchers and professionals should not neglect the relationship between SP and AT. Because SP creates positive AT, and
also positively influences SCI, the use of secure payments as an alternative method must be promoted. As such, negative outcomes that arise from using different payment methods (i.e., payment on delivery) can be overcome, especially when Sadad is a government initiative proven to be favored by consumers.

7.6.6 THE IMPACT OF SECURE PAYMENT SYSTEM SADAD ON TRUST

The impact of SP was lastly measured on consumers’ TR. The research question related to the relationship between SP and TR was: Does the Sadad secure payment system influence consumers’ TR in SC in Saudi Arabia? It was hypothesized, depending on the literature review that the Sadad secure payment system has a positive influence on consumers’ trust in SC in Saudi Arabia.

The statistical analysis on the collected data demonstrated the positive significant effect of SP on TR, accepting the hypothesis stated above. This finding is consistent with Kim and Park (2013) findings, where they found that transaction safety, where the concept of electronic safe payment was incorporated, was one of the most important factors affecting trust in their model. This does not differ much from the current study. In fact, the path going from SP to TR had the highest coefficient with the highest $t$-statistics in the entire model (0.303 and 9.830 respectively). This is an indication of the essentiality of SP and centrality of TR from consumes’ perspectives.

Indeed, an online shop equipped with a payment gateway that consumers know and trust is only going to increase trust or build it if not established before. Therefore, SP is seen as an important and vital factor, not only because it influences TR, but also AT and SCI. This factor is the only factor in the model that had multiple relationships, all with a high level of significance (i.e. $p$-value <0.000). This is evidence that security in SC research is undeniably important and should not be neglected. Thus, consumers seem
to substantially demand security, and the only option for sellers to satisfy this is to provide Sadad or any trusted payment gateway with similar characteristics.

7.7 SUMMARY

This chapter presented the discussion of the results of the research. The complexity of the research cannot be ignored given that a large number of factors were integrated, with a larger number of relationships between them. This integration is believed to be advantageous, as SC adoption is indeed complex, as presented in this study and stated in others. Thus, the use of the TPB as a beginning point was productive because it is suitable for investigating complex activities. The complexity of SC stems from it being an activity that encompasses technology, psychology, social, individual, and regulation aspects. Consequently, the TPB was incorporated with factors believed to be highly related to the SC setting.

The 15 hypotheses were then discussed by presenting a recap from the related previous chapters and by comparing the current results with the literature. The researcher’s views and arguments were presented in each related section. Three sections also presented an in-depth discussion of the qualitative results based on the selected quantitative results.

Chapter 8 provides the conclusion of the study and outlines the recommendations and limitations of the study.
8 CHAPTER EIGHT: CONCLUSION

8.1 OVERVIEW

The final chapter of this thesis aims to consolidate the background and the process, the findings, the contributions, and the limitations of this study. It also offers directions for future research. Section 8.2 provides a brief recap of the research context and background, the purpose of the study, and the research methodology appointed for this research. Section 8.3 presents a brief summary of the findings of the research, both quantitative and qualitative. Section 8.4 communicates the contributions of this study in two forms: theoretical and practical. Section 8.5 lists the limitations of this research, along with recommendations for future studies. Section 8.6 provides a summary of this final chapter, which concludes the thesis.

8.2 SUMMARY OF THE RESEARCH BACKGROUND, PURPOSE, RESEARCH QUESTIONS, AND PROCEDURES

The continuous evolution in technology that has been taking place in the communication and networking field has shaped a novel system where users exchange information in a collaborative manner. This in turn affects how users conduct e-commerce activities. While in the past, e-commerce systems were merely used for selling and buying, interaction enabling technologies have created an environment that is entirely different and complex in nature. In SC settings, consumers have become more powerful, where they leverage these interaction enabling technologies to find better buying options, even behind political borders. With this, to achieve economic benefits, it is important to comprehend what constrains and encourages consumers regarding their intention to buy from specific SC platforms.

Saudi Arabia is being reformed from a country reliant on revenue from oil to a country with a diversified economy (Alshuwaikhat & Mohammed, 2017; Khan, 2016).
This is important for achieving a sustainable economy. Thus, a series of initiatives were named by the Saudi government, and among these, is making use of digital economy to promote economic growth. The country introduced supporting programs and tools (i.e., Maroof and Sadad) to achieve an effective use of digital economy. However, more work is required by various institutions where consolidated work may lead to successful fulfilment. From an academic viewpoint, research is a very important aspect where the outcomes are conveyed to concerned parties, and better solutions can consequently be implemented and executed.

In addition to the motive of conducting such research arising from practical needs, a theoretical gap also existed. Because SC is becoming more popular, it is essential to investigate every aspect affecting its use and adoption. Such a complex environment encompasses different disciplines, such as technology, commerce, psychology, and sociology. Thus, multiple factors that relate to these disciplines can affect the successful adoption of SC. However, in the literature, it was not evident that enough investigation of SC has been performed where SC adoption has been explored from multiple perspectives making up the broad view of factors affecting it. Thus, this research aimed to address these shortcomings in the literature. Subsequently, the research question became: “What are the key factors that influence consumers’ adoption of SC in Saudi Arabia?”

To achieve a comprehensive answer for the research question, a pragmatic paradigm was utilized by employing multiple different methods to achieve the best results. Both quantitative and qualitative methods were employed in this research, allowing the capture of a single view as well as multiple interpretations. As such, the broad view was able to be reached. Explanatory sequential design was adopted for this study where quantitative methods were used, followed by qualitative methods.
Quantitative methods were employed when conducting the pilot study and also the full-scale study. A set of quantitative analyses, including descriptive analysis, validity tests (EFA and CFA), reliability tests, and SEM analysis were then performed. Because the SEM analysis yielded interesting results that contrasted with prior research, qualitative methods were employed to explain these interesting circumstances. Qualitative data were collected using interviewing approaches and hybrid thematic analysis was employed for analyzing the data.

### 8.3 SUMMARY OF RESEARCH FINDINGS

The quantitative findings of this study show that there are multiple players related to different disciplines in the context of SC. In general, most factors categorized as individual, social, and governmental influenced consumers’ intention to buy via SC platforms. E-WOM and SN were excluded because they did not show a significant influence on SCI. Government-related factors and SS showed significant influences on consumers’ AT and TR. In addition, TR significantly impacted consumers’ AT. This nomological network of relationships shows that SC is indeed complex, and investigation from a single or limited point of views is inadequate.

The statistical analyses revealed that AT is the most important factor predicting SCI. In addition to its importance, it played a central role in SC adoption because it was also affected by government-related factors, TR and SS. Furthermore, other factors found to have a significant impact on SCI impacted it relatively evenly, with the exception of the impact of TR, which was the lowest significant impact in the entire model. This was an interesting case, and it was therefore extended to be investigated in the next stage.

The qualitative findings complemented the results obtained from the statistical analyses. That is, they explained in detail why E-WOM and SN did not influence SCI. They also offered an insightful interpretation of why TR was amongst the weakest
relationships, which contrasts with most studies in the literature. In short, the results can be briefly summarized into three points.

- Although the qualitative analysis showed that e-WOM was essential, the impact of E-WOM about Maroof on SCI was not significant because its implementation and execution were poorly done and its perceived benefits were low from consumer and expert points of view.

- Although some interviewees thought that SN was an important predictor, it did not show an impact on SCI because other factors moderated its effects, such as the need to buy via SC as an enabler, and the desire to break out of traditions as an inhibitor.

- Although some interviewees indicated that TR was very important in the context of SC, its weak impact could be due to the current familiarity with SC, where people’s perception of risk is low. It could also be attributed to the payment on delivery option, which puts consumers in a safe position where they perceive that with no online payment, they will not be subject to fraud and deception from online sellers.

### 8.4 CONTRIBUTION TO THEORY AND PRACTICE

#### 8.4.1 THEORETICAL CONTRIBUTION

Theoretically speaking, this study extends the theory of planned behavior (TPB), where the augmented model better investigated SC. The extension of the TPB by adding a number of related factors and network of relationships was valuable. Indeed, this contributes to further understanding the complex process of adoption and acceptance of SC. The contribution to theory is highlighted in the following sections.
Venkatesh et al. (Venkatesh et al., 2012) suggested that price/cost related factors in the context of consumers’ adoption can be highly related in collaborative systems context. This is true; however, price/cost related factor is mainly captured in the theory of acceptance and use of technology (UTAUT) model. Theoretical contribution in regards to this factor can be explained in two ways. First, by extending the TPB, which was argued to work better in a SC context than the UTAUT, with cost/price related factors. Second, by altering the meaning of price value (PV) to reflect a logical rationalization of its addition. That is, PV in the UTAUT concerned the cost of using particular systems by consumers. However, there is no cost associated in the context of SC. Thus, PV was altered so it expressed the cost associated with purchasing and delivering items. This modification, as well as the extension of the TPB, are considered theoretical implications, because PV showed a significant impact on SCI.

Theoretical implications were also evident in other aspects of the model. For instance, the model not only introduced factors to the TPB, but also incorporated the model with a collection of paths that explained what causes what. That is, certain factors showed an impact, not only on SCI, but also on different central factors. For example, government-related factors (E-WOM and SP) were also predictors of favorable attitudes. In addition, a positive attitude was theorized to be attained by introducing relationships between SS and TR with AT. A similar theoretical contribution was found by introducing three relationships from E-WOM, SP and SS to TR. Although these relationships were stated implicitly or explicitly in the literature, this study is the first to consolidate them into a theoretical model that aims to acquire a broad view of SC adoption.

With the introduction of such a model, understanding the complexity of the SC environment is now one step clearer in this research. This is because the theoretical model showed how the process of the adoption is interpreted. For instance, consumers’ intention
to buy was predicted by consumers’ attitudes, which were affected by consumers’ trust, secure payment, E-WOM, and social support provided by SC communities. Consumers’ trust, moreover, improved with secure payment, E-WOM, and social support. Such detailed and thorough views, where a multilevel model was introduced, is of great value because it helps to simplify and clarify the complexity in SC. This study therefore contributes to the body of literature by introducing a broad model that encompasses factors and relations that capture human behavior in detail from different but related perspectives.

8.4.2 PRACTICAL CONTRIBUTION

The practical implications can be stated in the form of recommendations conveyed to concerned groups. Beginning with entrepreneurs and SMEs, the results of this study suggest that only paying attention to online marketing is not sufficient. Rather, certain consumer concerns need to be addressed. Different aspects and factors can lead to successful adoption from consumers where desired revenue and outcomes can be achieved by sellers. The results imply that certain strategies and methods need to be applied by sellers in order to pave the road for smooth consumer adoption in SC. First, sellers must think carefully about a pricing strategy where reasonable prices are perceived by the consumers. With the power being transferred from sellers to buyers as a result of advanced technologies that enable searching for better options and interaction between users, buyers are fully aware of what reasonable prices are. In fact, buyers have already observed that some prices are unreasonably exaggerated.

Second, because consumer attitudes play a major role in SC adoption, certain strategies have to be employed to enhance this. Consumer’s AT towards SC in general or towards a certain SC platform is not controlled by sellers because it represents individual preferences toward the act. However, certain factors can form positive attitudes. The
results indicate that the provision of a secure payment system such as Sadad, the establishment of different measures that help attain consumers’ trust, and the establishment of approaches of social support for buyers are strategies that sellers should take into consideration to fulfil the goal of successful SC adoption. These aspects are important, not only because they influence consumers AT, but also because they directly influence consumers’ SCI.

Third, consumers’ perception of behavioral control, whether full or partial, is dependent on internal factors, as well as external factors that altogether affect SCI. Because the seller has no control over internal factors, enabling consumers’ control over external factors is in the sellers’ hands. This can be done by applying and executing strategies that ensure consumers have the highest, if not full control over the behavior. These strategies include, but are not limited to, the provision of adequate and comprehensive information about products and services. In cases where poor or no information is provided, consumers can believe they lack the information required to decide whether certain products and services are right for them.

Other strategies can be applied to the delivery of products. Click and collect, an option used by online retailers where consumers order online and pick up their order from a physical branch, can be applied so that consumers are not controlled by a delivery time slot. Rather, consumers control the behavior of collecting the items at their preferred timing. This is widely provided by stores that have both conventional and online stores. Stores that only operate online can establish this service with other conventional retailers, such as local post offices or the nearest supermarket.

On the other hand, there are practical implications that can be conveyed to the concerned departments within the Saudi Government. Generally speaking, this study’s results provide the Ministry of Commerce and Investment and Saudi Arabian Monetary
Authority with information about the perceived value of Maroof and Sadad, respectively. Beginning with Sadad, consumers certainly do value this initiative, as the results showed it had an impact on consumers’ SCI, AT, and TR. However, the question is whether this initiative is being widely and effectively used in SC context in Saudi Arabia. As reported earlier in this thesis, CITC (2017) stated that Sadad has a low level of usability amongst other online payment options, which can be attributed to low awareness. While the results of this study indicated that consumers favor this initiative, it is foreseeable that the Saudi Arabian Monetary Authority can achieve higher usability of the Sadad trusted system by consumers. The step required in this regard is a well-planned advertising campaign about Sadad.

In the case of Maroof, the results from the quantitative and qualitative studies suggest that a substantial amount of work is required by the Ministry of Commerce and Investment. As the statistical analysis showed insignificant effects from E-WOM about Maroof on SCI, which is not in line with prior research, the qualitative study examined why this was the case with Maroof in Saudi Arabia. Qualitative data indicated that Maroof requires a series of corrective actions to be a beneficial E-WOM platform. These actions include redefining the objectives and the scope of Maroof, with two aspects to be taken into consideration: introducing a service that is innovative in nature and using global benchmarks used for E-WOM platforms. As such, consumers’ expectations can be met and also exceeded.

8.5 LIMITATIONS AND FUTURE STUDIES

As with any research, this study has limitations. The results of this study should be considered with caution for several reasons. First, the data were collected from Saudi Arabia. As such, the results may be reflected to populations with similar characteristics; however, the results may not be applicable to places where distinct characteristics could
be captured. Thus, future research may use the model developed in this study and apply it to populations similar and different to that in this study. This will allow for validation of the study’s model, as well as producing comparative studies.

Second, because this study aimed to obtain a broad view, it is understandable that some people might define “broad view” differently. This could be seen as a limitation, where some scholars might think that this study is not broad enough to be called “broad”. However, this is one of the few, if not the first study aimed at understanding SC adoption from a wider perspective. Thus, limitations in regards to being broad enough might arise. Future studies may therefore augment the current study’s model and make it even more comprehensive. In fact, the outcome of this study lies in the successful incorporation of factors related to the TPB.

Third, while collecting the qualitative data, interviewees indicated that the definition of trust (TR) in this study was too broad. This inferred a need to specify or categorize TR into different factors. Consumer TR can be linked to multiple concepts such as TR in a platform like Amazon, eBay, and Souq; TR in communities; and TR in sellers. This was seen as one of the major limitations of the study. Future research may overcome this limitation by specifying and categorizing the different types of TR encompassed into the conceptual frameworks.

Fourth, it is important to advise that understanding the effect of SP and E-WOM in this study is linked to the initiatives of the different departments of the Saudi Government. These results may differ even within the same context if SP and E-WOM are general ideas or represent different tools of platforms. Future studies may be able to evaluate the different representations of E-WOM and SP. That is, future research may examine the effect of the concept of E-WOM in general, and also the effect of different E-WOM platforms, such as Google reviews and Foursquare reviews along with the effect of
Maroof, on SCI. Likewise, future studies could investigate the impact of different SP systems such as PayPal. Comparison between institutional involvement (i.e., governmental vs. commercial) in the adoption of SC would therefore be possible.

Last, this study did not investigate how consumers wish to receive SS. While it can be received from sellers and other buyers, it is still not clear which is preferred by consumers. It is also not clear what form of SS is desired. Is ISS preferred over ESS or vice versa? What channels would consumers like sellers to use for SS? Could this be via social media, blogs, or maybe consumers demanding more advanced methods, such as chatbots or even video calls? The responses to these questions could be answered in future research. Great opportunities exist for scholars to examine the ideal techniques regarding the provision of ISS and ESS.

8.6 CONCLUSION

The investigation of SC adoption in this research showed that it is indeed a complex process. This research endeavored to obtain a broad view of the factors that affect SC adoption in an attempt to understand and simplify its complexity. This broad view was depicted in a broad framework that revealed what the key and supporting factors were in the adoption process. The integration of quantitative and qualitative methods and techniques were employed to reach such a broad view.

The discussion, interpretation, and integration of the quantitative and qualitative results with the comparison to the related research provided further understanding of SC adoption.

The outcomes of the research were reflected in theory and practice, which also showed a number of implications. This research contributes to the body of the literature and also communicates practical recommendations to concerned parties, including governmental and commercial organizations.
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APPENDIX A: HUMAN RESEARCH ETHICS APPROVAL

To Whom It May Concern

Human Research Ethics Approval
"The Drivers of Social Commerce: A Broad View of Factors Predicting Intention to Buy"
(Ref: 2016/7/30)

I am pleased to advise that this research has approval to commence from the Griffith University Human Research Ethics Committee, a committee established and operating in accordance with the standards and principles of the Australian National Statement on Ethical Conduct in Human Research (2017 - Updated 2018) and Griffith University policy.

The decision to approve is dated 10 March 2017 and covers the period 10 March 2017 to 30 November 2020.

For any queries regarding this ethical approval please contact the Committee Secretary on tel: 07 3735 4375 or research-ethics@griffith.edu.au.

Yours sincerely,

Ms Kim Madison
Secretary to the Griffith University
Human Research Ethics Committee and
Manager Research Ethics and Integrity
Office for Research
Griffith University
Nathan QLD 4111 Australia

26 August 2019
APPENDIX B: ENGLISH AND ARABIC QUESTIONNAIRES WITH CERTIFICATE OF TRANSLATIONS
Online Survey Design Sheet

The Drivers of Social Commerce: A Broad View of Factors Predicting Intention to Buy

Demographics:

1- Age:
   - □ 18 – 20
   - □ 21 – 30
   - □ 31 – 40
   - □ 41 – 50
   - □ 51 – 60
   - □ Over 60

2- Gender:
   - □ Male
   - □ Female

3- Highest educational qualification:
   - □ Secondary and below
   - □ Diploma
   - □ Bachelor
   - □ Postgraduate

4- Location:
   - □ Major city
   - □ Small city
   - □ Rural area
5- Employment status:

- Student
- Working at a governmental department
- Working at private Sector
- Self-Employed
- Unemployed or searching for a job
- Retired

6- Monthly income (in Saudi Riyals):

- Less than or equal to 5000
- 5001 – 10000
- 10001 – 15000
- 15001 – 20000
- More than 20000

7- How long have you been using electronic commerce?

- Never used electronic commerce before
- Less than one year
- 1 - 3 years
- More than 3 years
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<th>Somewhat agree</th>
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<th>Disagree</th>
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<td><strong>Subjective Norms</strong></td>
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<tr>
<td>Most people who are important to me think I should use social commerce</td>
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<tr>
<td>The people who I listen to could influence me to use social commerce</td>
<td>☐</td>
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<tr>
<td>Close friends and family members think it is a good idea for me to do</td>
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<td>this activity</td>
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<tr>
<td>Important people in my life want me to do this activity</td>
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<tr>
<td><strong>Perceived Behavioural Control:</strong></td>
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</tr>
<tr>
<td>I would be able to use social commerce</td>
<td>☐</td>
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<td>☐</td>
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<td>☐</td>
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<tr>
<td>Using social commerce is entirely within my control</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>I have the resources and the knowledge and the ability to make use of</td>
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<td>social commerce</td>
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</tbody>
</table>
The drivers of social commerce

Government Involvement:
The government involvement in the field of social commerce is represented by the introduction of "Maroof" and "SADAD" for Saudi electronic stores.

Maroof website is a platform for evaluating and commenting on Saudi electronic stores by consumers. Maroof website is one of the initiatives of the Ministry of Commerce in Saudi Arabia. For more information click here:
Https://maroof.sa/Home/About

Sadad is a tool for completing purchases from Saudi electronic stores (one of SAMA's initiatives for electronic payment). For more information click here:
Https://www.sadad.com/en/Personal/Pages/SADADAccount.aspx

<table>
<thead>
<tr>
<th>1. Electronic Word of Mouth using Maroof</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel Maroof ratings and reviews are generally frank</td>
</tr>
<tr>
<td>I feel Maroof ratings and reviews are reliable</td>
</tr>
<tr>
<td>Overall, Maroof ratings and reviews are trustworthy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Secure payment using Sadad</th>
</tr>
</thead>
<tbody>
<tr>
<td>I believe the payment information I provide with Sadad to not be manipulated by inappropriate parties</td>
</tr>
<tr>
<td>I am confident that the private payment information I provide to Sadad will be secured</td>
</tr>
<tr>
<td>I think Sadad has mechanisms to ensure the safe transmission of users' payment information</td>
</tr>
</tbody>
</table>

Trust

| Social commerce in Saudi Arabia is a reliable social network | ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ |
|-------------------------------------------------------------|
| I can count on social commerce in Saudi Arabia to protect my privacy | ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ |
### The drivers of social commerce

<table>
<thead>
<tr>
<th>Social commerce in Saudi Arabia can be relied on to keep its promises</th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
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**Price Value**

<table>
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<tr>
<th>Items on social commerce in Saudi Arabia are reasonably priced</th>
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<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Social commerce in Saudi Arabia is a good value for money</th>
<th></th>
<th></th>
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<th></th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>At the current prices, social commerce platforms in Saudi Arabia provide items with good value for money.</th>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
</table>

**Social Support**

**1. Emotional Support**

<table>
<thead>
<tr>
<th>When faced with difficulties, some social commerce sellers and users in Saudi Arabia are on my side</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>When faced with difficulties, some social commerce sellers and users in Saudi Arabia comfort and encourage me</th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>When faced with difficulties, some social commerce sellers and users in Saudi Arabia listen to me talk about my private feelings</th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>When faced with difficulties, some social commerce sellers and users in Saudi Arabia express interest and concern in my well-being</th>
<th></th>
<th></th>
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</thead>
</table>

**2. Informational Support**

| Some social commerce sellers and users in Saudi Arabia offered suggestions when I needed help |   |   |   |   |
|---|---|---|---|

<p>| | | | |</p>
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<thead>
<tr>
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</thead>
</table>

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### The drivers of social commerce

<table>
<thead>
<tr>
<th>When I encountered a problem, some social commerce sellers and users in Saudi Arabia gave me information to help me overcome the problem</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
</tr>
</thead>
<tbody>
<tr>
<td>When faced with difficulties, some social commerce sellers and users in Saudi Arabia helped me discover the cause and provided me with suggestions</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**Social commerce purchase intention**

<table>
<thead>
<tr>
<th>I think I will use social commerce in Saudi Arabia in the future</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
</tr>
</thead>
<tbody>
<tr>
<td>I recommend others to use social commerce in Saudi Arabia</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I intend to continue using social commerce in Saudi Arabia in the future</td>
<td>☐</td>
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<td>☐</td>
<td>☐</td>
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<td>☐</td>
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</tr>
</tbody>
</table>
المعلومات الديموغرافية:

1. العمر
   - 18 - 20 □
   - 21 - 30 □
   - 31 - 40 □
   - 41 - 50 □
   - 51 - 60 □
   - أكثر من 60 سنة □

2. الجنس
   - ذكر □
   - أنثى □

3. أعلى شهادة حصلت عليها
   - ثانوي أو أقل □
   - بكالوريوس □
   - دراستين □
   - ليس معتمداً □
The drivers of social commerce
### The drivers of social commerce

<table>
<thead>
<tr>
<th>الاسم</th>
<th>فئة النية</th>
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<th>فئة النية</th>
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<thead>
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<th>موافقة المستهلكين من التجارة الإلكترونية الاجتماعية</th>
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<td>√</td>
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<thead>
<tr>
<th>السلوكيات والفرعات المتوقعة</th>
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<tr>
<th>مشاركة الحكومة</th>
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<td>√</td>
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[https://www.saad.com/ar/Personal/Pages/SADADAccount.aspx](https://www.saad.com/ar/Personal/Pages/SADADAccount.aspx)
The drivers of social commerce

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## The drivers of social commerce

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2 - The drivers of social commerce

### 1. Social influence
- When users see others using social commerce platforms, they tend to do the same.
- Users are influenced by the behavior of their peers.

### 2. Convenience
- Users find it convenient to shop online and compare prices.
- Social commerce platforms provide a one-stop solution for purchasing.

### 3. Social comparison
- Users compare products and prices on social commerce platforms.
- They seek opinions and recommendations from peers.

### 4. Trust
- Users trust social commerce platforms that have positive reviews and ratings.
- Social proof and trustworthiness play a significant role in decision-making.

### 5. Personalization
- Social commerce platforms offer personalized recommendations based on user preferences.
- Users receive tailored content and offers.

### 6. Entertainment
- Social commerce platforms provide an entertaining shopping experience.
- Users enjoy browsing and interacting with social commerce platforms.

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### 7. Identity
- Users express their identity and values through the products they purchase.
- Social commerce platforms offer a platform for self-expression.

### 8. Social responsibility
- Users are influenced by the social responsibility of brands.
- Ethical and sustainable practices are increasingly important for users.

### 9. Networking
- Social commerce platforms facilitate networking and连接 with like-minded individuals.
- Users connect with others who share similar interests.

### 10. Peer influence
- Users are influenced by the recommendations of social media influencers.
- Opinion leaders can significantly impact purchasing decisions.

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### APPENDIX C: LANGUAGE CORRECTIONS FOR THE ARABIC QUESTIONNAIRE

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<thead>
<tr>
<th>صحة</th>
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<tr>
<td>التسجيل بالبريد الإلكتروني</td>
<td>استمارة</td>
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<tr>
<td>المكملة بتعليمات وресурсيات</td>
<td>الاستمارة</td>
</tr>
<tr>
<td>للاستفادة من الإنترنت</td>
<td>للاستمارة</td>
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<tr>
<td>الإنترنت</td>
<td>الإنترنت</td>
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<tr>
<td>استقرار حسابات</td>
<td>استقرار حسابات</td>
</tr>
<tr>
<td>الأرقام فقط مسموح ب записتها في هذا الحقل</td>
<td>الأرقام فقط مسموح ب записتها في هذا الحقل</td>
</tr>
<tr>
<td>هذه التفاعل مع مواقع وحسابات التجارة الإلكترونية الاجتماعية</td>
<td>هذه التفاعل مع مواقع وحسابات التجارة الإلكترونية الاجتماعية</td>
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<tr>
<td>مني وآنت تعامل مع مواقع وحسابات التجارة الإلكترونية الاجتماعية؟</td>
<td>مني وآنت تعامل مع مواقع وحسابات التجارة الإلكترونية الاجتماعية؟</td>
</tr>
<tr>
<td>معظم الأشخاص الذين يشكلون أهمية بالنسبة لي</td>
<td>معظم الأشخاص الذين يشكلون أهمية بالنسبة لي</td>
</tr>
<tr>
<td>أعتقد أنهم من الضروري أن استخدم التجارة الإلكترونية</td>
<td>أعتقد أنهم من الضروري أن استخدم التجارة الإلكترونية</td>
</tr>
<tr>
<td>أستطيع أن أقذر على استخدام التجارة الإلكترونية الاجتماعية في السعودية</td>
<td>أستطيع أن أقذر على استخدام التجارة الإلكترونية الاجتماعية في السعودية</td>
</tr>
<tr>
<td>أعتقد أن هناك أطراف أخرى قد تكون عدما على معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد)</td>
<td>أعتقد أن هناك أطراف أخرى قد تكون عدما على معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد)</td>
</tr>
<tr>
<td>يمكن الاعتماد على معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد)</td>
<td>يمكن الاعتماد على معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد)</td>
</tr>
<tr>
<td>عندما أواجه صعوبات في استخدام التجارة الإلكترونية الاجتماعية في السعودية، فإن بعض معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد) يمكن الاعتماد عليها</td>
<td>عندما أواجه صعوبات في استخدام التجارة الإلكترونية الاجتماعية في السعودية، فإن بعض معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد) يمكن الاعتماد عليها</td>
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<tr>
<td>عندما أواجه صعوبات في استخدام التجارة الإلكترونية الاجتماعية في السعودية، فإن بعض معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد) يمكن الاعتماد عليها</td>
<td>عندما أواجه صعوبات في استخدام التجارة الإلكترونية الاجتماعية في السعودية، فإن بعض معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد) يمكن الاعتماد عليها</td>
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<tr>
<td>عندما أواجه صعوبات في استخدام التجارة الإلكترونية الاجتماعية في السعودية، فإن بعض معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد) يمكن الاعتماد عليها</td>
<td>عندما أواجه صعوبات في استخدام التجارة الإلكترونية الاجتماعية في السعودية، فإن بعض معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد) يمكن الاعتماد عليها</td>
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<tr>
<td>عندما أواجه صعوبات في استخدام التجارة الإلكترونية الاجتماعية في السعودية، فإن بعض معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد) يمكن الاعتماد عليها</td>
<td>عندما أواجه صعوبات في استخدام التجارة الإلكترونية الاجتماعية في السعودية، فإن بعض معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد) يمكن الاعتماد عليها</td>
</tr>
<tr>
<td>عندما أواجه صعوبات في استخدام التجارة الإلكترونية الاجتماعية في السعودية، فإن بعض معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد) يمكن الاعتماد عليها</td>
<td>عندما أواجه صعوبات في استخدام التجارة الإلكترونية الاجتماعية في السعودية، فإن بعض معلومات الدفع التي أقدمها لإتمام الشراء من المتاجر الإلكترونية السعودية باستخدام (سداد) يمكن الاعتماد عليها</td>
</tr>
</tbody>
</table>

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The drivers of social commerce

When facing difficulties in using electronic social commerce in Saudi Arabia, some users and owners of those sites and accounts may offer suggestions when they need help.

When facing difficulties in using electronic social commerce in Saudi Arabia, some users and owners of those sites and accounts may provide information to overcome the problem and offer suggestions to solve it.

When facing difficulties in using electronic social commerce in Saudi Arabia, some users and owners of those sites and accounts may help me find the cause of the problem and offer suggestions to solve it.
APPENDIX D: INFORMATION ABOUT THE INTERVIEW

The aim of my study is to explore factors affecting the adoption of Social Commerce. First quantitative stage has been carried out and factors were identified. In this stage, interviews will be conducted to reach in-depth understanding about some results. Here are some definitions and abbreviations to start with.

Social Commerce (SC): This study defines SC as a combination of electronic commerce activities and social interaction where consumers and sellers interact via enabling technologies (e.g., buyers recommend and rate products to other buyers, sellers support buyers and answer their enquiries via internet).

Subjective Norms (SN): It refers to the social pressure and social influence perceived by an individual in regards to doing a certain behaviour (Ajzen, 1985). In this study, it refers to the perceived social influence from close friends and family members to use SC.

Electronic Word of Mouth (E-WOM): Refers to positive and negative statements (reviews and ratings) about products and services given by current or potential consumers that can be accessed online.

SCI = Social Commerce Intention (or intention to buy from SC)

TR = Trust

The interview will focus on three main aspects of our results:

1. The insignificant relationship between SN and SCI
2. The insignificant relationship between E-WOM and SCI
3. The weak significant relationship between TR and SCI.

"Why" questions will mainly be asked to get your valuable explanation about these relationships.

Thank you so much for your cooperation and support!

Sincerely, Ali Alghamdi
## Appendix E: Summary of the Interviews (Consumers)

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The status of E-WOM (Maroof) in SC</td>
<td>The need for electronic word of mouth</td>
<td>The use of E-WOM is important in online shopping (IH)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-WOM has an effect on the action of purchase (IH)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-WOM is needed after the intention is already existed (ZH)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The purchase decision is Justified and supported by going through E-WOM (SH)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumers will need to go through E-WOM when they already intended to purchase and about to make a purchase decision (SH)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Price of items makes it important to read E-WOM (BD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-WOM is needed just before making purchase decision (BN)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-WOM Is needed when the purchase decision is being made (BD)</td>
</tr>
<tr>
<td></td>
<td>The impediments of using electronic work of mouth</td>
<td>Not Knowing MAROOF make it insignificant on SC (IH)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre-existing trust override the role of E-WOM (AG)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If consumers are uninformed about MAROOF, it makes its effect insignificant on SCI (AG)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Age of the E-WOM platform matters (FM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low level of experience with the platform determine its low usability (FM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Time/period the people knew the platform for affect the use of the platform (FM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reliability of the reviews is an issue (FM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trust issues of new E-WOM platforms lead to having no effect on consumer’s intention to buy (FM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-WOM is differently dealt with in different contexts which can be affected by consumers services and support (SH)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-WOM in Saudi Arabia wouldn’t be as reliable as it is in Australia as it is new in Saudi Arabia (SH)</td>
</tr>
</tbody>
</table>
The drivers of social commerce

<table>
<thead>
<tr>
<th>The status of subjective norms in SC</th>
<th>Factors hindering the influence of subjective norms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors leading to better use of electronic work of mouth</strong></td>
<td>The familiarity and notability of the E-WOM platform make consumers use it (IH)</td>
</tr>
<tr>
<td></td>
<td>Quantity and richness of information in Maroof matters (IH)</td>
</tr>
<tr>
<td></td>
<td>Trust building for E-WOM platforms happens with time (FM)</td>
</tr>
<tr>
<td></td>
<td>How reviews are being made and by whom affect the use of them (FM)</td>
</tr>
<tr>
<td></td>
<td>Corrective responses to fake reviews are needed for it to be influencing factor on SCI (SH)</td>
</tr>
<tr>
<td></td>
<td>The quantity of the reviews on a platform matter to make it reliable (BD)</td>
</tr>
<tr>
<td></td>
<td>Social influence does not work alone (IH)</td>
</tr>
<tr>
<td></td>
<td>Social influence does not work with disreputable products and platforms (IH)</td>
</tr>
<tr>
<td></td>
<td>Bad experience affect Subjective norms negatively (IH)</td>
</tr>
<tr>
<td></td>
<td>Commercial advertisements are more influencing than SN (AG)</td>
</tr>
<tr>
<td></td>
<td>Uniqueness cannot be combined with social influence (AG)</td>
</tr>
<tr>
<td></td>
<td>Being unique matter which contradict with social influence where close friends and family get the same products. So looking for other ways of influence (AG)</td>
</tr>
<tr>
<td></td>
<td>SN would impact SCI if attitude about SC is positive (ZH)</td>
</tr>
<tr>
<td></td>
<td>Trust should be combined with SN in order to be significant factor (ZH)</td>
</tr>
</tbody>
</table>

Inadequacy of information can on E-WOM platform can make its effect on SCI insignificant (BN)

Perceived loss of credibility of E-WOM can be an issue (BN)

Reviews searching in other website might override the use of reviews in some E-WOM platforms (BN)

Not being exposed or educated about a platform might play a role in its insignificance (BN)

Not knowing Maroof can be the reason why it doesn’t affect SCI in Saudi Arabia (BN)

WOM from friends are more reliable than E-WOM (BD)

E-WOM can be untrusted so this might affect its impact on SCI (BD)

Factors hindering the influence of subjective norms

Social influence does not work alone (IH)

Social influence does not work with disreputable products and platforms (IH)

Bad experience affect Subjective norms negatively (IH)

Commercial advertisements are more influencing than SN (AG)

Uniqueness cannot be combined with social influence (AG)

Being unique matter which contradict with social influence where close friends and family get the same products. So looking for other ways of influence (AG)

 SNP would impact SCI if attitude about SC is positive (ZH)

Trust should be combined with SN in order to be significant factor (ZH)
<table>
<thead>
<tr>
<th><strong>The drivers of social commerce</strong></th>
<th>Family member or close friend’s Experience matters when SN is in action (ZH)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Buying habit and age may be moderator on SN (SH)</td>
</tr>
<tr>
<td></td>
<td>People’s needs can affect the impact of SN (SH)</td>
</tr>
<tr>
<td></td>
<td>SN is subject to whether spending lots of money is involved (SH)</td>
</tr>
<tr>
<td></td>
<td>Consumer’s need may be a strong influencing moderator on SN (BN)</td>
</tr>
<tr>
<td></td>
<td>The individual’s budget play a role when there is SN (BD)</td>
</tr>
<tr>
<td></td>
<td>Personality of the consumers could determine the effect of SN (FM)</td>
</tr>
<tr>
<td></td>
<td>SN combined with inclination make little effect on SCI (FM)</td>
</tr>
<tr>
<td></td>
<td>The need when combined with SN increases the intention (FM)</td>
</tr>
<tr>
<td></td>
<td>Social influence works with product presentation from friends and family members (IH)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>The status of trust in social commerce</strong></th>
<th>The unspecified meaning of trust</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Being not specific about trust makes consumers confused (AG)</td>
</tr>
<tr>
<td></td>
<td>Trust types vary even with consumers on the same platform such as trust in seller and trust in SC platform (AG)</td>
</tr>
<tr>
<td></td>
<td>People have different thoughts about different types of trust (FM)</td>
</tr>
<tr>
<td></td>
<td>Answers should be subject to variation of trust (FM)</td>
</tr>
<tr>
<td></td>
<td>Trust can be interpreted in different ways (ZH)</td>
</tr>
<tr>
<td></td>
<td>Trust may not be clearly interpreted by consumers (SH)</td>
</tr>
<tr>
<td></td>
<td>Trust should be broken down into different categories (SH)</td>
</tr>
<tr>
<td></td>
<td>Vague meaning of trust, or unclassified trust could put the participant in confusion, this is might why it shows week relationship (BN)</td>
</tr>
<tr>
<td></td>
<td>Confusion about the definition of trust makes its interpretation different by different participants (BD)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>The effect of experience on the dynamics of trust</strong></th>
<th>Trust may be built after the action of purchase (ZH)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attitude is a strong predictor of SCI, but Trust won’t be an issue unless bad experience is encountered by consumers (SH)</td>
</tr>
</tbody>
</table>

| **Factors moderating the effect of trust** | High Security standards in a website establish good trust (IH) |
### The drivers of social commerce

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>High Security standards in a website assures consumers about Information privacy (IH)</td>
<td></td>
</tr>
<tr>
<td>Trust can be established through care and making consumers happy (IH)</td>
<td></td>
</tr>
<tr>
<td>Policy of refund is related to trust (IH)</td>
<td></td>
</tr>
<tr>
<td>Asking for feedback from the merchant establish trust (IH)</td>
<td></td>
</tr>
<tr>
<td>Security issues can be attributed to low trust on SC (BD)</td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX F: SUMMARY OF THE INTERVIEWS (EXPERTS)

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The status of E-WOM (Maroof) in SC</td>
<td>The need for electronic word of mouth</td>
<td>E-WOM is essential – It is used by the business (LK)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maroof has potentials – they should continue what are they doing but need a viral change (LK)</td>
</tr>
<tr>
<td></td>
<td>The impediments of using electronic work of mouth</td>
<td>The added value of Maroof is not yet known (MR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maroof act like an authentication agency only (MR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maroof is a directory of online stores in Saudi Arabia (MR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor promotion of Maroof hinders effective use of it (MR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low quantity of reviews is an impediment of use (MR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Register to view the comment – indication that processes are complicated (MR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maroof did the minimal only – worked like authenticating agency (AA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No clear criteria resulted in consumers’ no benefit to use (AA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seems that no effort has been made to make consumers engaged (AA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In some cases, could be the already established trust with SC website made Maroof useless (AA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maroof is not established yet! (LK)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maroof is not part of the gossip because nothing extraordinary has been done (LK)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The “so what” is not yet defined making it useless from an expert point of view (LK)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What is done by Maroof would be effective in the 80s not in today’s world (LK)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maroof works like an authenticating agency – its badge is used only like a to-do-list (LK)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bad execution of Maroof- worked like authenticating agency (MD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of awareness of Maroof (MD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unfamiliarity of Maroof (MD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low quantity of ratings and reviews (MD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The complicated process of using Maroof (MD)</td>
</tr>
</tbody>
</table>
## The drivers of social commerce

<table>
<thead>
<tr>
<th>Factors leading to better use of electronic work of mouth</th>
<th>Making clear objectives and goals (MR)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Better promotion of Maroof (MR)</td>
</tr>
<tr>
<td></td>
<td>Redefine objectives in a clear way that add value to Maroof and make consumers engage (AA)</td>
</tr>
<tr>
<td></td>
<td>Being a platform that is specifically directed to reviewing specific industry may increase consumers’ engagement (AA)</td>
</tr>
<tr>
<td></td>
<td>Continuously evaluate businesses and require them to update their current status – exclude those who are no longer active in business (AA)</td>
</tr>
<tr>
<td></td>
<td>A change that makes Maroof goes viral must happen that could lead to a better use of Maroof – wowing the users (LK)</td>
</tr>
<tr>
<td></td>
<td>Doing authoritative actions will make people use Maroof better (LK)</td>
</tr>
<tr>
<td></td>
<td>Meet the expectation of the people in the real world (LK)</td>
</tr>
<tr>
<td></td>
<td>Use badge with embedded rating (MD)</td>
</tr>
</tbody>
</table>

### The status of subjective norms in SC

<table>
<thead>
<tr>
<th>Factors hindering the influence of subjective norms</th>
<th>SN would affect the actions shown in the environment – SN effect doesn’t apply on SC (Shopping vs wedding) (MR)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Social Influence is now considered from Social media influencers (MR)</td>
</tr>
<tr>
<td></td>
<td>The effect of individualism + moving away from traditions (LK)</td>
</tr>
<tr>
<td></td>
<td>Innovativeness and uniqueness are decrease the effect of SN (LK)</td>
</tr>
<tr>
<td></td>
<td>Dreams of being individual and different contradicts with SN (LK)</td>
</tr>
</tbody>
</table>

### Moderators of the effect of subjective norms

<table>
<thead>
<tr>
<th>Social media influencers campaigns lead to a website going viral – everyone is aware - SN now impact as people don’t want to feel they missed out (MR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive attitude, motivation and desire increase the impact of SN on SCI (AA)</td>
</tr>
<tr>
<td>Minds are, however, still hostage to social media influencers (LK)</td>
</tr>
</tbody>
</table>
### The drivers of social commerce

<table>
<thead>
<tr>
<th>The status of trust in social commerce</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The unspecified meaning of trust</td>
<td>The real effect is sourced from social media influencers which make effect on closed environment (MD)</td>
</tr>
<tr>
<td>Trust is a very broad concept (MR)</td>
<td>Trust should be defined in a more specific way (AA)</td>
</tr>
<tr>
<td>The effect of experience on the dynamics of trust</td>
<td>Habit and experience made trust less important as online shopping becomes frequent norm (MD)</td>
</tr>
<tr>
<td>Factors moderating the effect of trust</td>
<td>Cash on delivery is making trust less important (MR)</td>
</tr>
<tr>
<td>Trust is very important in the moms industry – industry type affect the level of trust (LK)</td>
<td>No trust issues perceived when payment on delivery is an option (MD)</td>
</tr>
</tbody>
</table>
APPENDIX G: POPULATION IN SAUDI ARABIA BY GENDER AND AGE GROUP

Population & Demography

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Total</th>
<th>Female</th>
<th>Male</th>
<th>Saudi</th>
<th>Female</th>
<th>Male</th>
<th>Non-Saudi</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>2,788,931</td>
<td>1,367,544</td>
<td>1,421,387</td>
<td>298,128</td>
<td>2,077,790</td>
<td>1,084,529</td>
<td>1,123,261</td>
<td>0-4</td>
<td></td>
</tr>
<tr>
<td>5-9</td>
<td>2,536,312</td>
<td>1,246,253</td>
<td>1,290,059</td>
<td>310,548</td>
<td>1,932,211</td>
<td>952,700</td>
<td>979,511</td>
<td>5-9</td>
<td></td>
</tr>
<tr>
<td>10-14</td>
<td>2,312,755</td>
<td>1,132,037</td>
<td>1,180,718</td>
<td>254,562</td>
<td>1,821,002</td>
<td>894,846</td>
<td>926,156</td>
<td>10-14</td>
<td></td>
</tr>
<tr>
<td>15-19</td>
<td>2,576,498</td>
<td>1,203,773</td>
<td>1,372,725</td>
<td>300,596</td>
<td>2,052,314</td>
<td>980,185</td>
<td>1,072,129</td>
<td>15-19</td>
<td></td>
</tr>
<tr>
<td>20-24</td>
<td>3,189,330</td>
<td>1,428,320</td>
<td>1,761,010</td>
<td>764,993</td>
<td>1,971,269</td>
<td>975,252</td>
<td>996,017</td>
<td>20-24</td>
<td></td>
</tr>
<tr>
<td>25-29</td>
<td>3,230,441</td>
<td>1,332,414</td>
<td>1,898,027</td>
<td>1,001,237</td>
<td>1,778,751</td>
<td>881,961</td>
<td>896,790</td>
<td>25-29</td>
<td></td>
</tr>
<tr>
<td>30-34</td>
<td>3,223,846</td>
<td>1,169,310</td>
<td>1,580,928</td>
<td>1,916,771</td>
<td>1,307,085</td>
<td>614,244</td>
<td>665,841</td>
<td>30-34</td>
<td></td>
</tr>
<tr>
<td>35-39</td>
<td>2,393,995</td>
<td>813,067</td>
<td>1,580,928</td>
<td>1,307,085</td>
<td>1,089,089</td>
<td>529,550</td>
<td>559,539</td>
<td>35-39</td>
<td></td>
</tr>
<tr>
<td>40-44</td>
<td>1,670,297</td>
<td>528,518</td>
<td>1,141,779</td>
<td>579,037</td>
<td>1,155,396</td>
<td>678,617</td>
<td>776,977</td>
<td>40-44</td>
<td></td>
</tr>
<tr>
<td>45-49</td>
<td>1,153,989</td>
<td>802,098</td>
<td>351,891</td>
<td>1,179,398</td>
<td>396,247</td>
<td>743,151</td>
<td>788,173</td>
<td>45-49</td>
<td></td>
</tr>
<tr>
<td>50-54</td>
<td>760,864</td>
<td>285,780</td>
<td>475,084</td>
<td>488,494</td>
<td>488,089</td>
<td>235,932</td>
<td>252,157</td>
<td>50-54</td>
<td></td>
</tr>
<tr>
<td>55-64</td>
<td>1,075,852</td>
<td>307,959</td>
<td>767,893</td>
<td>62,350</td>
<td>142,340</td>
<td>871,162</td>
<td>445,609</td>
<td>425,553</td>
<td>65-69</td>
</tr>
<tr>
<td>65+</td>
<td>33,413,660</td>
<td>14,172,704</td>
<td>19,240,956</td>
<td>12,645,033</td>
<td>3,979,972</td>
<td>8,665,061</td>
<td>20,768,627</td>
<td>10,192,732</td>
<td>10,575,895</td>
</tr>
</tbody>
</table>

Source: The General Authority for Statistics (GASStat)

Credit: اعتماد الهيئة العامة للإحصاء

Preliminary estimates the middle of the year based on demographic survey 2016.