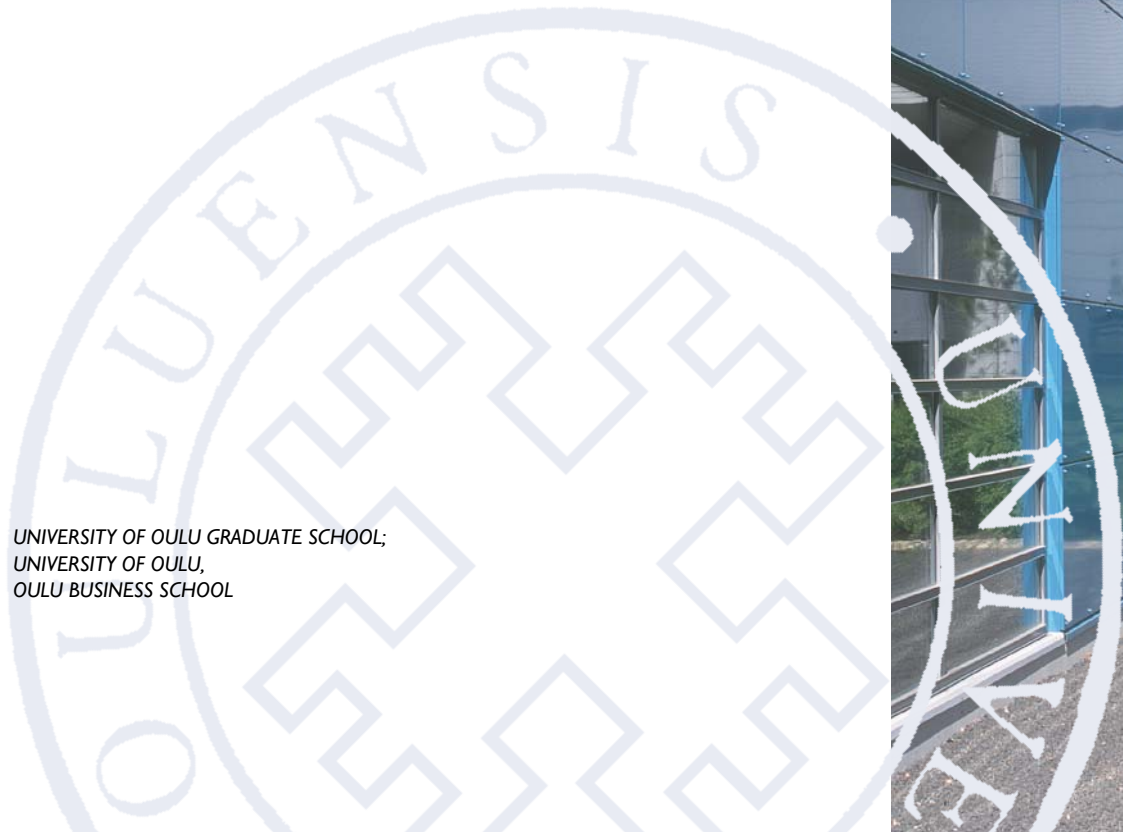


Waqar Nadeem

EXAMINING CONSUMERS'
ACCEPTANCE OF SOCIAL
COMMERCE IN CLOTHING
E-RETAIL

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UNIVERSITY OF OULU,
OULU BUSINESS SCHOOL

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WAQAR NADEEM

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Abstract

Social commerce is an emerging phenomenon and consumers' acceptance of it has set a challenge for marketing today. The proliferation of Web 2.0 technologies has brought consumers to spend most of the time online at different platforms of social media to connect with their family and friends. These mere connectivity, entertainment, and socialization platforms possess a huge potential to drive businesses. The main premise here is that social networking sites have been tremendously popular, especially Facebook, which has led to more integration of consumers and retailers. Consumers, unintentionally or subconsciously, are coming across information about their preferred brands at Facebook and their decision making is influenced through this.

In this regard, a study is required that examines consumers' acceptance behavior in social commerce settings. This dissertation contributes to the existing knowledge of the new phenomenon of social commerce in marketing literature. It highlights the consumers' aspects of the acceptance of social commerce and contributes to the theoretical discussions on three levels: (i) it provides a general framework for engaging consumers online through traditional means (e-commerce) and new means (social commerce); (ii) it identifies the various consumer segments present at the most popular social networking site, Facebook; and finally (iii) it extends the recently devised model—the unified theory of acceptance and use of technology (UTAUT2)—with constructs such as trust, perceived security, and perceived privacy in order to identify consumers' trust in the new stream of social commerce.

The main aim of this study is to understand consumers' acceptance of social commerce empirically, in a way that enlightens the theoretical implications and enables managers to devise strategies accordingly in this new age of social commerce. To this end, data has been collected from three countries—Italy, Pakistan, and Australia—in order to have a diverse perspective on consumers around the world. The data comes from consumers who participate in social commerce and whose shopping decisions are influenced by Facebook. As social commerce is a rather new and unstructured phenomenon, this dissertation focused on the consumers' perspective and the most popular social networking site, Facebook, thus providing a baseline theoretical model of further research with different categories, target audiences, and constructs.

Keywords: behavior, consumers, engagement, Facebook, privacy, social commerce, trust, Web 2.0

Nadeem, Waqar, Tutkimus kuluttajien sosiaalisen kaupankäynnin hyväksynnästä vaatteiden verkkokaupassa.

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Tiivistelmä

Sosiaalinen kaupankäynti on nouseva ilmiö, ja kuluttajien hyväksyntä sitä kohtaan herättää haasteen nykypäivän markkinoinnille. Web 2.0-teknologioiden määrän räjähdysmäinen kasvu on saanut kuluttajat viettämään suurimman osan ajastaan sosiaalisen median eri alustoilla. Yhteydenpidon, viihteen sekä sosiaalisen kanssakäymisen alustat pitävät hallussaan valtavan liiketoimintapotentiaalin. Sosiaalisten yhteisöpalveluiden, etenkin Facebookin äärimmäinen suosio on johtanut integraatioon kuluttajien ja vähittäiskaupan välillä. Facebookissa kuluttajat, tietoisesti tai alitajuisesti, törmäävät informaatioon suosikkibrändeistään, mikä vaikuttaa heidän päätöksentekoonsa.

Näin ollen on muodostunut tarve tutkia kuluttajien hyväksyntäkäyttäytymistä sosiaalisen kaupankäynnin kontekstissa. Tämä tutkielma edistää olemassa olevaa tietämystä sosiaalisen kaupankäynnin ilmiöstä markkinoinnin kirjallisuudessa. Se korostaa kuluttajanäkökulmaa sosiaalisen kaupankäynnin hyväksynnässä sekä osallistuu akateemiseen keskusteluun kolmella tasolla: i) tarjoamalla yleisen viitekehyksen kuluttajien sitouttamiseksi verkossa sekä perinteisin (verkkokaupankäynti) että uusin (sosiaalinen kaupankäynti) keinoin, ii) tunnistamalla tämän hetken suosituimman yhteisöpalvelu Facebookin erilaiset kuluttajasegmentit sekä iii) laajentamalla äskettäin laadittua yhtenäistä teorianallia teknologian hyväksynnästä sekä käytöstä (UTAUT2), joka pyrkii tunnistamaan kuluttajien luottamusta sosiaaliseen kaupankäyntiin muun muassa luottamuksen ja koetun turvallisuuden sekä yksityisyyden rakenteiden kautta.

Tutkimuksen pääasiallinen tavoite on saavuttaa ymmärrystä kuluttajien sosiaalisen kaupankäynnin hyväksynnästä empiirisesti, valaisten teoreettisia johtopäätöksiä sekä edistäen liikkeenjohdon mahdollisuuksia asianmukaisten strategioiden laadintaan sosiaalisen kaupankäynnin aikakaudella. Tähän mennessä aineistoa on kerätty kolmesta maasta – Italiasta, Pakistanista ja Australiasta – monimuotoisen ja maailmanlaajuisen kuluttajaperspektiivin saavuttamiseksi. Data on kerätty sosiaaliseen kaupankäyntiin osallistuvilta kuluttajilta, joiden ostopäätökseen Facebook vaikuttaa. Sosiaalisen kaupankäynnin ollessa vielä suhteellisen uusi ja epämuodollinen ilmiö, tämä kuluttajanäkökulmaan suosituimmassa sosiaalisessa yhteisöpalvelussa Facebookissa keskittyvä tutkielma tarjoaa jatkotutkimuksia varten perustan teoreettiselle mallille eri kategorioineen, kohdeyleisöineen sekä rakenteineen.

Asiasanat: Facebook, kuluttajat, käyttäytyminen, luottamus, sitouttaminen, sosiaalinen kaupankäynti, Web 2.0, yksityisyys

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Some wise man said; *you can romanticize with the struggles in the hindsight, not when you are present in them.* It has been some journey for me since the past four years when I started my PhD at the end of spring quarter of year 2012. I never imagined that I would decide to pursue my PhD at a place so different than where I come from and survive for the whole duration. I have seen many transitions during this period of time and have come across many challenges. But as they say, *it is not the strongest or the most intelligent who will survive but those who can best manage change.* It wasn't easy for me at all, but I'm grateful and thankful to so many people who played a crucial role in making this journey worthwhile.

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The sun shines bright again..... May, 2016
Waqar Nadeem

Original publications

This thesis is based on the introductory chapters and the following research papers:

- I Nadeem W, Andreini D, Salo J & Laukkanen T (2015) Engaging consumers online through websites and social media: A gender study of Generation Y Italian clothing consumers. *International Journal of Information Management* 35(4): 432–442.
- II Nadeem W, Juntunen M & Juntunen J (2016) Consumer segments in social commerce: A latent class approach. Manuscript.
- III Nadeem W, Cripps H & Salo J (2016) Consumers' acceptance of social commerce: Examining the role of trust, perceived security and perceived privacy in clothing e-tail settings. Manuscript.

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1 Introduction

1.1 The importance of the topic

Consumers are relying on the Internet not only for seeking out information related to goods and services but also for purchasing them, and more people are coming to social networking sites for the same purpose (Gatautis & Medziausiene 2014). In this era, the terms *social media*, *social networking sites* (SNS), and *Web 2.0 technologies* are interchangeably used (Iriberry & Leroy 2009, Parameswaran & Whinston 2007, Berthon *et al.* 2012). In this age, the new form of electronic commerce (e-commerce) is social commerce (Kim & Park 2013) as it supports social interaction and consumers' contribution related to buying and selling products and services (Shen & Eder 2012). There are many definitions of social commerce available in the relevant literature and, based on the extant literature, the present author defines social commerce as “*an activity that harnesses Web 2.0 technologies / social media that supports sellers and buyers to interact, engage, collaborate, and create value that eventually leads to the intentions or actual decision making to shop for or acquire information about products and services.*” The term *social commerce* has a tendency to be explained from different academic disciplines, such as retailing (Constantinides *et al.* 2008), marketing (Parise & Guinan 2008), computer sciences (Lee *et al.* 2008), psychology (Wigand *et al.* 2008), and sociology (Kim & Srivastava 2007).

With regards to the paradigm of marketing, the focus of e-commerce is on maximizing shopping efficiency by providing product catalogues, advanced searches, product recommendations, and one-click buying (Huang & Benyoucef 2015). However the primary focus of social commerce in the marketing paradigm is on socializing, networking, and collaborating—social activities (such as sharing) with a secondary focus on shopping (Huang & Benyoucef 2013). Moreover, in the marketing domain the phenomenon of social commerce has been introduced previously (Constantinides *et al.* 2008, Parise & Guinan 2008). Broadly the features of social commerce comprise of forums and communities, consumer ratings and reviews, consumers recommendations and referrals, social advertising and social applications, and social media optimization and social shopping tools (Qiu & Benbasat 2009). Moreover, social commerce is evolving in a way that it will provide a platform that unifies all features and functions, enabling consumers to

connect with online communities by relying on social networking sites (Shen & Eder 2012).

Furthermore, Zhang *et al.* (2013) argue that more consumers are relying on social networking sites as a source of information about companies, products, services, and brands as social media platforms have become readily accessible. E-tailers wish to take full advantage of this rising phenomenon. Several authors argue that following the success of social networking sites, social commerce will become mainstream (Khan & Sadiq 2015, Liang & Turban 2011, Marsden 2010, Stephen & Toubia 2010) and value will be co-created with companies (Wang & Hajli 2014) as it is becoming essential for the businesses to have a presence on social networking sites. Moreover, the retailing landscape is being significantly altered at a rapid rate because of social networking sites. Businesses have better outreach to their consumers now as the big social networking platforms possess huge populations of consumers that are easily accessible. E-tailing is the component of e-commerce that is “*a retail channel where products and services are offered for sale to the customers through the Internet*” (Weitz & Levy 2012).

In their study, Yadav *et al.* (2013) discuss how social commerce involves exchange related activities and is not only limited to transactions. Also, the exchange related activities appear in both online and offline contexts. To broaden this concept further, Yadav *et al.* (2013) argue that social commerce specifies the activities in which consumers engage themselves before, during, and after the transaction while the respective companies facilitate these activities. The notion of exchange between two entities (a reciprocal relationship) prevails as the foundational concept in the discipline of marketing (Bagozzi 1975). Earlier research by Friedman and Fireworker (1977) has indicated that consumer behavior is influenced by other consumers with regards to alternative evaluations, choice, and information seeking. In this regard, social networking sites provide a common space for consumers to leverage their decision-making process.

Gillin (2007) revealed that social media is a new phenomenon that has become the new source of consumers' empowerment, influence, and creativity; this consumer empowerment is making the old style of marketing and traditional media constantly lose ground as the influencers of consumer behavior (Constantinides *et al.* 2008). Moreover, the most important innovation in the field of marketing is arguably the advent of the Internet (Bhatnagar & Ghose 2004). A recent study by Duggan and Brenner (2013) has revealed that 89% of Internet users spend almost three hours daily at the social networking site Facebook in order to connect and communicate with friends. Within the same study almost 76% of the respondents

(Internet users) revealed that, for the sake of acquiring information about products and services, they spend around four hours on social media. Various academic researchers from the disciplines of psychology (Kim & Eastin 2011, Peterson & Merino 2003), information systems (Lee *et al.* 2011, Niu & Hemminger 2012), sociology (Cole 2011), and marketing (Grant *et al.* 2007, Jepsen 2007) have studied the effects of consumer behavior online and how it differs from the offline environment. Also it has been argued that the phenomenon of social commerce is multi-disciplinary (Huang & Benyoucef 2013).

According to Marsden (2010), social media will become the key factor in user- and community-generated content, which is the new face of marketing. Further, Nutley (2010) revealed that social commerce is a form of social media that allows people to sell services and products, and participate in marketing in online communities and marketplaces, especially through social networking sites.

Social networking sites are gaining a huge reputation worldwide and, to tap into the potential of these technologies for e-commerce, companies are trying to identify ways to combine the power of social networking sites and e-commerce for new business opportunities (Shen & Eder 2012). As past reports have also suggested, there is a rise in the trend of companies having advertisements and retail pages on Facebook in order to attract the online social network users, along with their friends (Needleman 2010). Facebook has huge potential in being the most popular social networking site and more companies are deploying Facebook in their marketing and business strategies. Moreover, the retail sales driven by social media are the fastest growing if compared to any other online counterpart. According to a report by Internet Retailer (2015) the top 500 retailers earned \$3.3 billion in 2014 from social shopping, a 26% rise from the previous year. Further, a report by Business Insider (2015) revealed that social media is leading retail sales with a bigger leap than any other online medium. Out of social media platforms, Facebook is the most dominant social commerce platform, accounting for 64% of the total social revenue. Most of the social commerce sales are found in the US; however, in other parts of the world it is still accelerating. Recent research conducted in Latin America (comprising countries such as Mexico, Brazil, Colombia, and Argentina) revealed that 42% of the shoppers start their research online but do the actual purchase in store. In contrast, 21% of the shoppers found the product in a store and then went online to purchase it. The report has argued that the path to purchase is not linear anymore. For the sake of making informed decisions, consumers smoothly toggle between screens and blend the digital and physical touch points in their journey to purchasing an item (Facebook IQ 2015).

With recent, promising statistical figures, one out of seven people on earth are using the largest social networking site, Facebook (Facebook News 2015b). Therefore, these statistics show the potential in the world of social commerce. The *social commerce* term was introduced in 2005 by Yahoo and O'Reilly, which underlined that social commerce, is a subset of e-commerce (O'Reilly 2005). As social commerce is regarded as a subset of e-commerce, it is usually associated with technology use by consumers and e-tailers, accordingly there are various theories that try to determine social consumers' acceptance. The way business is being done is fundamentally changed by social media; for instance, the way retailers incorporate Web 2.0 technologies as a means of driving consumers into the stores, rather than as a primary tool for shoppers to make instant purchases (Joel 2012).

Many researchers and practitioners would argue that Facebook is a platform that connects and is not primarily a platform for shopping; we are still a far cry from a proper transaction platform. Stephen and Toubia (2010) have highlighted that very little is known about the economic value produced by social networking sites in retailing and marketing contexts. The total online sales might comprise of the small portion of sales driven through social media, however, with the unprecedented growth of social media and social networking sites, Facebook phenomenon will be huge in online retail (Business Insider 2015).

The key challenge for companies is to deploy Facebook for commerce or sales, rather than deploying it as an entertainment, socializing, and mere content environment (its use as seen by the consumers) (Gatautis & Medziausiene 2014). Previous studies on the e-commerce context have addressed how consumers can become buyers from merely visiting a website (Schlosser *et al.* 2006), and further research has argued that searchers are better persuaded by product information on websites as compared to non-visitors and similarly searchers have a higher visitor-to-buyer ratio. In the present age, where there is abundant information available, it is vital for marketing managers to make their consumers come across information that is most relevant and useful. This very purpose is served by social networking sites. Moreover, various authors have argued that the consumer aspect in social commerce is very important as it is related to the involvement of other consumers, which supports purchase decision making (Curty & Zhang 2011, Curty & Zhang 2013).

Although Facebook has been accepted as an entertainment, socialization, and connectivity platform, its acceptance as a commercial platform is still under a big question mark and evidence is still inconclusive regarding whether social

networking platforms play a part in increasing sales (Shen 2013). Despite the fact that marketing scholars have paid attention to the phenomenon of social media in recent years, very little is known regarding social media's role in supporting sales, influencing transactions, or possibly serving as a selling platform (Yadav *et al.* 2013).

The new content generators are consumers themselves, due to their use of new technologies on the Internet (Phillips 2011), and the popularity of social networking sites has grown rapidly in recent years (Cachia *et al.* 2007, Hajli & Lin 2015, Lu & Hsiao 2010). There is an urge for examining new issues and theoretical developments in the domain of Web 2.0 / social media, and social commerce, and these issues which are going to be the most challenging topics in the area of marketing research and information systems (IS) (Liang & Turban 2011).

Technology acceptance and e-commerce have diverse backgrounds and have been researched over time; however, the new phenomenon of social commerce needs further theoretical development through more empirical evidence. For instance, in their bibliometric study, Zhou *et al.* (2013) found that the majority (43 out of 78) of the publications related to social commerce appeared in industry magazines rather than in scientific academic journals or presented at conferences, and the notion of lack of research on social commerce is also confirmed by Zhang and Wang (2012). Further, Hajli *et al.* (2015) argued that online communities or fan pages are expanding through Web 2.0 technologies such as Trip Advisor or Facebook, yet theory-driven empirical research examining the adoption issues from a social and behavioral perspective is insufficient in the field of marketing and information systems. Many studies have emphasized that the role of social commerce needs to be explored further (Constantinides & Fountain 2008, Huang & Benyoucef 2013, Nadeem *et al.* 2015) as it possesses huge potential to alter the e-commerce scenario.

Moreover, since the term gained popularity in year 2005, practice has driven it more than research (Wang & Zhang 2012), and previous studies have focused on either describing or defining social commerce (Stephen & Toubia 2010). Studies related to (UTAUT) have focused on peer support (Sykes *et al.* 2009), online social support (Lin & Anol 2008), and perceived playfulness (Wang *et al.* 2009). Studies related to Facebook have focused on investigating the consumers' motivations for using Facebook (Joinson 2008, Raacke & Bonds-Raacke 2008), social networking sites usage patterns, and their effects on the users' behavior (Ellison 2007).

However, research related to consumers' acceptance of social commerce is still at in its infancy, especially in the marketing literature. Along the same lines,

previous studies related to social commerce have focused on the acceptance of social shopping websites (Cha 2009), social support and the relation of quality impact to social commerce (Liang *et al.* 2011), and social commerce constructs (Hajli 2015). Whereas very few studies focused on technology acceptance and consumer behavior in the context of social commerce, incorporating theoretical models—such as the theory of reasoned action (TRA) (Kim & Park 2013), the theory of planned behavior (TPB) (Hajli *et al.* 2015), the technology acceptance model (TAM) (Hajli & Lin 2015, Rauniar *et al.* 2014)—has been over-studied and overused (Bagozzi 2007). This study incorporates the recently devised second version of UTAUT, (UTAUT2) (Venkatesh *et al.* 2012), which has outperformed all previous TAMs (more about the models in subsection 3.2.1). Research related to social commerce and Web 2.0 / social media evokes a demand for new theories that will be the most challenging topics in marketing research (Liang & Turban 2011) and especially come under the domain of digital marketing. In particular, studying social commerce is a key agenda for the marketing discipline (Hajli 2014a). In both the fields of IS and marketing, researchers strive to understand consumer behavior, now especially with regards to social networking sites whose core is technology yet they are the biggest marketing tools for companies. Hajli (2013) signifies that information and communication technology has an influence on online consumer behavior, therefore the IS discipline serves as the reference discipline for studying consumers' behavior. Moreover Kollat *et al.* (1970) argued that the need for studying consumer behavior as dynamic ongoing process has been recognized. However, with the rise of Web 2.0, more attention will be paid to such topics, with regards to studying online consumer behavior, in the marketing discipline as well (Hajli 2013).

Our empirical validation of the model (in Study 2 and 3) showed the most important constructs that influence behavioral intention. Also, it is not only the technological factors that drive social commerce; the main determinant is how consumers engage with social commerce and to what degree they trust the whole phenomenon. This poses a great challenge to social commerce; the need to identify not only the technological factors but also the constructs that make social commerce tick for consumers. Having an insight into these constructs will lead marketers to devise business strategies by accordingly strengthening business relationships, identifying new business opportunities, increasing traffic to companies' websites, supporting product and brand development (Michaelidou *et al.* 2011), and making the most out of the online social capital present in social networking sites. Social commerce research is an emerging phenomenon in the e-

commerce area and to date the theoretical information about this growing phenomenon is lacking (Hajli & Lin 2015) as research is more driven by practice (Wang & Zhang 2012, Zhou *et al.* 2013). We pilot the concept of social commerce on Facebook (a website that influences the phenomena of buying and selling) as it has been done before (Hajli & Sims 2015).

Maclaran (2009) reveals that the marketing discipline is a “magpie” as it incorporates knowledge and theories from other disciplines. Similarly, retailing is a synthesis of cross-borrowing from the social sciences discipline mainly and does not possess its own theoretical base (Dawson & Sparks 2010). Within the discipline of marketing, some of the core functional areas are marketing communications, international marketing, and consumer behavior (Williams 2014). Further, Meyer (2013) argues that the marketing discipline risks being too abstract to be applied as the basic discipline and practically useful too. Therefore, this study eventually tests the emerging phenomenon of social commerce for the applicability of previous findings in the marketing discipline (Williams 2014). Studying social commerce can play a vital role in sequencing and theorizing knowledge generation. Arnould (2007) has further argued that, in marketing scholastic research, a deeper understanding of consumption patterns can come from studying the consumers’ shift to becoming “socialized value creators.” Maturing e-tail research (Grewal *et al.* 2004) also solicits more integrative research with emerging phenomena—such as social commerce—as it cuts through many marketing practices and various academic disciplines (Williams 2014). Even consumer behavior has been studied in various disciplines, such as social science, psychology, marketing, and even social science (Afrasiabi Rad & Benyoucef 2011).

Taylor and Strutton (2010) discuss that the marketing academics who are unfamiliar with the literature reviews related to e-commerce in the information systems field will actually be surprised to know about the frequency of marketing related studies in IS and management literature, where the focus is mainly on business rather than technical issues (Holland *et al.* 2013). The roots of social commerce come from technology but it has a tendency to drive marketing theory itself (Dholakia *et al.* 2010). Moreover, Corley *et al.* (2013) highlight that future empirical research on social commerce can employ cross-disciplinary research teams to build the multi-theoretical approaches for the sake of knowledge generation (Cayla & Arnould 2013). The conceptual foundations of contemporary marketing and the status quo of marketing practice are specifically being reframed by social media (Firat & Dholakia 2006) and this scholastic work on this new agenda will become more relevant for marketing academics (Reibstein *et al.* 2009).

Especially in the field of marketing, social commerce has brought a noticeable shift in online marketplaces, where Web 2.0 / social media is harnessed and leveraged as a direct marketing tool that facilitates and influences consumer behavior and the purchase decision-making process (Constantinides & Fountain 2008).

This study has three-fold academic relevance to the marketing field. Firstly, the study provides insights into various theoretical models—originating from psychology, information systems, and marketing—that are used to construct individual theoretical models in order to explain consumer behavior. Secondly, this study revisits the finite mixture structural equation modeling (FMSEM) technique (see Study 2) that has been understudied in marketing literature. Thirdly, in this study consumers' acceptance of social commerce is examined when as an emerging phenomenon, still lacking research in marketing literature, and it thus contributes to the advancement of digital marketing literature. There is an overlap between the marketing and information systems fields as Pavlou and Fygenson (2006) (while describing e-commerce) previously stated that, e-commerce's adoption involves IT acceptance and use in a setting where technology adoption with marketing elements is combined with each other, thus distinct theorization with information systems literature is required. Keeping this notion in view, social commerce is a subset of e-commerce and therefore our study contributes to the knowledge advancement in both the marketing and IS disciplines.

With Fortune 500 companies warmly embracing social media tools, social commerce might become the next big thing in the digital marketing arena (Barnes 2014) and requires more academic research. This timely study touches upon the role of digital and social media in gaining consumer insights (Marketing Science Institute 2015) which has the most pressing need to be examined. The value this study generates is significant to retailers, as well as to researchers from the marketing discipline as it bridges the gap between the existing business practices of retailers, it uncovers the potential of a new era of social commerce, and it provides significant theoretical implications. The figure below (Fig. 1) shows that online commerce, or e-commerce (including Facebook commerce or social commerce), is a subset of commerce.

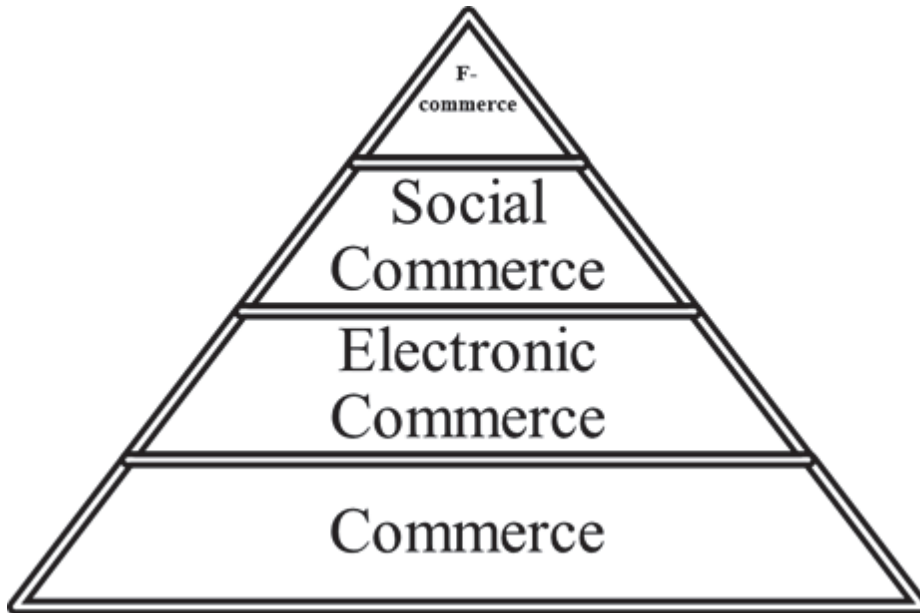


Fig. 1. The pyramid of evolution of commerce.

1.2 Research Background

In recent years, the media and retail landscape has witnessed a remarkable change. Over the span of one decade, social media has totally changed the outlook of consumers and retailers (Ngai *et al.* 2015). A new concept of social class is now defined that refers to more technological literacy, familiarity, and competence with computers and the Internet. Bernoff *et al.* (2008) mentioned in their study that 75% of the adults who use the Internet also use social media on a regular basis. Trusov *et al.* (2009) revealed that over a quarter of Internet traffic is represented by more than 90% of the teens and young adults studied, often called digital natives, especially on social networking sites such as Facebook or Myspace. Particularly under the umbrella of social media, social networking sites have become a common phenomenon and are a popular sensation nowadays. Social media refers to “*the websites and applications built on the technological and ideological foundations of Web 2.0 that enable its users to create and share content*” (Kaplan & Haenlein 2010). Whereas social networking sites can be defined as “*websites that enable the users to connect by creating profiles, adding personal information, inviting friends and colleagues to become a connection and sending instant messages to each other*”

(Kaplan & Haenlein 2010). Among the social networking sites, Facebook is the most popular platform in Western countries, having more than a billion people actively using it (Forbes 2013). Facebook is a growing phenomenon and possess huge popularity among younger people. Initially, Facebook allowed university students to create and maintain social ties amongst each other (Ellison 2007). It can be said that, Facebook is nowadays a platform that enables its users to do everything in one place, even if that refers to acquiring information, sharing opinions, and adding personal information including photos and “likings” for music, movies, and much more.

Consumers visit websites and search for products, which lead to different kinds of experiences at times. After deliberating their research on the website, consumers may talk about received products and related services with other consumers and their friends. These activities are usually exerted in social networking sites (Hui-Yi & Hung-Yuan 2010). Moreover, consumer cultures of consumption are impacted greatly by the implications of social networking sites (Beer & Burrows 2010). User-generated content and social networking sites have become legitimate as a transparent web system, paving the way for a trusted voice that resonates with the consumers. The marketplace has turned out differently; previously there was a lack of influence and a lack of information (Berry *et al.* 2010) but they are being replaced by the advancements of information technology and, specifically, by the effectiveness of social networking sites that lead to new endeavors of research. Also, the rise of social networks has brought a new light to the phenomenon of online shopping, especially in the clothing purchase context. A common platform like Facebook enables clothing e-tailers to promote their brand to huge numbers of potential consumers online with fewer costs.

Clothing companies like H&M, Calvin Klein, Hugo Boss, and other similar companies have a very large fan following (millions of fans from all around the world) on their Facebook pages and they keep on posting information about new clothing arrivals and events. Consumers, at times, actively show their interest in posting reviews about their favored items and other related information. Facebook is a platform that enables consumers to search for their preferred clothing brands, and follow up on the updates. Moreover, due to the interactivity of Facebook, consumers can freely post comments and view the opinions of other consumers. There has been a substantial change in the manner in which people and companies conduct themselves and communicate with each other.

The connectivity between people has been shaped up in a different way by social media platforms (Colliander & Dahlén 2011). Also, in their research, Tang

et al. (2012) specified that, besides participation, social media involves simple social communication; most of the companies' reputations and revenue generation also depends on social media. Traditional marketing media tended to be in the form of one-way communication, such as print and static websites; however social media has created a revolution in the shopping scenario (Pappas *et al.* 2014) by providing multi-directional and multi-channel communication (Pousttchi & Hufenbach 2014). The pervasiveness and ubiquity of online media, especially social networking sites, enables consumers to engage across multiple platforms, leading them to be ultimately unaware from which platform they are gathering the information for their prospective shopping decisions (Blázquez 2014).

There has been a tremendous rise in electronic shopping and academia has given special attention to e-commerce. With the advent of social media a decade ago, the phenomenon of e-commerce was merged with social commerce. Broadly, *social commerce* means how the act of buying and selling takes place through social media. Social media has provided the opportunity for consumers to choose between large numbers of alternatives. There is so much choice available now for consumers because of competitive pressures and rapid innovation. Usually, while shopping, consumers look for advice from important others, online sources, advertisements, and brochures, and somehow all of these sources have come along in the form of social media. Consumers can receive advice from their important others; all the choices are available to them. Consumers' can watch videos about the desired products online, get recommendations, and receive all the necessary information about the brand, which shows how commerce has evolved over time. Previously the role of consumer was passive, however, now that role is changing into a more active one in the whole shopping process and social media aids them in creating and sharing information (Trainor 2012). Social media has provided an unprecedented platform for consumers to obtain and share information freely.

Many retailers have embedded their online brand communities on third-party social networking sites, thereby enabling consumers to interact and co-create products and offerings. Of the social networking sites, Facebook has become the dominant social networking platform for both consumers and e-retailers; however sites such as Instagram and Pinterest are also gaining popularity with retailers (Pousttchi & Hufenbach 2014). Through channels such as fan pages on Facebook, retailers are enabling consumers to share their opinions about products and to search for desired products to purchase online or offline. The dynamic interaction provided by Facebook has created a platform for retailers to grow their potential customer pools through actively developing their fan pages (Kane *et al.* 2009).

Moreover, Kirkpatrick (2011) has described that Facebook, the most powerful distribution mechanism, is committed to creating new products for e-tailers. In addition to that, the social and community aspects of social networking sites are particularly important due to the three-way conversations between brands and community members, which enhance consumers' interest. Also, consumers are more likely to visit social networking sites that are dynamic and sociable, and that have regular updates (Rishika *et al.* 2013).

Various kinds of business have generated new kinds of business models with the help of social media that are revoking the traditional business models and the way companies used to operate before (Hanna *et al.* 2011). Several unique advantages are provided by social media: (i) it provides a level playing platform for big and small retailers to outreach their consumers; (ii) most of the young consumers' spend an adequate amount of time on social media and therefore it has become the common platform for retailers' to operate upon; (iii) consumers are able to communicate effectively with the respective sellers; (iv) retailers are able to outreach their consumers and potential consumers in the best possible manner; (v) plenty of product information is available to consumers and they can easily refer to the recommendations given by the other consumers and shape their decision making; and (vi) social media has reduced the costs of companies directly engaging with consumers (compared to traditional media).

Every small to big retailer has their presence on social media in one way or the other, for example, in the retail category of the Fortune 500 companies, 91% have a presence on Twitter, and 96% have a presence on Facebook (Barnes 2014). The rise of online shopping, has led to state-of-the-art websites that were giving only a one-sided perspective (for example, of the company) before social media. All the information, most of the time, came from companies, and consumers were actually not able to read between the lines. Social media has benefitted both the retailers and consumers. Retailers have been provided with an outreach to consumers and potential consumers.

Consumers are present on social media and spend plenty of time there. For example, consumers are present on platforms such as wikis, blogs, YouTube, and Twitter and spend a considerable amount of time there, which creates a huge leap for researchers to understand. In this study the focus is especially on Facebook, and some statistics reveal that Facebook is the most popular platform and it has seen much success. However, Facebook as a platform for commerce has stumbled many times. For instance, over the last decade, consumers have seen so many transient technologies and heard so many rosy promises made by marketers. But these

transient technologies—such as *t-commerce* (interactive television)—were only around for a short while (Shin 2013). Retailers also have to harness the power of social media in the right way. For instance, Facebook may not be providing enough functionality for retailers, which leads to little or no incentive for the consumers and e-tailers to be present there (Mashable 2012).

One example of the problems with commerce that Facebook encountered is when, in late 2007, Facebook attempted to link the browsing behavior of consumers with third-party ads, visible to consumers. Ultimately, Facebook had to shut down this advertising platform facing a lawsuit claiming that it violated consumers' privacy (Vascellaro 2009). In 2009, Facebook commerce was announced as retailers were allowed to open their storefronts—such as those by GAP and Nordstrom—but they had to shut it down in 2012 as consumers were there to socialize and not to shop (Miranda 2012). A previous study by IBM (2012) highlighted that, out of all of the sales that come from social networks on Black Friday, the percentage of consumers who were referred from social networks accounted for only 0.34%. Further, amongst some of the vital factors that can hinder social commerce from growing further are inappropriate recommendations and uninformed reviews (Briggs 2011), and issues related to the transactions, such as incorrect deliveries (Kim & Park 2013). As a result, the consumer might feel indifferent about the whole concept of social commerce. This does not necessarily mean that social commerce is dead on arrival; however, Yadav *et al.* (2013) have argued that more careful examination is required to identify the path from social interaction to purchase. Zhou *et al.* (2013) have highlighted that the best is yet to come from social commerce.

Gatautis and Medziasiene (2014) argued that social commerce is considered as the subset of e-commerce, as it is usually associated to technology use by the consumers, and various theories that explain technology acceptance are TRA (Fishbein & Ajzen 1977), the TPB (Ajzen 1991), TAM (Davis 1989), and UTAUT (Venkatesh *et al.* 2003). Based on the theoretical development of these theories, the most elaborated and recent theory is UTAUT2 (Venkatesh *et al.* 2012). The use of social technologies in commercial settings is associated with social commerce; therefore the acceptance of social commerce is linked to technology acceptance (Gatautis & Medziasiene 2014, Shen 2013).

Therefore, it is inferred that e-commerce has emerged mainly from information systems literature, and there is integration between the marketing discipline concepts and information technology adoption (Hajli & Lin 2015). Information systems can be used as a reference discipline in studying online consumer behavior

(Hajli & Lin 2015). In the information systems discipline, e-commerce has been well studied (Ba & Pavlou 2002, Pavlou & Dimoka 2006, Pavlou & Fygenson 2006). Although the literature is enriched with studies that relate to e-commerce's acceptance and information technology, newer theoretical frameworks are needed in order to study consumers in the new world of Web 2.0 and what can they bring to business strategies and practices (Hajli 2014b). As per Liang *et al.* (2011), social commerce has an influence on users' behavior in marketing literature. Mandal and McQueen (2012) reveal that the usage of Facebook in business terms is essential as a sales and marketing conduit. Social media and social commerce have become the key phenomena in e-commerce and marketing literature (Hajli 2014b). Stephen and Toubia (2010) argued that very little research has been conducted as to whether social networking sites provide some economic value in retailing and marketing contexts.

The premise here is that recent research regarding social commerce has taken into account theories—such as the TPB, TAM, and TRA (Hajli 2014a, Hajli 2013, Hajli & Lin 2015, Shen 2013, Shin 2013, Teh & Ahmed 2012)—either partially or fully, contributing to the knowledge field of social commerce. Along the same lines, the current study has incorporated UTAUT2 (in Study 2 and 3), which has outperformed and synthesized all the previous technology acceptance theories in order to understand the phenomenon of social commerce.

Cooke and Buckley (2008) indicated that consumers' acceptance of e-commerce has to be rethought due to the tremendous rise in social networking sites. Social commerce is rather a new topic and gathering lots of attention from industry and academia. And most of the time it is an intersection between the fields of marketing and information systems sciences.

1.3 Research Questions

Taking into account the rising stream of social commerce research, the main aim of the current study is to understand consumers' acceptance of social commerce. The current study has adapted the quantitative research approach to understand this phenomenon. It is assumed that there can be different factors that are predictors of consumer behavior in the new era of social commerce. The theoretical aim of the current study is to add to the new social commerce research by touching on the issue of consumers' acceptance of social commerce. Managerially, the current study aims to enable managers to identify the factors that contribute most to consumers' acceptance of social commerce and address the key issues that may

hinder consumers' acceptance. The phenomenon of interest becomes looking at social commerce to identify consumers' behavior, which lies at the core of the marketing discipline.

Despite all the hype of social commerce, the central question still remains: Do consumers accept commercial activities through social networking sites and what factors lead them to acceptance? Social commerce is a new phenomenon, it has attracted little research attention and has little theoretical basis (Hajli & Sims 2015, Zhang *et al.* 2014a). In addition to that, many authors argue that social commerce research is in its infancy (Hajli 2015, Liang & Turban 2011, Ngai *et al.* 2015). Therefore the primary question becomes the following:

RQ: How do consumers accept social commerce in clothing e-retail?

The sub-research questions are given as follows:

RQ1: How are consumers engaged in online commerce (e-commerce and social commerce)?

RQ2: What are the different types of consumer segments in social commerce?

RQ3: What factors lead to consumers' trust and acceptance in social commerce?

As social commerce is a subset of e-commerce (Kaplan & Haenlein 2010) it is important to examine consumers' engagement online both through companies' websites and social media. Consumer engagement refers to interactive and co-creative consumer experiences with the focal object/agent, leading to a particular psychological state (Brodie *et al.* 2011). In the e-commerce context, the term *acceptance* is used to refer to consumers' engagement in an electronic exchange relationship with retailers on the web (Pavlou 2003). In this study, the author predominantly targeted Generation Y consumers (born 1981–1999) therefore it is answered through the first research sub-question. The two phenomena of shopping through e-tailers' websites (e-commerce) and online shopping via Facebook (social commerce) have been merged in this study to examine their impact on consumers' behavior in the form of trust, attitude, and loyalty intentions in regard to e-tailers. This study has enabled the study of consumers' engagement online. The empirical inquiry is conducted as a quantitative study, which included an online survey. The first research sub-question (*How are consumers engaged in online commerce [e-commerce and social commerce]?*) is addressed by this research paper.

The second sub-research question (*What are the different types of consumer segments in social commerce?*) is proposed to identify the various consumer

segments in social commerce. The consumers present at social networking sites might not come from a homogenous group and data may lead to unobserved heterogeneity. Therefore the recently devised UTAUT2 model was employed to identify various consumer segments through their latent classes. An online survey has been conducted in order to identify the varying behavior of different consumer segments in various models.

For the third sub-research question (*What factors lead to consumers' trust and acceptance in social commerce?*) the main aim was to address the role of trust in social commerce with constructs such as perceived privacy and perceived security. Again, UTAUT2 was employed to identify the factors that contribute to consumers' acceptance of social commerce, and data was collected from the respondents whose shopping decisions are influenced through Facebook.

All three research papers play an individual role in highlighting the new phenomenon of social commerce. As an outcome, the three individual studies contribute to understanding the phenomenon of consumers' acceptance of social commerce. Data has been collected from different parts of the world, including both developing and developed countries, to gain a more enriched perspective of social commerce. The social commerce phenomenon has mostly been driven by practice (Wang & Zhang 2012); however, this study presents several theoretical underpinnings to add to the existing body of knowledge. Overall the author's contributions with each paper are given as follows in the table below (Table 1).

Table 1. Authors' contribution in papers.

Title	Authors contribution
Engaging Consumers Online Through Websites and Social Media: A Gender Study of Generation Y Clothing Consumers.	For Paper I, the main responsibility was of present author in conceptualizing, planning, writing the overall paper and developing the instrument (questionnaire) for data collection. However the data was collected and analyzed by another colleague and valuable insights have been given by other co-authors to improve the quality of the paper. The sub-research question R1 has been answered by Paper I.
Consumer Segments in Social Commerce: A Latent Class approach	In Paper II, present author had the main responsibility to conceptualize, plan, write the overall paper and develop questionnaire for collecting the data. The data was analyzed by other colleagues along with providing valuable insights and partial writing in the paper to improve the overall quality of the paper and sub-research question R2 has been answered by this research article.
Consumers acceptance of social commerce: Examining the role of trust, perceived security, perceived privacy in clothing e-retail settings	With regards to Paper III, present author was responsible for planning, conceptualizing, writing the overall paper and designing the questionnaire. Data has been collected with the help of co-author. However, present author is responsible of analyzing the data and sub-research question R3 has been answered by this research article.

By bringing the findings of these sub-research questions together the main research question (*How do consumers accept social commerce in clothing e-retail?*) is addressed. Data was collected by other colleagues, who also partially wrote the individual papers. All the answers to the research questions provided will enable an understanding of the theoretical underpinnings in the literature of social commerce as to how social commerce is being accepted and how to address this phenomenon further in the marketing domain. A loop is established to identify consumers' acceptance, from traditional e-commerce towards social commerce, which will help in understanding consumer behavior in a more enriched form with empirical evidence from various countries.

This thesis is based on two parts. Part I is designed to summarize all of the research papers, starting with chapter of the Introduction, followed by a literature review, research methodology and frameworks, an overview of the studies, and a final chapter of discussion, conclusion, implications, and future research. And Part

II comprises of the research papers. The structure is presented in the table below (Table 2).

Table 2. Overall structure of the dissertation.

Chapter	Part I
	Overall summary of the thesis
1	Introduction Importance of the topic, research background, research questions.
2	Literature review What are web 2.0 technologies and social networking sites? The shift from e-commerce to s-commerce. What is F-Commerce? Online shopping via Facebook with emphasis on developing country
3	Research methodology and frameworks Research design and methodology Theoretical models Data and procedure in individual papers.
4	Overview of studies Overview of Study 1: Engaging consumers online through websites and social media Overview of Study 2: Consumer segments in social commerce Overview of Study 3: Consumer acceptance of social commerce: Facilitating the role of trust
5	Conclusions Conclusion and answers to the research questions: How consumers are engaged in online commerce (e-commerce and social commerce?) What are the different types of consumer segments in social commerce? Do the consumers have trust in social commerce? What are the factors that influence consumers' acceptance of social commerce? Theoretical implications Practical implications Limitations and future research recommendations
	PART II
	Research papers Paper No.1 Engaging consumers online through websites and social media: A gender study of Italian Generation Y clothing consumers. Paper No.2 Consumer segments in social commerce: A latent class approach Paper No. 3 Consumers' acceptance of social commerce: Examining the role of trust, perceived security, perceived privacy in clothing e-retail settings.

2 Literature review

2.1 What are Web 2 .O technologies and social networking sites (SNSs)?

According to Constantinides and Fountain (2008) Web 2.O “*is the collection of open-source, user controlled and interactive online applications that expand the knowledge, experiences and market power of users as participants in social and business processes.*” These applications support the creation of informal user networks that facilitate the flow of knowledge and ideas by allowing the efficient editing, refining, dissemination, generation, and sharing of informational content. In addition to that, Web 2.O not only provides businesses with challenges but opportunities to interact or engage with consumers in a more direct manner and learns about their needs and experiences as well (Constantinides & Fountain 2008). Furthermore, O’Reilly (2005) revealed that Web 2.O is referred to as a network platform spanning all connected devices. Most of the intrinsic advantages of that platform are made by Web 2.O applications that deliver software on a continual basis with an updated service so that more people get to use it, consuming and mixing data from multiple sources that include individual users, who provide data that can be mixed by others by creating a network effect through an ‘architecture of participation’ and giving rich user experiences by going beyond the page metaphor of Web 1.O. Moreover, Web 1.O brought about static websites and connecting computers, making them more technology efficient. However, Web 2.O refers to the ‘architecture of participation’ (O’Reilly 2005), which is about making technology efficient for people and connecting them.

Further, Constantinides and Fountain (2008) divided Web 2.O into five main categories based on their classifications: (i) content (communities) are websites that organize and share a particular type of content: some examples of such communities are YouTube, Flickr, and Wikipedia; (ii) weblogs (blogs) are online journals that are one of the fastest growing categories; they are often combined with podcasts, which can be digital video or audio that can be downloaded or streamed on portable devices: one example is huffingtonpost.com; (iii) forums / bulletin boards are websites built for organizing and sharing a particular type of content, especially in the domain of special interests: examples are python.org, epinions.com; (iv) content aggregators are websites and applications that allow users to fully customize the type of web content they wish to access; two techniques

(rich site summary or real simple syndication [RSS]) are used to allow users to fulfill their customized requirements: an example is netvibes.com; (v) social networking sites are the most important of all the categories and these are websites that allow users to create a webpage where they can connect with other friends' webpages and companies, and that allows the exchange of personal content and communication: examples are Facebook, Google+, QQ, Renren, and Vkontakte.

In all of the above-given categories, users are the common entity and are the main contributors of content. Therefore, the term *user-generated content* is often related to Web 2.0 technologies (Constantinides & Fountain 2008). Earlier the websites / online communities were focused around topics and interests, whereas now social networking sites are more focused on people (Staples 2009). Consumers use Web 2.0 technologies / social media to share their knowledge and experience over the Internet (Pitta & Fowler 2005). Before the emergence of Web 2.0 technologies, online consumers did not have the advantage of sociability and actual human contact (Gefen *et al.* 2003) and the relationship between consumers and sellers had been impersonal and automated (Wang & Emurian 2005). However, the emergence of Web 2.0 technologies has changed the whole landscape of online shopping.

The main focus of this study is on the social networking sites as the growth and adoption of social networking sites are increasing at an exponential rate (Staples 2009). Offline social networks have existed since the beginning of time (Clemons *et al.* 2007). A group of people, who have interacted in the past, have some common interest or purpose, and keep up relationships with the group is known as a social network. These relationships can be short term or long term and are built upon the notion of trust (Clemons *et al.* 2007). With the rise of technology in the past decade, some of these offline social networks have come online (Staples 2009). There are various definitions of social networking sites, for example, Boyd and Ellison (2010) defined a social networking site as "*a web-based service that allows individuals to create a profile that is public or semi-public within a bounded system, determines other users with whom they will share a connection and finally view and transverse the connections made by themselves and others within that system.*" According to Lenhart and Madden (2007) social networking sites are web-based locations where a profile can be created by users and this lets the users connect with each other, which enables building and maintaining a personal network.

Social networking sites are the part of Web 2.0's evolution that has enabled people to connect and communicate freely via the web, resulting in some of the largest social networking platforms (examples are Facebook and LinkedIn).

Furthermore, in online settings individuals can maintain relationships as they like; for example, individuals can specify a certain level of access that others connected with them have to their profile. Similarly, users can be asked what level of access of information they want to share with companies when they use companies' applications. The main feature of social networking sites is that they provide a single point of access to various communication tools and enable individuals to create their digital identity (Staples 2009). Some of the features include, posting status on the website space called a wall, communicating through messenger service, and being able to make audio and video calls, write texts, comment on other walls, share and upload audio and video, to name a few. All these functionalities are provided by the social networking site (such as Facebook) that encourages participation and engages individuals to a maximum level.

Facebook was founded in 2004 as a college network but it quickly expanded from Harvard to Stanford, and then to Yale and within less than a year almost one million people became active on the social networking site. Facebook kept on expanding its network and during 2012 more than one billion people were active on Facebook, making it the biggest online social networking site, which means that every one in seven people on the earth have used Facebook to connect with their family and friends (Facebook News 2015b) and on June 30, 2015 there were 1.4 billion active monthly users.

2.2 The shift from e-commerce to social commerce

The major difference between social commerce and e-commerce is that social commerce focuses on social goals—such as information sharing, networking, and collaborating—with a secondary focus on shopping (Wang & Zhang 2012) while in e-commerce the primary focus is on shopping—such as one-click buying, strategies that enhance search patterns for buying, recommendations about past purchases by buyers, and virtual catalogs. Broadly it can be said that e-commerce and social commerce differ on the basis of the customer connection, system interaction, and business goals (Huang & Benyoucef 2013). Earlier, in e-commerce settings, consumers were independent from other customers while making a purchasing decision. However, with the rise of social commerce purchasing decisions has become more collaborative and connected in nature (Kim & Srivastava 2007). In addition to that, e-commerce systems provided one-way communication, with consumers' feedback rarely being shared by the companies or other consumers. However, social commerce has enabled consumers to express

themselves and share their experiences accordingly with companies and other consumers (Parise & Guinan 2008). The process of acquiring information about products and services is the equivalent to window shopping (Gefen & Straub 2000). It has been suggested by Pavlou and Fygenon (2006) that the two main aspects of online consumer behavior are purchasing intentions and information acquisition, and before making any purchasing decision, acquiring product information is the main component of online activity (Gefen & Straub 2000, Pavlou & Fygenon 2006). This acquired product information is the main enabler in making decisions about purchasing the product or service. With the advancements in technology—specifically Web 2.0 technologies—consumers have more access to the relevant product information (Huang & Benyoucef 2013), and as per Hajli and Lin (2015), social networking sites provide a host of opportunities and platforms for consumers to have communication with other consumers before making a purchase. This interconnectivity between consumers and social communication through social networking sites developed e-commerce into social commerce (Liang *et al.* 2011).

The major shift from e-commerce to social commerce is because of the rapid development of Web 2.0 technologies / social media that has transformed the landscape of e-commerce by leveraging it from a product-oriented medium to a more social and customer-centric environment (Wigand *et al.* 2008). According to Kaplan and Haenlein (2010), Web 2.0 technologies refer to the platforms that harness collective intelligence. Within such a platform consumers have the tendency to share their experiences with others and have access to the social knowledge provided by others that influences them to make informed and better purchasing decisions (Dennis *et al.* 2009). The social knowledge provided by consumers on such platforms enable companies to harness this knowledge to develop successful business strategies (Constantinides & Fountain 2008). Therefore, Web 2.0 platforms provide mutual advantages to both consumers and companies, and almost all of the successful e-commerce platforms provide social functions to aid their consumers and enhance participation, along with the consumer engagement (Kim & Srivastava 2007) that eventually help companies to achieve greater economic value (Parise & Guinan 2008). Kim and Srivastava (2007) have indicated that social commerce is all about utilizing Web 2.0 in an e-commerce environment.

The fundamental features of Web 2.0 are user-generated content and platforms that enable the sharing of user-generated content (Huang & Benyoucef 2013). Business transactions and the reliability of the reputations of businesses are significantly influenced by Web 2.0 (Swamynathan *et al.* 2008). Web 2.0 can help

increase traffic on companies' websites, build stronger relationships between consumers and companies, identify new business opportunities, and support brand development (Michaelidou *et al.* 2011). Web 2.0 helps consumers to have more control over their purchases. Because it enables consumers to read what others say about the products and items on e-commerce websites and what others are saying on social networking site platforms (Constantinides & Fountain 2008, Stephen & Toubia 2010).

The transfer of power has shifted to consumers from sellers as a brand is no longer what sellers tell consumers it is—it is what consumers tell each other it is (Hajli & Sims 2015, Qualman 2015, Qualman 2010). Even on the consumers' side, they require more engagement tools, such as online services and applications through social networks, which tend to be more interactive (Huang & Benyoucef 2013). This requirement of more interaction and engagement by the consumers is met by the phenomenon of Web 2.0 technologies. In a report by Lewis *et al.* (2008) they revealed that social commerce's popularity amounts to 43% in businesses, and 88% of businesses are planning or expecting to not only to invest but also to expand their investment in social commerce in the future (Constantinides & Fountain 2008). There are several benefits of social commerce that include commercial benefits—such as e-commerce sales optimization and social media monetization (Marsden 2010, Xue & Guo-xin 2014)—and many studies have emphasized the role of social commerce needs to be explored further (Constantinides & Fountain 2008, Huang & Benyoucef 2013, Nadeem *et al.* 2015) as it possesses a huge potential to alter the e-commerce scenario. Previous research has also shown that social commerce is the evolved form of e-commerce (Kooser 2008, Wang & Zhang 2012). Previously, studies to identify Chinese consumer behavior focused on social media, which will eventually contribute to the marketing discipline and provide future research directions and avenues (Chong & Ngai 2013).

Social commerce involves many disciplines, encompassing of psychology, marketing, and computer sciences to sociology and psychology; therefore the definitions are accordingly diverse. Based on the literature, various definitions of social commerce are given, as follows:

Table 3. Definitions of social commerce over the years.

Authors	Year	Definitions of social commerce
Jascanu <i>et al.</i>	2007	The combination of e-commerce and online social networks is referred to as social commerce.
Kim & Srivastava	2007	E-commerce companies utilizing the web-based social communities that focus on the impact of social influence shaping interaction among consumers
Murugesan, Wigand <i>et al.</i>	2007, 2008	Social commerce is an online mediated application that combines Web 2.0 technologies with interactive platforms such as social networking sites and content communities in commercial environment.
Parise & Guinan	2008	A more creative, social and collaborative approach that is used in the online market places is referred to as social commerce
Wigand <i>et al.</i>	2008	Social commerce refers to applications of social media that alter the business in a way that transform a market of goods and services into more socially centered and user driven marketplace
Constantinides <i>et al.</i>	2008	Social commerce is the combination of social commerce and Web 2.0
Dennis <i>et al.</i>	2009	Word of mouth that can be applied to e-commerce
Kang & Park	2009	The possibility to relate and discuss about products, is new kind of e-commerce that is referred to as social commerce.
Shen & Eder	2009	Social commerce is based on communication and information sharing.
Marsden	2010	The psychology of social shopping where people within the networked community are influenced by salient information cues while shopping online.
Afrasiabi Rad & Benyoucef	2011	Social commerce is a subset of e-commerce but with more interactive, personal and social relations approach. It is a network of buyers as well as network of sellers.
Zhong	2012	A process which facilitates through the interactions of users is social commerce.
Huang & Benyoucef	2013	An Internet based commercial application that leverages Web 2.0 technologies and social media to support user generated content and social interaction that assists consumers in decisions making and acquisition of products and services within communities and online market places.
Yadav <i>et al.</i>	2013	It refers to the exchange related activities, which are influenced by or occur in the individual's social network in computer-mediated social environments. Where in these activities correspond to the need recognition, pre-purchase, purchase, and post-purchase stages of a focal exchange.

Authors	Year	Definitions of social commerce
Hajji	2014	A new concept that enables customers to have an active space in cyberspace is referred to as social commerce. It is a development in e-commerce that incorporates the network of buyers and sellers and more commonly found in interactive and social forms of e-commerce.
Gatautis & Medziausiene	2014	Social commerce is basically the deployment of social media tools in e-commerce
Hajji & Lin	2015	Social commerce has been evolved through e-commerce and is facilitated by new advances in Web 2.0 technologies.

The definitions given above have been presented in their own contexts. Similarly, based on the various definitions given, in the context of this study and for the sake of better understanding, the present author defines social commerce as *“an activity that harnesses Web 2.0 technologies / social media that supports sellers and buyers to interact, engage, collaborate, and create value that eventually leads to the intentions or actual decision making to shop for or acquire information about products and services.”*

2.3 What is Facebook commerce?

Social commerce is a broad phenomenon that encompasses the commerce activity happening through all possible social media platforms. Nevertheless, the main focus of this study is on one particular social networking site, Facebook; therefore it is crucial to understand the phenomenon of Facebook commerce as representative of social commerce overall. This section gives glimpses of the commerce activities happening on the largest social networking site (Facebook) and highlights the potential it has to be accepted as commerce platform, rather than as a platform for entertainment and socialization alone. As the current study has incorporated Facebook in all three individual studies, it is therefore important to understand the phenomenon of Facebook commerce, which is the main entity of social commerce.

In this study the concept of online shopping via Facebook, or Facebook commerce, is defined as *“involvement expressed by consumers’ willing to follow up brands, browse for information and willingness to purchase items on Facebook”* (Jin 2012). For years Facebook has lured businesses to join them and businesses invest considerable amount of money on the social network to affectively reach their target audience. This practice has enabled companies to make use of the huge social capital available on the most popular social networking

site. Not only that, Facebook has the legacy of providing functionalities to both consumers and sellers to aid the shopping process. For example, Facebook has announced new features for sales groups to buy and sell in a different manner (Facebook News 2015c). These features include price tags, delivery location, and functionalities such as adding a description of the product to be sold, and eventually the availability of the product and item can be altered to be sold or available. For instance, one professional guitarist from Rio de Janeiro created a Facebook group that helped musicians in Brazil to buy and sell music instruments. Within a span of three years, the group has attracted 34,000 members. It has enabled Kadu (the Facebook fan page owner) to buy and sell musical instruments; it raised awareness for his brand, along with a rise in his profile (Facebook News 2015c). This is how Facebook helps small businesses. No wonder Facebook is the primary platform for advertisers and, according to Facebook; there are more than two million advertisers on Facebook. It facilitates them with a new application to manage ads more effectively, and the number of advertisers is far bigger than any other social networking site platform (Facebook News 2015a).

As of March, 2015, Facebook announced new features to its more than 700 million Messenger application followers, stating it planned to connect consumers and companies in a way like never before. Facebook Messenger is set to enhance communications and interactions between people and businesses that may lead to more engagement. This feature will enrich the personal conversations of consumers with companies. For example, after purchasing the product from the e-tailer, consumers will receive updates about shipping and continue the conversation with the e-tailer at Messenger. Facebook Messenger will feature all of the order confirmation updates, modifying basic actions—such as returning, modifying, tracking an order, shipping status updates— and consumers’ communicating directly with the e-tailer in one thread. According to Forbes (2014), commerce is happening on Facebook.

There are more than 30 million small businesses operating on Facebook as per the head of payments of Facebook. Furthermore, she revealed that over a billion people come to Facebook to engage with each other, and underlying all this is a place where payments and commerce are happening. Forbes (2015) indicated that Facebook goes all in on e-commerce by bringing businesses onto Messenger. The integration of Facebook Messenger with businesses could be the company’s ticket to the wider world of online retail. Even e-commerce platforms are looking forward to this integration, for example, the Senior Vice President of Zulily (an e-commerce retail platform) experimented with Facebook to outreach Zulily’s consumers this

way as most of their consumers purchase online and the dynamic capabilities provided by Facebook will enhance Zulily's business. Moreover the former president of PayPal (who works for Facebook now), David Marcus, explained how the traditional online shopping process had been a drag that involved multiple emails and vague shipping details. However, with Facebook's new functionality all this will happen in one thread without any drags (Facebook News 2015d, Forbes 2014).

Therefore it is quite evident that Facebook is going to make a huge leap in the e-commerce industry. The concept of co-defining the brands with the social networking websites, co-owning, and co-directing have become mainstream (Heil *et al.* 2010), which makes it necessary to evaluate the avenues that influence consumers' decision making and their behavior online.

2.4 Online shopping via Facebook with an emphasis on developing countries

Based on the fact that the high Internet penetration rates in developed countries, such as Australia and Italy (data collected from these countries is presented in Study 1 and 3), the main focus of this section is on the developing country, Pakistan (data collected from this country is presented in Study 2), which is a huge unexplored market and possesses huge potential. The high Internet penetration rates indicate that there would be high usage of the social networking sites as well. Specifically the clothing industry is highlighted in this section as it shows potential in the developing market.

Based on the Internet growth, online shopping is emerging in a fast manner (Pappas *et al.* 2014). As the Internet adoption and penetration levels increase, the number of online shoppers increases as well (Colton *et al.* 2010). The most important business breakthrough since the industrial revolution is termed to be as the social media revolution and everybody has jumped on this bandwagon. Consumer cultures of consumption are greatly impacted by the implications of social networking sites (Beer & Burrows 2010). The rise of social media and social networks has changed the scenario of online shopping altogether. Boston Consulting Group (2014) has demonstrated that online shopping in Asia is leading in every manner, with China being the only major market in the clothing segment (McKinsey & Company 2012).

Clothing relates to fashion and thus to consumers' needs for self-expression (Piacentini & Mailer 2004) and the constant reflection of themselves. Further,

Berthon *et al.* (2012) discussed that fashion is also one of the most popular topics in social media, constituted by what is hot and what is not. These characteristics make social networks an ideal place for clothing brands to update their information and at the same time help consumers express their personalities. Participation with Facebook and other social media is primarily motivated by companies' desire to utilize a popular marketing channel that permits direct interaction with potential consumers (DeKay 2012). Therefore, Facebook being a social network of huge importance, Facebook fan pages related to clothing brands are the most numerous and are commented upon by consumers on frequent basis.

Specifically in emerging countries, online shopping is still an emerging phenomenon. Social networks are more popular than online shopping websites in emerging countries and have brought more convenience and shopping literacy to consumers. Most of the time consumers are present on Facebook and they do not necessarily visit the company's website, and through Facebook they can know about the offerings and updates of their preferred brands. Clothing companies initiate competitions and free giveaway schemes that engage a larger audience, and consumers enjoy the perks offered by the clothing companies; this is a win-win situation for both consumers and clothing companies. Much has been written on the increasing labor costs in China and the tragic incidents in Bangladesh (home to thousands of garment factories) where most of the world's clothes are made (McKinsey & Company 2014). Long-term increases in energy and labor are expected by the most of the clothing players who are seeking to partially move their business portions into some other surprising markets (McKinsey & Company 2014). This has led the world to search for other avenues for business, such as Pakistan. According to the survey conducted by McKinsey & Company, Pakistan remains in the top eight markets where the clothing sourcing market is expected to grow in the next five years (McKinsey & Company 2014).

A recent study by Venkatesh *et al.* (2012) revealed the appliance of the UTAUT2 model in Hong Kong, where there is high penetration of technology, in this regards, it is deemed important to conduct a study in an emerging country (such as Pakistan) where technology penetration is relatively low, in order to draw interesting findings (as in Study 2). From the underdeveloped economies, almost one billion new consumers will be added in the global market (Davis & Stephenson 2006) for discretionary products and services before 2020. There has been acceptance of and numerous benefits of online shopping in western countries, yet the acceptance of online shopping is lower in the emerging Asian markets (Ashraf *et al.* 2014). In the emerging markets, the retail industry is rapidly changing due to

the spending power of consumers. Pakistan is the sixth largest country in the world in terms of population, neighboring China and India (the top emerging markets) (Ashraf *et al.* 2014). In 2010 European and US markets were dominated by China in the ready-made clothing category, China accounting for 40% of imports in each region. According to McKinsey & Company’s survey, 86% of chief purchasing officers in leading clothing companies are shifting their focus to avenues other than China because of capacity constraints and declining profit margins (McKinsey & Company 2012). Hence a country like Pakistan becomes of huge importance as e-commerce adoption is at an early stage (Ashraf *et al.* 2014) and social commerce is growing along with.

There has been increased level of communication through social media and brands are taking full advantage of it in Pakistan. On Facebook, clothing brands share all kinds of information and receive feedback from the consumers, which help clothing e-tailers to serve consumers in the best possible manner. According to a recent survey conducted by the Express Tribune (2013), most of the respondents online, used social networking sites, followed by email and news. Almost all of the respondents in the survey were on Facebook and more than half of the respondents have shopped online. These trends show a very promising trend in an emerging economy like Pakistan. Hence, the study incorporates Pakistan (Study 2) as representative of an emerging economy in terms of technology adoption located in the South Asian region. Pakistan’s profile in terms of Internet statistics is the same as India and Sri Lanka (as shown in Table 4) with respect to technology penetration. With the arrival of new e-retailers like daraz.pk, kaymu.pk, (powered by Rocket Internet Germany, Internet Incubator), much more is to come in the clothing e-tail context.

Table 4. Countries comparison of Internet and Facebook users.

Country	Population (2014 Est.)	Internet Users 31-Dec-2013	Internet Penetration (% Population)	Facebook 31-Dec-2012
Australia	22,507,617	21,176,595	94.1%	11,808360
Italy	61,680,122	36,058,199	58.5%	23,202,640
Pakistan	196,174,380	29,128,970	14.8 %	7,984,880
India	1,236,344,631	195,248,950	15.8 %	62,713,680
Srilanka	21,866,445	4,788,751	21.9 %	1,515,720
Bangladesh	166,280,712	10,808,246	6.5%	3,352,680

Source: <http://www.Internetworldstats.com/stats3.htm>

Over 30 million people are now online in Pakistan and the number keeps on growing. More than 12.6 million users in Pakistan are on Facebook (PAS 2014). As per the Facebook ads manager, Pakistan is at number 27 on the list of countries by population on Facebook. Of these, 65% are young, between the age of 13 to 24 years old, males comprise 70% and females 30%, and Internet penetration is just 14.8% of the total population, indicating a huge unexplored market.

3 Research methodology and research frameworks

3.1 Research philosophy

The aim of social research for positivists is to discover the regularities and patterns of the social world with the help of scientific methods (Denscombe 1998). Positivists supposedly believe that reality is separate from the individual who observes it. The general view of positivists is that they consider the subject (the researcher) and the object (the phenomenon that they focus on) to be two independent and separate things. According to Weber (2004) positivistic ontology is said to be dualistic in nature. The approach of the positivists is to make efforts to build knowledge of the reality that exists beyond the human mind. Positivists believe that independent reality and an objective reality are reflected by the human experience of the world and that the foundation of human knowledge is provided by this reality. Alternatively, interpretivists are of the view that individuals who observe reality and reality itself cannot be separated from each other.

The main ideological difference between interpretivists and positivists lies in how much it can be believed, that individuals can acquire accurate knowledge that describes reality. The main communication that takes place in a social fabric—and how meaning is assigned to it—shapes reality. Therefore, reality is somehow dependent on the rhetoric of social fabric and the lives of individuals are constructed in this ‘social’ reality, along with research. Interpretivists also believe that reality is reflected through particular experiences, culture, history, and particular goals (Weber 2004). A practical argument exists for conducting interpretivistic research as it aids in examining complex, fine-grained social phenomena as strict assumptions cannot be set about their nature that might turn out to be difficult and inappropriate.

The meta-theoretical differences between interpretivism and positivism are spurious and comprise misplaced and outdated ideas (Weber 2004). Another fundamental difference between positivists and interpretivists is the use of different kinds of research methods. For example, positivists incorporate research methods such as field experiments and surveys. Interpretivists use various kinds of research methods such as phenomenographic studies, ethnographic studies, ethnomethodological studies, and case studies. Orlikowski and Baroudi (1991) suggested that a research method adopted by a researcher in particular as

compatible with their research interests and the different choices of research methods are due to various factors, such as the social pressures associated with colleagues and advisors, training provided for the researcher, and preferences for acquiring a certain type of insight in research work (Weber 2004).

In the current study, the main focus is not to fall into a certain category of positivism or interpretivism as they no longer serve a useful purpose (Alvesson & Sköldbberg 2009, Weber 2004) and promote prejudice rather than alleviate the evaluation of research. Most excellent researchers choose a research method that fits the research based on previous experiences or similar research. Different research methods have their own strengths and weaknesses related to the knowledge available regarding the existing phenomenon. Further, Weber (2004) argues that the rhetoric of positivism versus interpretivism is inhibiting rather facilitating. Historically, for laying the foundations of change, a positivistic or interpretivistic approach might have been useful. However, it is argued that research should not be labeled as positivistic or interpretivistic and it should move beyond these labels to find unifying rather dividing research methods (Weber 2004).

Basically, in the realms of social research the terms qualitative research and quantitative research are the signposts that are widely understood and used pertaining to the nature of research to be undertaken (Denscombe 1998). Therefore, for the current study—after an extant literature review related to TAMs—quantitative research methods have been incorporated in the form of online surveys. This suggests that data is gathered from a group of people in social studies who represent a certain population and this purpose is fulfilled through a questionnaire (Bryman 2007). The data has been gathered accordingly and statistical tools—such as SPSS, LISREL, and MPLUS—have been utilized to analyze the data. In qualitative research there is an inclination towards the interpretivistic methodology, which comprises methods such as participant observation and unstructured interviews through to collect data (Livesey 2006).

The research design makes explicit which research data is relevant, the process through which evidence or data is collected, and, further, how the data is organized and analyzed in order to draw conclusions for the research (Arthur 2012). For instance, the nature of the deductive approach is narrower and relates to the testing and confirming of hypotheses, and this technique enables the rigorous application of the testable theories in the real world for the sake of assessing their validity (Lancaster 2007). With the help of the process of deduction, researchers arrive at a reasoned conclusion by logically generalizing a known fact.

According to Sekaran (2006) there are number of steps involved in the deductive process and it is considered as the building block of the scientific method. The first step in deductive methods is developing hypotheses; therefore this process is also known as the hypothetico-deductive method (Sekaran 2006). There can be various underlying bases for developing the hypotheses, for instance they can stem from previous literature by bringing the ideas and theories of others together or they can be based on personal experiences. Also, hypotheses can stem from having a desire to offer a solution for an existing problem. Theories and hypotheses are then operationalized in the concepts. The main aim of operationalization is that these concepts and theories can be empirically evaluated and analyzed. The second step in the deduction process involves selecting the research methodology, such as the sampling plan, research instrument, methods for analyzing, measuring, and interpreting the empirical observations, and data collection methods. The objective of this step is to measure the operationalized concepts and theories with the help of an appropriate methodology chosen from amongst various techniques. The last step involves either to falsify or affirm the theories and concepts that are empirically tested (Lancaster 2007).

Although the researcher does not want to label most of technology acceptance research as adopting a positivistic approach, it is driven by the positivistic epistemology. However, for the sake of understanding the current study falls under the scope of a theoretical thrust that is deductive in nature, following a confirmatory strategy of research that envisions the confirmation or disconfirmation of the hypotheses developed in previous literature through empirical analysis: overall the epistemology is positivistic. Furthermore, the researcher is aware of the possible shortcomings of quantitative research where data collection is held in a narrower perspective (with superficial datasets), the results provide numerical descriptions rather than a detailed narrative (so human perception is reduced), and research is often carried out in an artificial environment (O' Neil 2006). In contrast, there are many advantages of quantitative research as well: it allows greater accuracy and objectivity in the results and uses prescribed procedures to ensure generalizability, reliability, and validity. Also, these set standards enable researchers to compare the results of their studies with similar studies and the research can be extended and replicated in different settings as well. In addition to that, quantitative research is generally more formalized and structured in form (O' Neil 2006). According to Creswell (2013) quantitative research is *“an inquiry into a social or human problem based on testing a theory composed of variables, measured with numbers,*

and analyzed with statistical procedures, in order to determine whether the predictive generalizations of the theory hold true.”

Based on the several research approaches mentioned after the review of the extant literature, as the vast body of knowledge on the field of technology acceptance has a specific theoretical drive that is positivist and deductive in nature, the current study also follows the strategy of confirmatory research, which infers that previously stipulated hypotheses will be either confirmed or disconfirmed, especially in the social commerce context, when intertwined with technology acceptance research. Besides elaborating the differences between the positivistic and interpretivistic approaches and their advantages and disadvantages, the researcher tags this research according to the epistemological stances given in Table 5 (below).

Table 5. Data, methods and epistemological stances.

Paper	Data	Methodology	Epistemological Stance
Study 1	Online survey from Italian fashion clothing consumers	SEM(Structural Equation Modelling)	Positivistic
Study 2	Online survey from Pakistani consumers who rely on Facebook for clothing purchase	FMSEM(Finite Mixture Structural Equation Modelling)	Positivistic
Study 3	Online survey from Australian consumers who rely on Facebook for clothing purchase	SEM(Structural Equation Modelling)	Positivistic

With regards to the target population, the current study mainly incorporates the individuals who shop online and use Web 2.0 technologies / social networking sites in particular. This study has been conducted in three countries—Italy, Pakistan and Australia—and the outcome is in the form of three individual research papers. With regards to social media, across all regions it has been suggested that social media has a tendency to influence consumers’ shopping decisions for home electronics, consumer entertainment, travel, leisure, clothing, fashion, restaurants, food, and beverages. These are the most discussed product and service categories on social networking (Nielsen 2012). Even in the category of *exchanging information* on social networking sites, the top spots are normally taken by clothing consumers (Park & Cho 2012). Thomas *et al.* (2007) argue that, out of the different categories

of items, one of the most talked-about items on social networks is fashion / clothing. Further, as noted by Artigas and Calicchio (2007), consumers have great disposable income and tend to spend more on items other than the basic necessities: the first of item to feel the change is clothing. Hence, clothing e-retailers can take advantage of Facebook as they can obtain direct feedback from consumers just by keeping track of the conversations and discussions on the social network's online communities (Nielsen 2012, Thomas *et al.* 2007). Therefore a social networking site like Facebook becomes imperative in promoting their brand and company to huge numbers of potential consumers online and possesses weight as one of the core aspects of any business and marketing strategy. In this study we have chosen consumers who shop for clothing items in particular.

With regards to the theoretical framework, the use of social media, social networking, and online shopping are closely related to technology adoption, which is a growing trend in understanding consumer behavior and essential for the marketing discipline. Also, in terms of studying consumer behavior, in order to reach a decision to purchase a product, a consumer may go through four different phases: (i) need recognition, (ii) pre-purchase activities, (iii) the purchase decision, and (iv) post-purchase activities. These four phases come mainly from early consumer behavior models (Howard & Sheth 1969) and considering how consumer decision making takes place in the newer era (Hoyer *et al.* 2010). Broadly, these four phases encompass the purchase decision of consumer (Yadav *et al.* 2013). Furthermore, Edelman (2010) and Elzinga *et al.* (2009) argue that these four phases do not necessarily follow each other in a sequential or linear manner and Yadav *et al.* (2013) also believe that these various phases may occur in a non-sequential, non-linear manner—in iterative loops and that all four phases may not even be applicable to all the purchase decisions of consumers. Similarly, in this study, theoretical frameworks have been devised for individual studies that incorporate either part of or some of the phases of consumer behavior; those that turn out to be most relevant in the respective contexts.

Normally, in the previous studies TAM has been used because of IT adoption in a variety of contexts and its good predictive behavior (Ashraf *et al.* 2014), but previous studies have focused more on Internet banking (Foon & Fah 2011), the use of mp3 technology (Im *et al.* 2011), and online gaming (Chen *et al.* 2011). The presence of clothing retailers on Facebook may create a huge impact on consumers' intention to use Facebook. Venkatesh *et al.* (2012) have recently established their extension of UTAUT (UTAUT2), which can be applied in a consumer context (more about theoretical models in Section 3.2).

Most academic researchers have focused on the privacy issues in the social networks, whereas the business sector has emphasized the growing attraction of social networking sites (Charnigo & Barnett-Ellis 2013). However, huge numbers of people (in millions) have joined the social networking sites, adding content to them and revealing personal information, yet it is not possible to join a network of millions and trust all of them (Dwyer *et al.* 2007).

Consumers might become skeptical at times that their personal information might be passed on to irrelevant parties. These privacy and security issues have led to the study of the impact of trust on the behavioral intentions when using Facebook in this study. Hence, the role of trust in using Facebook is crucial. Marketing research in particular has previously shown the role of trust in influencing purchase intentions (Dowling & Staelin 1994, Garbarino & Johnson 1999, Gefen 1997). For the sake of studying online consumer behavior, in this study the theoretical paradigms from different fields—such as psychology, information systems and marketing—have been taken into account, as has been done previously (see Koufaris 2002).

Facebook has enabled individuals to communicate effectively, whether they are consumers or e-tailers. In the context of social commerce, shopping via Facebook is still emerging, therefore the time is right to add to the existing body of knowledge of social commerce through technology acceptance research.

3.2 Theoretical Frameworks

3.2.1 From TAMs to UTAUT and UTAUT2

One of the constantly developing fields is technology acceptance research. One of the most mature streams of information systems research is using individual acceptance and the use of information technology (Benbasat & Barki 2007, Venkatesh *et al.* 2007), which is subsequently incorporated in understanding consumer behavior in the marketing discipline. Most of the research that contributes to this constantly developing field is either system focused or beliefs focused. However, with the more dynamic approach of UTAUT it covers both the system- and belief-focused approach. In 2003, Venkatesh *et al.* (2003) felt that there was a need for a synthesis into a single model that would lead to a unified view of users' technology acceptance. As researchers were previously taking into account the favored TAMs and neglecting the contribution of other models of technology

acceptance, a unified view was vital. Amongst the TAMs, one of the most dynamic and latest models that surpassed all the previous TAMs was UTAUT, in which the synthesized elements of eight well-known models of technology acceptance are included. The models are as follows: TAM, TRA, the motivational model (MM), the combined TAM (TAM2), the TPB, the innovation diffusion theory (IDT), the social cognitive theory (SCT), and the model of PC utilization (MPTU).

The major five-fold limitations of these models, according to Al-Qeisi (2009), are given as follows: i) complex and sophisticated organizational technologies have been overlooked by these theories, resulting in studies focusing on simple and individual-oriented technologies; (ii) except for a few studies, most of the studies have used students as samples; (iii) in most of the studies, the time of measurement was general, and in the acceptance of technology in usage decisions, the individual decisions turned out to be retrospective; (iv) generally, cross-sectional measurement was taken into account; (v) as most of the studies were conducted in the situation of voluntary usage, it is problematic to generalize the findings to settings that are mandatory.

To get to UTAUT, eight models were tested empirically in longitudinal field studies that were conducted amongst individuals at four different organizations in order to test the introduction of a new technology at a workplace (Venkatesh *et al.* 2003). Further, they found commonalities in the previous eight models and, out of many, seven constructs turned out to have a significant impact on behavioral intention or usage when individual models were tested. In UTAUT, four determinants were found to have a direct and significant effect on user acceptance and behavior. These four constructs are referred to as performance expectancy (PE), effort expectancy (EE), social influences (SIs), and facilitating conditions (FCs). More about the origin of these constructs is given as follows.

PE: The degree to which an individual believes that using a system or technology will help him or her to increase his or her performance in their job. In other models the constructs that are similar to performance expectancy are the extrinsic motivation in the MM, the outcome expectancy in the SCT, the job fit in the MPCU, the perceived usefulness in TAM and TAM2, the theory of planned behavior, and the relative advantage in the DOI. In each individual model, the strongest determinant of behavioral intention was PE (with similar constructs in other models) and in both situations (voluntary and mandatory) its impact was significant.

EE: The degree of ease associated with the use of a system or technology is referred to as its EE. In other models, the constructs that capture the essence of EE

are: complexity (in the MPCU and the DOI) and the perceived ease of use (in TAM and TAM2). In each individual model, the impact of EE (and similar constructs in other models) in both voluntary and mandatory contexts was significant.

SI: SI refers to the degree to which an individual believes that important others want him or her to use the new technology or system. In other TAMs, similar constructs are as follows: social factors (in the MPCU), subjective norms (in the TPB, the DTPB, TAM, TRA, TAM2) and image (in the DOI). The impact of this construct was non-significant in voluntary contexts but significant in mandatory situations. In mandatory situations the effect was only important in the early stages of individual experience, when the applicability of punishment and rewards was found. However, SI impacts the perceptions about technology in voluntary contexts.

FC: The degree to which an individual believes that technical and organizational infrastructure is present to support the use of a technology or system. Similar constructs in other TAMs are: compatibility (in the DOI), facilitating conditions (in the MPCU), and perceived behavioral control (in TAM, TAM2, the TPB and the DTPB).

The main target audience in UTAUT was employees at organizations. The main highlight in UTAUT was that it accounted for 70% of the variance in usage intention; however, all the individual TAMs before accounted for only 40% of variance in usage intention. The major limitation of UTAUT was its content validity and Venkatesh *et al.* (2003) recommended replicating the model in different settings and extending and revalidating it. Also UTAUT has been formulated by leading researchers in technology acceptance research (Al-Qeisi 2009) and based on the conceptual similarities that came from eight dominant models as these eight major theories were synthesized to develop the one UTAUT model. The major problem with the models was that, on the one hand, there were models that enjoyed and advocated parsimony but the comprehensiveness was lacking that was required to consider them sufficient or complete, for instance the TAM model. On the other hand, previous research has argued that there are models that cover most of the constructs and are complete but that they are inapplicable to a single investigation because of their capability and impracticality in trying to understand acceptance behavior (Vallerand 1997). However, UTAUT sits in the middle of these two extremes, it is parsimonious, and it explains the highest variance (70%) in usage intentions when compared to any of the models before.

Since the origin of UTAUT it has served as a baseline model and has been replicated and extended in different fields. Various studies have incorporated UTAUT either in full or partly (Neufeld *et al.* 2007). It has been used in new

cultural settings (Gupta *et al.* 2008), in new contexts (such as new technologies) (Chang *et al.* 2007), in Internet adoption (Näsi & Koivusilta 2013), in new user populations (Yi *et al.* 2006), in social media businesses (Mandal & McQueen 2012), in the online purchasing of tickets (Escobar-Rodríguez & Carvajal-Trujillo 2014), in the use of mp3 technology (Im *et al.* 2011), in online gaming (Chen *et al.* 2011), and even used without the role of moderators (such as gender and age) (Al-Gahtani *et al.* 2007, Armida 2008). As argued by Alvesson and Kärreman (2007), when theories are adopted in different contexts, it brings new changes to the theories that result in the creation of knowledge. For instance, Stofega and Llamas (2009) revealed that the consumer industry is a multibillion-dollar industry given the number of applications and websites that are associated with it. Therefore, Venkatesh *et al.* (2012) presented a new research framework, UTAUT2, whose main emphasis is on the consumer context. The three new constructs that were added to be the significant predictors of the behavioral intention to use technology in UTAUT2 are referred to as *hedonic motivation*, *price value*, and *habit*; this presents a major leap in understanding consumer behavior in technological contexts. The main constructs of UTAUT have been retained in UTAUT2, namely PE, EE, SIs and FCs. Table 6 (given below) presents the definitions of the main constructs.

Table 6. UTAUT2 constructs definitions.

Construct Name	Definition
Performance Expectancy	The degree to which benefits would be provided to a consumer for using technology and performing certain activities is referred to as performance expectancy
Effort Expectancy	The degree of ease associated with it is referred to as effort expectancy.
Social Influence	The way in which consumer behavior is influenced by important others is referred to as social influence.
Facilitating Conditions	The conditions in which users' feels resourcefulness and support available to perform a behavior is referred to as facilitating conditions
Habit	Habit is defined as the extent to which people perform automatically because of learning
Hedonic Motivations	Hedonic motivation is defined as pleasure or fun derived from the use of technology.
Price Value	Consumer's cognitive tradeoff between perceived benefits of the applications and the monetary cost for using them.
Behavioral intention to use technology	The degree to which a person has formulated conscious plans to perform or not perform some specified future behavior
Actual use of technology	Use refers to the actual use of technology.

According to Hajli and Lin (2015) the current perspective of e-commerce is generally divided into either the TPB (Ajzen 1991) or TAM (Davis 1989). Although the literature is enriched with the studies that relate to e-commerce acceptance and information technology, newer theoretical frameworks are needed in order to study consumers in the new world of Web 2.0 to see what can they bring to business strategies and practices (Hajli 2014b). There has been a thorough investigation of the construct ‘intention to use,’ as seen in the related theories such as the TPB, TRA, and TAM. Consequently, this construct has been altered to *the behavioral intention to use Facebook for shopping* in order to fit the context of social commerce. These days, a key factor in marketing is consumers’ involvement through social media (Park *et al.* 2007). Hajli (2014b) has also emphasized that studies related to consumer behavior on social media platforms (such as Facebook) hugely influence the marketing strategies of companies (Liang & Turban 2011) with regards to trust-building measures and affecting consumers’ behavioral intentions.

In e-commerce research, trust is considered to be a vital factor (Ono *et al.* 2003) while trading in an online context (Morid & Shajari 2012). As per Weijun and Lin (2011), the most important characteristics of social commerce are communication, information quality, and viral marketing as they can positively influence the consumers’ level of trust. Within the era of social commerce, there are functionalities provided by e-commerce enhancing social interactions that lead to trust, for example, through social networking sites (Hajli *et al.* 2014). Even previous research (Hajli & Lin 2015) has used the traditional theoretical framework (TAM), which has been widely used in numerous e-commerce settings. However, its implementation in a social commerce context provides a useful contribution (Hajli & Lin 2015). Previously, in predicting acceptance behavior, TAM has specifically proven to be a successful theory (Cheng & Yeh 2011). However this study has incorporated UTAUT2, which encompasses all the models of technology acceptance before and is more robust in identifying consumers’ acceptance.

In the general framework (Study 1), we have added variables—such as peer recommendations, website service quality, online shopping via Facebook—and blended them with other variables—such as trust, attitude, and loyalty intentions—to study consumers’ engagement online.

For Study 2, the main construct that were added in our current theoretical model (UTAUT2) was trust, used to identify the various consumer segments. For Study 3, UTAUT2 was extended with variables, such as perceived privacy, perceived security, and trust. It is deemed necessary to add these variables; users

are likely to rely on Facebook when they trust this social network (Limayem *et al.* 2007).

Therefore, given the emergence of different mediums of interaction for consumers, it becomes vital to study how the users of Facebook develop trust with retailers in respect to shopping for clothing online, which is evident in all of the given studies. Moreover, it is equally important to categorize the different consumer segments present on Facebook based on the consumers' prioritization of factors (the extent to which they find Facebook useful, enjoyable, trustworthy, and resourceful). As in previous research, Pöyry *et al.* (2013) describe that in the Facebook community; consumers want to enjoy themselves while participating in it and categorized them as hedonic consumers. However, utilitarian consumers look for useful information, browse community pages, and are more concerned about further purchases. Pöyry *et al.* (2013) also found that there is a positive linkage between users' loyalty intentions towards the host company and behavioral patterns of participation and browsing, and they urged that high-quality information should be presented to the consumers by marketers. Therefore, along with the general framework (in Study 1), this study incorporates the UTAUT2 model (in Study 2 and 3) with the inclusion of trust—this inclusion being specifically designed to help identify consumer behavior—and we identify Facebook acceptance in terms of online shopping with the help of this model.

3.3 The research methodology in individual studies

3.3.1 Study 1: Engaging consumers online through websites and social media: A gender study of Generation Y clothing consumers

Data

The data was collected from Generation Y clothing consumers (born between 1981—1999) (Bolton *et al.* 2013). The main reason for collecting data from Generation Y consumers was that they are tech savvy and have had early exposure to technology, which leads to advantages and disadvantages in the form of the cognitive, emotional, and social outcomes (Immordino-Yang *et al.* 2012). This generation relies heavily on technology for entertainment and interaction purposes. To collect data from Italian Generation Y consumers, the online questionnaire link

was posted on the Facebook fan pages of a master's degree course in fashion marketing and the respondents were asked to re-post the questionnaire on personal Facebook profile pages. The questionnaire appeared only once in order to avoid the problem of repeated entries by respondents. A total of 288 responses were collected of whom 74% were female and 24% were male. Five percent of respondents were aged between 25 and 29 and two percent were aged between 30 and 34. High Internet usage was reported by the users as 29% were online for more than four hours a day and 49% were online for between two to four hours. In terms of shopping online, all of the respondents had shopped online and with regards to the frequency of shopping, 38% of the respondents shop monthly, 28% shop on a quarterly basis, 23% of the respondents shopped semi-annually and 11% at least once a year.

Procedure

The model testing was conducted through LISREL 9.1 and firstly the measurement model was tested, leading to the analysis of the structural model. So confirmatory factor analysis was conducted and items that were contributing to the poor fit of the model were excluded. Afterwards, an invariance analysis was performed so that a comparable representation of both genders was presented by the measurement model. Finally, the discriminant validity of the constructs was confirmed, followed by the moderation effect of gender. As overall some of the items contributed to the poor fit, the largest and smallest standardized residual values were taken into account, along with the multiple squared correlations below 0.50 (Byrne 1998). This procedure helped to retain the items that were contributing to the good fit of the model. The ratio between chi-square and degrees of freedom turned out to be less than two (Tabachnick & Fidell 2007) and other indexes also overcame the recommended threshold values. Also, the internal consistency of the variables was identified through Cronbach's alpha, which exceeded the level of 0.70 (Nunnally 1978). Furthermore, the recommended threshold value of 0.6 and 0.5 for composite reliability and average variance were extracted respectively (Bagozzi & Yi 1988, Fornell & Larcker 1981). The invariance analysis was performed by dividing the data into two groups of males and female consumers for assessing the measurement model if it provided the same representation in both genders, and hence we ran a configural variance analysis and metric and scalar invariance analyses were performed successfully. All these tests were performed on the theoretical frameworks given below in Fig. 2 & Fig. 3.

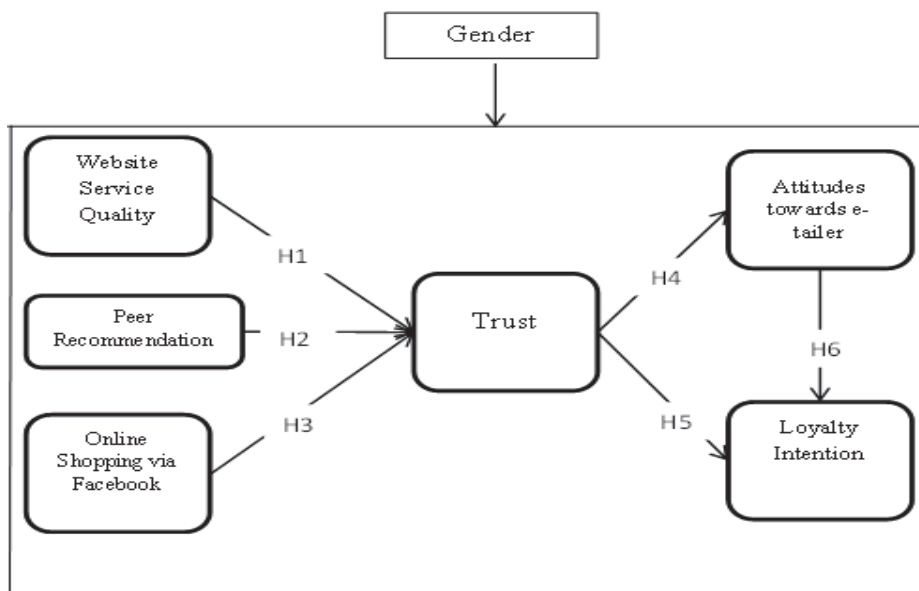


Fig. 2. Conceptual framework for study 1.

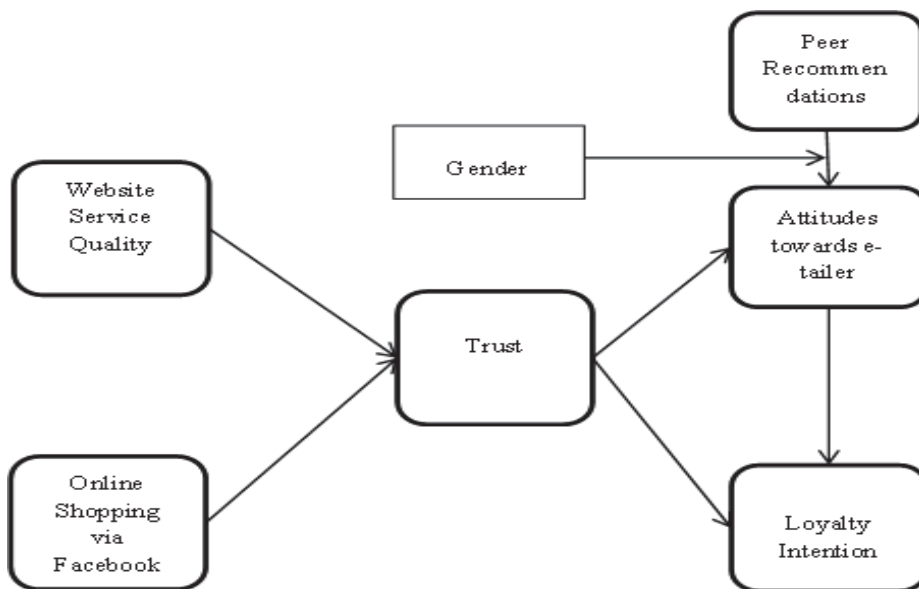


Fig. 3. Re-specified model after analysis for study 1.

3.3.2 Study 2: Consumer segments in social commerce: A latent class approach

Data

In this research, we focus on Generation Y cohorts (Bolton *et al.* 2013) as they are tech savvy (Lester *et al.* 2006) and embrace technology after being exposed to it a short while. Also, Trusov *et al.* (2010) demonstrated that over a quarter of Internet traffic is represented by more than 90% of the young adults, especially those using social networking sites, such as Facebook and Myspace. The cohorts from Generation Y (Bolton *et al.* 2013) are also characterized as innovative, conscious of their identity, and open to trying new brands (Lambert-Pandraud & Laurent 2010), along with having had better and greater exposure to the media (Zhou & Hui 2010).

The survey data was drawn from student consumers from Pakistan who rely on Facebook for making shopping-related decisions in general. As students have a close association with technology and spend a considerable amount of time using the Internet for various purposes, they serve as a promising and an attractive market segment (Ashraf *et al.* 2014). Also, they fit very well into the cohorts of Generation Y, thus our target group consisted of students at a large university in the capital city of Pakistan, Islamabad. To prompt the consumer response a survey was conducted with the clothing consumers at Facebook who actually see clothing related posts and explore for their preferred clothing brands online in order to identify the degree to which they are likely to adopt Facebook in the shopping process. Respondents were prompted through their Facebook pages and email addresses to respond to the survey.

In this regard, online surveys were distributed with the help of Webropol software from January to April, 2014. The survey was opened and viewed by almost 900 individuals and around 438 individuals responded to the survey. Out of the 438 respondents, thirty percent have never used Facebook for shopping purposes; therefore the eventual number of responses taken into account was 309. According to Bolton *et al.* (2013), the age of Generation Y (born between 1981 and 1999) and leads to the bracketing of the age of the respondents to between 16 and 34 years old.

However, there are various descriptions of Generation Y available in the literature, in which the age varies. Based on this assumption 94.9% of the cohorts we used for the data analysis were predominantly Generation Y, however the rest did not fall into the category of Generation Y yet we kept this tiny segment for data

analysis. The main reason to include this tiny segment in data analysis was because they have relied on Facebook for shopping purposes. It was ensured that the respondents have incorporated Facebook for searching, exploring, and shopping for clothing items online by asking control questions that referred to the usage of Facebook in a shopping process.

Procedure

For analyzing the data, structural equation modeling was initially run to test the operational measures. According to Browne *et al.* (1993) a reasonable fit of the model is represented if the root mean square error of approximation (RMSEA) value is below 0.08, and Jaccard and Wan (1995) suggested that the non-normative fit index (NNFI), and comparative fit index (CFI) values should be above 0.90 for the model to be statistically fit. If the P value does not support the model, which can be because of the large sample size as well, then some insignificant relationships may appear and therefore the model has to be rejected. A strong theoretical background was incorporated to examine each latent variable yet the structural equation modeling (SEM) came out to be insignificant, and therefore potential was seen in the data as it might not be homogeneous. Thus, finite mixture structural equation modeling was employed in order to analyze the data for unobserved heterogeneity (Bart *et al.* 2005, Jedidi *et al.* 1997) using MPlus software. In mixture modeling, the categorical latent variables are represented by the sub-populations, where the population membership is inferred from the data and is unknown (McLachlan & Peel 2004, Muthén & Muthén 2010). The technique of classic multi-group membership is unfamiliar and a priori cannot determine it (Bart *et al.* 2005). In FMSEM, models are estimated in a way that uses one latent class, two latent classes, and so on, until the information of model fit indicates that the previous model was better than the current model. Multiple fit indices are offered by the MPlus software to compare the different outcomes. When the sample size is less than 500, the most reliable fits are the parametric bootstrapped likelihood ratio (PBLR) and Bayesian information criteria (BIC) (Tolvanen 2007). The frameworks are given as follows (in Fig. 4 & Fig. 5).

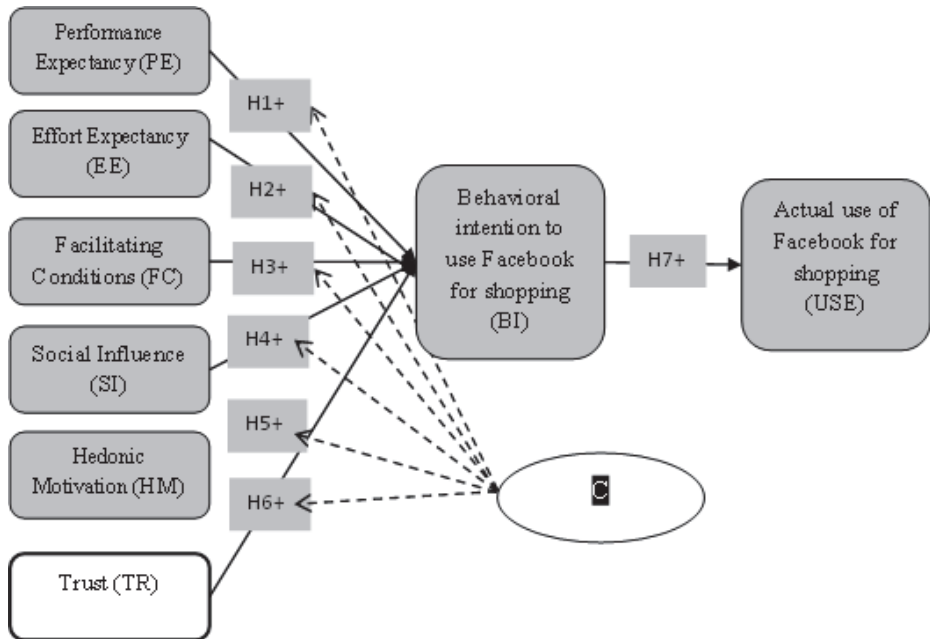
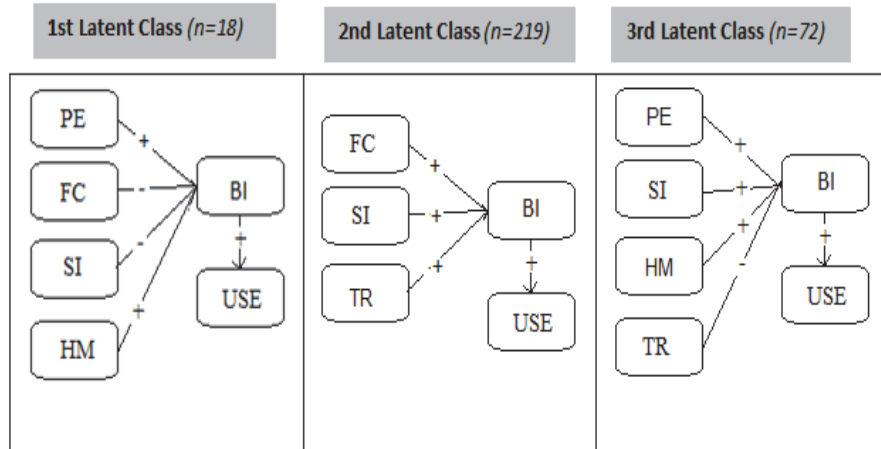


Fig. 4. Theoretical model for study 2.



Note: PE = Performance Expectancy; FC = Facilitating Conditions; SI = Social Influence; HM = Hedonic Motivations; BI = Behavioral Intention; TR = Trust; USE = Actual Use

Fig. 5. Description of the found latent classes for study 2.

3.3.3 Study 3: Consumers' acceptance of social commerce: Examining the role of trust, perceived security, and perceived privacy in clothing retail settings

Data

Survey items have been included in the study 3 for operationalizing the variables based on the existing literature and altered as per the settings of social commerce. An online survey was developed to test the theoretical framework. All the items were measured on a seven-point Likert scale, ranging from one to seven. The online survey was designed accordingly to ask the respondents about their shopping experiences at Facebook. In particular, the study focused on the consumers using Facebook in Australia who actively explored for clothing items through Facebook. A university student web-portal and Facebook were employed to collect data. In total 372 responses were collected, and after the initial screening of data only 204 responses were retained, incorporating the consumers who had mentioned that they have used Facebook for shopping purposes. Of the respondents, 88.7% were Generation Y cohorts (born between 1981—1999). Respondents were asked which Web 2.0 technology they use the most, with possible options given such as Facebook, LinkedIn, YouTube, Google+, Instagram, and Pinterest, and out of all of these, Facebook surpassed all other platforms by having a 99% usage rate.

Procedure

The respondents were specifically asked about their searching and shopping patterns for their preferred clothing items, which helped the researcher to screen out the responses that did not rely on Facebook for shopping and only incorporate those that did. For example, a direct question was asked, “Do you shop for clothing brands online (especially on Facebook)?” and respondents were notified that “Facebook is being used in the context of online shopping for clothing items” to target the right audience for the social commerce context. After getting the data, the measurement model was tested and items were removed that were contributing to the poor fit of the model and, further, the SEM was analyzed through LISREL 9.1 and monitored for goodness-of-fit indexes for the model, along with path coefficients. The reliability criteria were checked using Cronbach's alpha, where the threshold value has to be above 0.70 (Nunnally 1978). The framework of the study is given as follows (in Fig. 6).

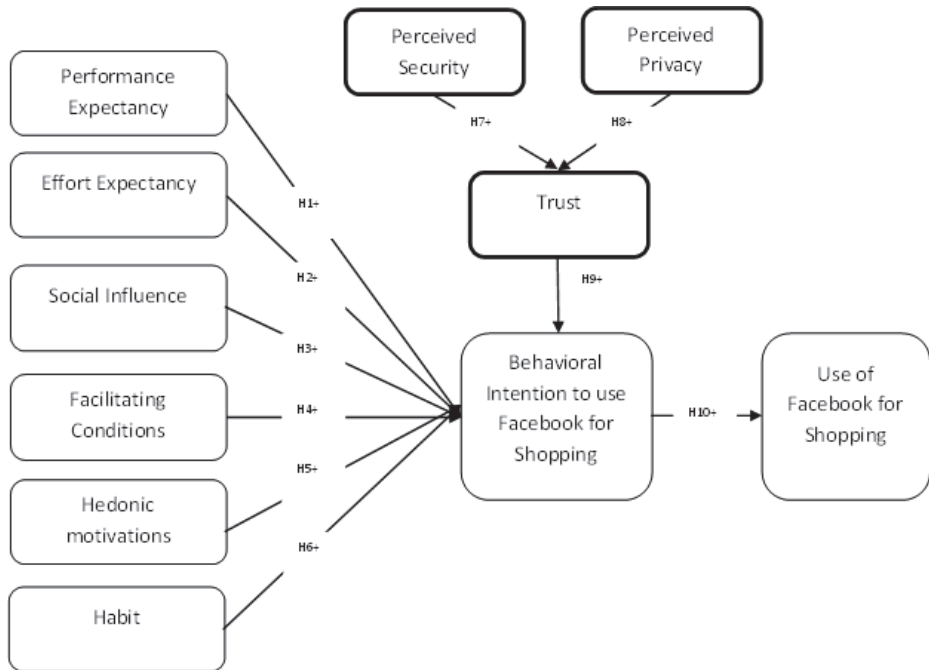


Fig. 6. Theoretical framework for study 3.

Overall in all the studies, although all the constructs have been taken from previous research, we have checked for the content validity and construct validity. To have the proper content validity, a substantial literature review is required that spreads to the domains of information systems, psychology, sociology, and marketing to get support for the proposed model in terms of theory related issues (Straub 1989). Content validity also refers to the quality of the content of the measure (Gefen 2002). In content validity the assessment is carried out through a review of literature (Gefen 2002). Sound content validity is ensured if the items come from previously established theories (Gefen 2002, Pavlou 2003). For the sake of sound content validity, other academic researchers were asked to go through the questionnaire items and their potential suggestions and recommendations were taken into account accordingly. It is pertinent to mention here that almost all of the questionnaire items (used in Study 1, 2, and 3) were adopted from previous literature and altered slightly to fit the specific contexts, thus ensuring content validity. In addition to that, the author carried out an extensive literature review in order to ensure the content validity and questionnaire items came from validated

sources. Also, the validity of an instrument can be measured through different means such as construct validity, which is investigated through discriminant and divergent validity (Straub 1989). For the convergent validity, the average variance extracted (AVE) needs to be checked, and this value ought to be greater than 0.5 (Naylor *et al.* 2012). AVE and composite reliability (CR) values up to a certain threshold level (i.e. 0.5 and 0.6 respectively) represent a good convergent and discriminant validity (Hair *et al.* 2006). If the factor loadings turn out to be greater than 0.5 (Gefen *et al.* 2000), which is the cut-off point, then the measurement model is examined through convergent validity, discriminant validity, and internal consistency. One way to confirm the construct validity is to identify it through the convergent and discriminant validity (Chin *et al.* 1997), which have been examined in all the individual studies.

For the sake of identifying convergent validity, which represents the common variance between the indicators measuring the same construct (Fornell & Larcker 1981), it was verified that each item was substantially and significantly loaded onto the expected latent construct and it was also verified that all the t-values were greater than 5.23 and the standardized parameters were greater than 0.5 accordingly (see Study 3). Convergent validity tends to be acceptable if the loading for each construct is higher than 0.5 (Falk & Miller 1992), a criteria that was met in this study. Moreover, convergent validity is assessed using three criteria. The first one is that each item's standardized path loading has to be statistically significant and greater than 0.7 (Gefen *et al.* 2000). Secondly, the Cronbach's alpha has to be greater than 0.7 for each construct. Finally, as per Fornell and Larcker (1981), the AVE and CR must exceed 0.5 and 0.6 respectively.

The main objective of assessing the discriminant validity is to identify how a construct in a given model is empirically distinct from other constructs within the same model (Bagozzi *et al.* 1991, Wasko & Faraj 2005). To assess the discriminant validity of each construct, the correlations of all pairs of latent variables are compared with the AVE values. The highest squared correlation came out to be 0.469, compared with the square root of the lowest AVE, 0.72. Therefore the criteria of discriminant validity are met by all pairs of constructs (see the Appendix of Study 3). The square root of the AVE must be superior to the correlation between constructs (Fornell & Larcker 1981). Moreover, in a table of the results (see the Appendix of Study 3), diagonal bold values represented the square root values of the AVE and other values represented correlations amongst constructs. The square-rooted AVE values surpassed the desired values in all cases.

Regarding common method bias, if the data is collected through the same questionnaire, and is self-reported and collected during the same period of time, with cross-sectional research design, then it is possible that the measurement error may occur with a bias that harms the true relationship between theoretical constructs (Podsakoff *et al.* 2003). Because of this, in this study Harman's single factor test was used to identify if there was any common method bias. All the variables were entered in the exploratory factor analysis and the method of un-rotated principal component factor analysis was used to determine the number of factors that originate variance in variables. If there are chances of bias occurring then a single factor will appear to account for very large covariance (greater than 50%) amongst other variables (Podsakoff *et al.* 2003). Therefore in this study (see the Appendix of Study 3) the largest factor did not account for the majority of the variance (25%). Therefore these results do not inflict the results and the possible occurrence of common method bias, and we can infer that it is unlikely that the interpretations of the results will be confounded. Therefore the validity of this study is deemed to achieve a satisfactory level.

Various researchers argue that in the discipline of social sciences, SEM is a complete resource for assessing theoretical models (Anderson & Gerbing 1988, Bandalos 2002) and that it is more advantageous than multiple regressions (Gefen & Straub 2000, Chin 1998). A group of causal relationships are measured by SEM (Esposito-Vinzi *et al.* 2010). For two individual studies (Study 1 and 3), the SEM approach has been incorporated, however, for Study 2, SEM was initially applied but based on some limitations and the scope of the study, FMSEM was further incorporated in order to analyze the data.

4 An overview of the studies

This chapter presents an overview of each individual study that contributes to the need to understanding the phenomenon of consumers' acceptance of social commerce. To this end, the three individual papers are accompanying this study and an overview of the papers is presented next.

4.1 An overview of Study 1: Engaging consumers online through websites and social media

The first research paper focuses on how online shopping via Facebook, website service quality, and peer recommendations all affect the trust of consumers, along with their attitudes and loyalty intentions in e-tailing. As social commerce has evolved from e-commerce (Liang & Turban 2011) it has become a matter of concern to understand how consumers' social media activities interact with e-tailers to identify consumer engagement. The study incorporates Generation Y consumers (Bolton *et al.* 2013) (born between 1981—1999). Using a quantitative online survey, the study examines the role of both e-commerce and social commerce in e-tailing. Moreover, this study has incorporated the fashion industry as it is suitable for research related to social commerce as clothing e-tailers are highly active on Facebook. For instance, Hugo Boss, H&M, Calvin Klein, and Gap each have millions of fans on Facebook.

With regards to the theoretical framework of this study, the relationships between attitude, trust, and loyalty have been studied numerous times in the literature of marketing (Hong & Cho 2011, Singh & Sirdeshmukh 2000). However, this study contributes by examining consumer engagement online via e-tailers' websites and Facebook pages, thus bridging the gap between the e-commerce and social commerce constructs. Also, these relationships have not been identified in the marketing literature with respect to Generation Y consumers, therefore this study provides novelty. The current study empirically shows that consumers trust the phenomenon of shopping through websites and social media, which highlights the power of social media in this age. In addition to that, the online gender gap is diminishing, as shown by this study where no gender difference was found. Also this finding is unique as the gender analysis studies in social media contexts are still in their infancy (Zhang *et al.* 2014b). Further, there was no relationship found between peer recommendations and trust towards the e-tailer, instead there was a direct impact of peer recommendations on the attitudes of consumers towards e-

tailers. This finding has a strong behavioral implication as peer recommendations have increasing relevance in building positive attitudes, which may lead to a willingness to recommend websites (Kumar & Benbasat 2006). The mediation analysis also showed that peer recommendations affect both the attitudes of males and females; however females are influenced more, which is in line with the previous research (Awad & Ragowsky 2008).

Further, it has been shown in this study that the low mean values of the items of the construct of online shopping via Facebook show that consumers are not very interested in shopping through Facebook but they do trust Facebook as a platform for shopping purposes (which includes searching for their preferred brands), therefore managers need to have a Facebook presence for their companies. The study suggests that managers invest further in the quality of peer recommendations in order to generate a positive consumer attitude towards e-tailers. Moreover peer recommendations are to be monitored carefully in order to give the perspective of the company and to ensure that they are not just driven by the consumers. In a previous study by Daugherty and Hoffman (2014), it has been found out that the word-of-mouth totally varies by brand type and affects the attention of consumers differently. Similarly consumers respond to peer recommendations, which can sometimes be in favor of companies and sometimes not. Also, this study has revealed that consumers evaluate e-tailers not only based on their website presences but also based on the Facebook outlets they have. Therefore more enjoyable experiences are to be provided for consumers to ensure their engagement. This can be ensured through managers' dedication to providing all the social media plugins with which consumers would like to engage with them on their company's websites. The current study has some limitations as social commerce research is still in its infancy (Hajli *et al.* 2015), therefore this study provided a conceptual framework for engaging consumers online that can be replicated with a different social media platforms, such as Pinterest or YouTube. The study only focused on Generation Y consumers, those who are born between 1981 and 1999, hence further studies can incorporate different cohorts (such as Generation X cohorts) to draw interesting findings.

4.2 An overview of Study 2: Consumer segments in social commerce

The second paper focuses on identifying the consumer segments in social commerce in order to further understand how different consumers on social networking sites can be approached through different strategies. The study examines the number of unobservable consumer segments through their latent classes present on Facebook and reveals a model of antecedents in each of the latent classes that have an influence on consumer behavior in social commerce. The study is piloted on the most popular social networking site, Facebook.

Further a conceptual framework is designed for this study that combines the recently devised UTAUT2 (Venkatesh *et al.* 2012) and the construct of trust. This study has not incorporated TAM as TAM uses a deterministic approach rather than focusing on individual characteristics. However, UTAUT2 is incorporated in this study, which focuses on consumer characteristics and which is assumed to predict consumer behavior well in social commerce settings. Plenty of research is available regarding the typologies of shoppers in the e-commerce scenario (Ganesh *et al.* 2010) and regarding the users on social networking sites (Brandtzaeg & Heim 2011), but this study has categorized the consumers on social networking sites, hence contributing to the body of literature. Some authors (Wedel & Kamakura 2012) have argued that, when there is an aggregated sample, SEM can lead to serious bias given the condition of a significant difference being found in the model across the unobserved segments of the population. Therefore, this study also incorporated a rather a new approach in marketing literature, known as FMSEM, as the SEM model was unworkable due to unobserved heterogeneity in the data. To be more explicit, it is modeling with latent variables that are categorical, which represent sub-populations where the membership of the population is unknown but inferred from the data (Muthén & Muthén 2010, Van Horn *et al.* 2008). Hence the current study has adapted the FMSEM technique to identify the latent classes from the population due to the unobserved heterogeneity.

The study reveals the characteristics of the consumer segments present on Facebook and gives three unique segments of consumers, referred to as “social patrons,” “wary explorers,” and “sporadic explorers.” Previous research has found various types of users on social networking sites based on their characteristics through the cluster analysis approach (Brandtzaeg & Heim 2011). However, the current study categorizes consumers through the FMSEM approach, which is considered more dynamic when compared to cluster analysis (Jedidi *et al.* 1997).

Further, this study demonstrates how each variable varies in each latent class. The study incorporated actual consumers, who actually shopped and searched for clothing items through Facebook and thorough analysis revealed three different categories of consumers in social commerce. Social patrons (n = 219) turned out to be the largest latent class, followed by wary explorers (n = 72) and sporadic explorers (n = 18). Social patrons have acquainted themselves with Facebook or generally with other social networking sites and are skilled at searching and shopping for their preferred brands on social networking site platforms, and this segment analysis has given very positive indications for social commerce. The study further shows that wary explorers are a bit worried about the shopping process on Facebook as they feel that the platform is not trustworthy. However, besides using Facebook for shopping, this category of consumers enjoy being on Facebook and are influenced by important others to be present on it. Lastly, sporadic explorers have very few reasons to come to Facebook as this category of consumers feel that adequate resource for shopping are not present on Facebook and they do not feel pressure from their important others to be present on Facebook.

The role of trust varied among the latent classes: in the largest latent class, social patrons, trust on Facebook had a positive influence; among wary explorers the influence was negative; and among the smallest latent class, sporadic explorers, trust had no relationship with Facebook buying intentions. The positive influence of trust among social patrons is in line with the previous research (see e.g. Kim *et al.* 2008, Lin & Wang 2006, Sledgianowski & Kulviwat 2009), which might indicate that trust has an essential role among technology acceptance research. However, as the social patrons' model does not employ all the constructs usually employed in the UTAUT2 model, the question is whether this is because of including trust in the model (due to our empirical context) or something else. These questions cannot be answered through this study.

A completely opposite finding was provided by the group of wary explorers, among whom the influence of trust on buying intentions was negative. This can be explained by the fact that online shopping via Facebook and social commerce in general are emerging phenomena and Facebook is not the primary platform for shopping. This group, despite enjoying being on Facebook, does not trust the information related to shopping present on Facebook or the shopping process in general. Another interesting finding was that among sporadic explorers, trust had no relationship with behavioral intentions to use Facebook for shopping. This can be explained by the fact that these are irregular users of Facebook. They use Facebook at on and off basis and are not necessarily looking for brands or clothing

related items thus lacking trust. Overall this study has shown the different consumer segments in the social commerce scenario. The study has given important implications, both theoretically (by contributing to the literature of social commerce) and managerially (for how diverse consumer segments can be taken care of through different approaches). The study argues that incorporating the UTAUT2 and FMSEM approaches is quite useful for understanding the newer stream of social commerce in the marketing literature.

4.3 An overview of Study 3: Consumers' acceptance of social commerce: Examining the role of trust

The third paper emphasizes consumers' acceptance of social commerce by facilitating the role of trust. The study examines consumers' acceptance of social commerce when piloted on Facebook as previous studies have argued that despite there being significant commercial value associated with social networking sites, their impact in the social commerce context has yet to be fully explored (Guo *et al.* 2011, Shi *et al.* 2010). Also, in the e-commerce research one of the most challenging research issues has been trust (Gefen *et al.* 2003, Turban *et al.* 2015) and now research related to social commerce is also focusing on it (Hajli 2014b, Nadeem *et al.* 2015), but this study identified the role of trust through two other variables; perceived security and perceived privacy. Therefore, this study not only investigated the mere acceptance of consumers acceptance of social commerce but goes beyond it by examining the role of perceived security, perceived privacy, and trust and the influence of these variables on behavioral intentions to use Facebook for shopping and actual use. In this study UTAUT2 has been modified with the inclusion of variables such as security and privacy. The main constructs of UTAUT2 have been applied with the additional construct of trust added for examining consumer behavior in the social commerce context. This study incorporated the target audience of consumers in Australia who actively search or shop for clothing items through Facebook.

The results of the study showed that the most significant predictor of consumer behavior in social commerce turned out to be PE. The study found out that shopping through Facebook is not effortless. Also there is no significant impact of SI, which is not in line with the previous studies (see e.g. Hajli *et al.* 2014, Liang *et al.* 2011, Slade *et al.* 2015). This finding can be due to the fact that when users become more experienced with a certain technology; they are less influenced by social influencers.

In this study, 71% of the respondents had been using Facebook for more than four years, therefore it can be ascertained that this is why the role of social influencers was diminished. Further this study suggests that consumers on Facebook find the shopping experience enjoyable. With regards to trust, this study demonstrates that trust is only influenced by perceived security and not by perceived privacy as consumers are of the view that their personal information might be mistreated by the companies present on Facebook, whereas Facebook itself is considered a secure platform. Also trust is the basis of the model that enables the Facebook commerce business model to operate; unless both buyers and sellers trust the social networking site, social commerce will not take place—as shown by this study.

Furthermore, Berthon *et al.* (2002) have advocated that the theories and frameworks incorporated in the past should be extended further in newer contexts to draw interesting findings. Therefore, this study has used UTAUT2 with the extension of trust. The study shows that, as per UTAUT, the main predictors of consumers' behavioral intention to use a social networking site for shopping turned out to be PE, hedonic motivations, perceived security, and trust: so it can be said that there are huge prospects for social commerce, yet there is more to be done from the e-tailers in order to engage more consumers.

For managers, the current study has highlighted that privacy measures are to be enhanced, and therefore one possible solution could be incorporating privacy statements and seals to lower the risk. Further this study revealed that consumers enjoy being present on Facebook, therefore e-tailers can devise strategies, such as providing more enjoyable content for its target audience, in order to have more engagement with consumers. The current study contributes to both research and practice. The current study contributes to the social commerce literature by examining the antecedents of the behavioral intention to use Facebook and its actual usage in the context of social commerce, achieved by documenting the main constructs influencing intention. This study in particular extends UTAUT2 with the addition of trust (determined by perceived security and perceived privacy) in order to better understand possible Facebook usage for shopping. The addition of trust to UTAUT2 requires further development however with the current discussion around data privacy; future studies may consider including these constructs.

5 Conclusions

5.1 Conclusions and answers to the research questions

The study planned to advance the literature of social commerce both theoretically and managerially with respect to consumers' acceptance of social commerce, which has been understudied in the marketing literature. Therefore, the main research question was how consumers accept the phenomenon of social commerce in clothing e-retail. Also, light has been shed on some of the main factors that have an influence on consumers' acceptance of social commerce. In particular we conducted three individual studies for the sake of addressing the main research question, and used the following three sub-research questions: 1) *How are consumers engaged in online commerce (e-commerce and social commerce)?* 2) *What are the different types of consumers in social commerce?* 3) *What factors lead to consumers' trust and acceptance in social commerce?* The first sub-research question identifies consumer behavior through the effect of the e-commerce setting, including social commerce. The second research question examines the consumer behavior of different types of consumers in the social commerce setting. The third sub-research question emphasizes the role of trust in consumers' acceptance of social commerce. Therefore, to answer the current study's research questions, the synthesis of various theoretical and empirical approaches used in three individual papers is incorporated.

This study shows that there can be different factors that can contribute to consumers' acceptance of social commerce but these factors vary in different given situations. Especially when compared with e-commerce research, the influence of some of the factors that had been positive, have come out to be negative and insignificant. The following section throws more light on the answers to the three sub-research questions.

5.1.1 *How are consumers engaged online in online commerce (e-commerce including social commerce)?*

This sub-research question is addressed based on the findings of first research paper (see Nadeem *et al.* 2015a). The findings of this paper have bridged the gaps in previous research where the combined effect of e-tailers' website presence and Facebook presence has not been taken into account. This study examined online

engagement both through e-tailer's website and Facebook presence, and has determined that consumers still prefer e-tailer's websites over their social presence on Facebook for shopping purposes. However, consumers have accepted the notion of shopping through Facebook, which enhances consumer trust. It can be because of the fact that e-commerce is a mature stream and consumers are well versed with it, and social commerce is a new phenomenon that will take a bit of time to be considered as the primary platform for shopping.

The findings suggest that factors such as trust, loyalty intentions, and attitudes have been widely studied in marketing literature (Hong & Cho 2011, Singh & Sirdeshmukh 2000), however, the study emphasized the role of Generation Y (those born between 1981—1999) in the new social commerce settings and that website service quality and online shopping via Facebook both had a direct impact on consumers' trust, highlighting the importance of e-commerce (including social commerce). The study has incorporated a general framework with relationships between variables that have abundant evidence from the previous literature. Furthermore, the study has found no gender difference as the online gender gap is diminishing whereas studying gender differences has long history in marketing research (Ladhari & Leclerc 2013, Yeh *et al.* 2012). Also, instead of impacting trust, peer recommendation has a direct effect on the attitude of consumers that was found to be stronger on the attitudes of females rather than of males. This finding was particularly interesting as previous research (Awad & Ragowsky 2008) has postulated that peer recommendations have a direct impact on consumers' trust.

Also, Awad and Ragowsky (2008) suggested that females are affected more by the recommendations of others than males, whereas males make faster decisions and rely on their judgment. In addition to that, previous research by De Vries and Pruyn (2007) showed the relationship of peer recommendations and attitude via trust. And they showed that there is a direct relationship between peer recommendations and trust.

Furthermore, the findings suggest that the low mean values for the construct of online shopping via Facebook reveals that Facebook is not the primary platform for shopping. However, consumers trust Facebook and have a huge presence on Facebook. The Facebook presence of e-tailers is inevitable and findings have also suggested that consumers enjoy the shopping on Facebook but are more interested in connecting and gathering information, which is in line with the previous research (Harris & Dennis 2011).

Overall, the study has provided a theoretical framework for engaging consumers online, with an emphasis on social commerce settings, and it has drawn

some interesting findings that were in contrast with the previous literature as well (regarding the direct affect of peer recommendations on attitudes). Based on the findings, it is argued that Facebook is a trustworthy platform for shopping but the importance of the websites of e-tailers cannot be denied and the combination of these two platforms will lead to more engagement by consumers. *To summarize, the study revealed that consumers like to engage with e-tailers through both e-commerce and social commerce platforms and show positive behavioral outcomes, except that peer recommendations' directly impact consumers' attitude rather than their trust.*

5.1.2 What are the different types of consumer segments in social commerce?

The second sub-research question is addressed through the second research paper (see Nadeem *et al.* 2015b) and relates to the findings of the overall theme of social commerce. The study empirically identifies various types of consumers that are present on Facebook in order to better equip e-tailers with the means to devise their strategies accordingly. An established framework, UTAUT2 (Venkatesh *et al.* 2012), has been incorporated in this study with the addition of trust and its role has been identified in each of the latent classes. The study has not incorporated the role of moderators such as age, gender, and experience, as it was beyond the scope of this study considering that that was social commerce a new phenomenon and the objective was to identify the consumer segments irrespective of such moderators in this context. For instance, previous studies have found out that the Internet gender gap is diminishing, and no significant gender difference was found (Nadeem *et al.* 2015). However these findings may contrast with some findings in social media research and warrant more research. The study has found three different types of consumers, referred to as social patrons, wary explorers, and sporadic explorers. There is a plenty of evidence available regarding the different typologies of shoppers, especially in e-commerce (Ganesh *et al.* 2010, Wallace *et al.* 2004) and for the users at social networking sites (Brandtzaeg & Heim 2011, Brandtzaeg 2010) but this study has identified consumers whose shopping decisions are actually influenced through Facebook.

The study has found three latent classes based on their unobserved heterogeneity and hence used FMSEM (Jedidi *et al.* 1997), which is rarely used in the marketing and business literature. The study emphasizes that aggregate data samples can result serious bias when estimated through SEM, which is in line with

the previous research of Wedel and Kamakura (2012). To address this bias, a priori segmentation is used (where consumers are assigned to a segment a priori, based on psychographic or demographic factors). As a priori segmentation has its limitations, FMSEM is a better method to approach the matter of unobserved heterogeneity (Jedidi *et al.* 1997). Therefore, in this study consumer segments are identified by this method.

The findings of this study revealed that although there is a plenty of technology acceptance research in various contexts (see e.g. Chang *et al.* 2007, Mandal & McQueen 2012, Näsi & Koivusilta 2013), technology acceptance research is scarce in social commerce settings, and hence this study provides a contribution. One of the main contributions of this research is its incorporation and highlighting of the theories from IS in the marketing discipline and synthesizing them (as done previously by Hajli 2014a).

The findings indicated that the variables in UTAUT2 (modified with trust) will perform differently in each of the latent class of consumers. Instead of focusing on demographic differences, the study emphasized the differences between classes. The study suggests that the largest group of consumer segments identified—referred to as social patrons—has acquainted themselves with Facebook and they are found to be skillful with regards to gathering information and purchasing their preferred items. This group finds that there are enough resources to use Facebook as shopping tool and this group has given highly positive indications for using Facebook with regards to purchasing activity. The two other identified groups are referred to as wary explorers and sporadic explorers. Findings suggest that wary explorers are a bit worried about the shopping process on Facebook, whereas they like being present on Facebook as they feel it is productive and they enjoy the whole process. The third group of consumers, which also tends to be the smallest, is called sporadic explorers. These consumers come to Facebook on an irregular basis as they do not feel pressure from family & friends others and they also feel that the conditions for shopping through Facebook are not adequate. However, they are aware of the importance of Facebook and this group can be engaged further by providing them with adequate resources.

Taking into account the findings of this study, it can be ascertained that there can be different types of consumers in social commerce and that they should be identified and addressed accordingly. The findings answer the call for more research in social commerce settings (Harris & Dennis 2011), incorporating technology acceptance research (Hajli 2014b) and advancing knowledge by identifying consumers, rather than users, as has been done previously (Brandtzaeg

& Heim 2011). *The study concludes that there are three different consumer segments in social commerce settings, referred to as social patrons, wary explorers, and sporadic explorers.*

5.1.3 What factors lead to consumers' trust and acceptance of social commerce?

The third sub-research question (*What factors lead to consumers' trust and acceptance in social commerce?*) is addressed by the third research paper (see Nadeem *et al.* 2015c). The study investigated the growing trend of social commerce amongst consumers and the extent to which they trust the phenomenon of social commerce. The findings suggest that though consumers trust social commerce and find the platform secure for shopping, they have privacy concerns. Further, the findings reveal that when consumers were asked for which platform they rely on the most, 99% responded with Facebook, with YouTube being the next closest (at 75%), which would seem to correlate with the real-world situation where Facebook has outperformed all other types of Web 2.0 technologies in terms of popularity. With regards to the theoretical standpoints, this study has responded to the call of researchers who ask for further studies in the domain of social commerce (Hajli & Lin 2015, Liang & Turban 2011, Ngai *et al.* 2015).

As Berthon *et al.* (2002) have advocated that past theoretical frameworks should be extended in newer contexts, the UTAUT2 framework has been used in the context of this study and the composite reliability of constructs (such as PE, EE, SIs, FCs, hedonic motivations, perceived privacy, trust, perceived security, behavioral intentions to use Facebook for shopping, and actual use of Facebook) have come out to be positive and reliable instruments that can be used in further studies of social commerce. Not only that, the study was empirically piloted on Facebook and hence can be further tested with other streams such as mobile commerce or even e-commerce. For instance the effect of EE on influencing behavioral intentions came out to be negative, which is in line with the previous research (Teh & Ahmed 2012). It is inferred from this study that shopping through Facebook is not effortless, which can be because of the few functionalities available. Also, the study has shown that important others do not independently influence the decisions related to making a purchase. There are different explanations for this and one of them is that when consumers have more experience with some technology, they are not usually influenced by family and friends to a great extent.

The major aim of this study was to facilitate the role of trust with two antecedents; perceived privacy and perceived security. Only perceived security was found to have a positive influence on consumers' trust, which further leads to the behavioral intention to use Facebook for shopping. The impact of perceived privacy turned out to be negative, through which it can be inferred that consumers are concerned about privacy and feel that the information they might need to provide to third-party e-tailers may not remain private and could be used for purposes they do not wish it to be used for.

Also, the study has shown that only two constructs of the UTAUT2 model have an impact on the behavioral intention to use Facebook for shopping, namely PE and hedonic motivations. *To conclude, the current study has shown that due to the proliferation of social networking sites, the phenomenon of social commerce has emerged, which has highlighted the importance of consumers' trust, privacy, and security in these new settings. The study concludes that, out of the main constructs of UTAUT2, only PE and hedonic motivation are factors that influence the behavioral intention to use Facebook for shopping. In addition to that, while consumers find Facebook a secure platform for shopping, there are privacy concerns.*

5.2 Theoretical Implications

The main objective of this study was to identify consumers' acceptance of social commerce and thus to contribute to the paradigm of marketing and consumer behavior research. The study has resulted in providing five theoretical contributions. Taking into account the newness of social commerce research, novel views are provided that will enable the further development of the new stream of literature.

Firstly the study has contributed in the widespread knowledge of the relationships between trust, attitude, and loyalty intentions (Hong & Cho 2011, Singh & Sirdeshmukh 2000) by combining them with variables that determine consumers' engagement online, such as website service quality and online shopping via Facebook. Also, the role of peer recommendations has been tested (with moderation for gender), specifically targeting Generation Y consumers, thus providing a general framework for engaging consumers online, which is a significant contribution to the marketing literature. With the help of this study, future researchers can further contribute to the knowledge by using our extended model with different product categories and other social media applications besides social networking sites. The theoretical insights provided by these findings and

discussions show that there is a huge potential to engage consumers online through social media and that peer recommendations have a direct influence on attitudes rather than trust. It is pertinent to mention here that no previous studies have given a framework for engaging consumers online in both e-commerce settings in general and specifically in the social commerce settings. Previous research has either been on the e-commerce side or the social commerce side.

Secondly, from several viewpoints there has been plenty of technology acceptance research (see e.g. Chang *et al.* 2007, Mandal & McQueen 2012, Näsi & Koivusilta 2013) and extant research has incorporated the TAMs, for example in mobile marketing (Persaud & Azhar 2012), in tourism (El-Gohary 2012), and in online shopping (Ashraf *et al.* 2014). However, research that merges technology acceptance with social commerce is scarce, especially research using the recently devised UTAUT2 model. Previous research regarding social commerce has incorporated TRA (Hajli 2014b) and TAM (Hajli 2015) but hardly any studies have examined the UTAUT2 model in the new settings of social commerce. Therefore this study is a rare attempt to include the UTAUT2 theoretical framework in social commerce research to study the consumer acceptance phenomenon. This study also makes a significant contribution in confirming the robustness of the UTAUT2 model by applying it in different countries. Moreover, it is tested in an emerging country (see Study 2) to draw interesting findings as previous research incorporating UTAUT2 has remained dominated by the west.

Thirdly, not only has UTAUT2 been tested in social commerce settings, its possible extension with the variable of trust has also been examined. The role of trust has been examined through two other constructs referred to as perceived security and perceived privacy. Previous research by Berthon *et al.* (2002) advocated that past theories and frameworks need to be tested in new contexts in order to draw interesting findings and hence this study provides such a contribution. Out of the two antecedents of consumers trust in this study, only perceived security had a positive influence on trust, which further impacts consumers' behavioral intention to use Facebook for shopping.

Fourthly, out of the revised UTAUT2 model, only two variables showed a positive influence on trust, which further impacts consumers' behavioral intention to use Facebook for shopping when tested with Australian consumers (see Study 3) who shop and search for items through Facebook. The constructs PE and hedonic motivations had a positive influence on behavioral intentions to use Facebook. It can however be because of the newness of social commerce research that the major

relationships between constructs that previously turned out to be positive come out to be negative and insignificant in this research.

Fifthly, to the best of the authors' knowledge, no previous study has identified the consumer segments that are present at Facebook with the help of technology acceptance research (in particular, UTAUT2) in a social commerce context. Previous research by Brandtzaeg and Heim (2011) found the users on social networking sites; however this study has focused on the consumer segments that actually search and shop for their preferred clothing items through Facebook. With the help of the latent class approach (more about this can be found in the methodological part of Study 2), three unique classes of consumer segments were identified in which the constructs of UTAUT2 and trust vary. Finding these unique consumers would not have been easy with the traditional SEM technique, therefore FMSEM was incorporated in order to reveal the unobservable consumer segments. By incorporating the different latent classes of the model with the help of FMSEM and using MPlus software, this study is unique.

The study overall contributes to the nascent research on social commerce, which is still in its infancy, by providing a general framework for engaging consumers online, identifying the consumer segments, and examining the role of trust (which has had little attention in previous studies in the domain of marketing). Instead the research related to social commerce has either focused on defining or understanding the phenomenon of social commerce itself (Stephen & Toubia 2010). Previous research has adapted TAMs (Hajli 2014b, Hajli *et al.* 2015) but the current need is to incorporate more dynamic and recently devised models. This study combines the marketing notion with information technology by extending the UTAUT2 model in various countries with a varying degree of explanatory power. The extended UTUAT2 model in our study can further be incorporated in explaining other online behavior such as mobile banking, e-government, and other social media sites.

This study contributes to the existing body of knowledge on social commerce and has partly answered the call from researchers for more empirical research in the domain of social commerce, and new research avenues were found.

5.3 Managerial Implications

The managerial contributions will reveal various characteristics to be taken into account while devising purchase-related strategies for consumers in the context of social commerce.

The study provides a four-fold key contribution for managers. Firstly, e-tailers' presence on Facebook can enhance the consumers' trust and peer recommendations are to be taken care of by the managers as they have a direct impact on consumers' attitude. Therefore, investments are not only to be made in improving the websites of the e-tailer but also in monitoring the quality of peer recommendations by having a team that constantly responds to the consumers' comments and queries, and the team should be responsible for clarifying the perspective of e-tailers rather than the comments being only from consumers (which may well digress from the desired message of e-tailers about products and items). Also, managers need to identify the influential groups and devise strategies to influence these groups (such as giving special discounts to draw more traffic online), especially the female groups whose attitudes are significantly influenced by peer recommendations. More visual and informative content can be added by the managers by looking through the consumer comments and peer recommendations, which can help in devising further successful strategies for the e-tailers. Moreover, Berthon *et al.* (2012) warranted that, from the international marketing perspective, social media might appear very simple and easy at first glimpse, for instance, perceiving that it merely requires tweeting frequently about the brand, having a Facebook fan page, and running some advertisements on the YouTube channel. Whereas it is not that simple when it comes to targeting Generation Y, as this generation, in particular has grown up with social media. Therefore, to address the international marketing perspective, this study particularly emphasizes and studies the consumer behavior of Generation Y. The present study enables managers to understand how social networking sites change consumers' decision making and their path to purchase.

Secondly, the main key construct between bringing positive change in consumers' attitude, loyalty intentions, and behavioral intentions is trust. As consumers not only evaluate e-tailers through their shopping websites but also through outlets on Facebook, to gain the trust of the consumers, managers must provide significant, up-to-date content on Facebook outlets and the content must have an updated look in order to provide an informative and enjoyable experience that will enhance online consumer engagement. For engaging consumers, marketers need to understand the attitude and language for engagement as this turns out to be the major barrier. Marketers need to carefully observe, learn, and listen (rather than start preaching) in order to engage consumers successfully (Berthon *et al.* 2012). It is a challenge and opportunity for marketers to understand through which traditional channels (company websites) and new channels (social media, Facebook, Pinterest) consumers would like to engage. Lin and Lu (2011) argue that

Facebook's main focus was on entertainment for its users, but now it is also used as a marketing tool by companies.

Furthermore, managers must also not neglect the role of e-tailers' websites as Facebook is still not the primary platform, therefore significant investments should be made in improving company's websites and providing enough functionality for all social media plugins. According to Berthon *et al.* (2012) Web 2.0 has brought about many challenges and opportunities for marketing managers and they provide five axioms; (i) the actions and creations of creative consumers are highly dependent on technology, government, and culture, (ii) social media has become a function of technology, culture, and government within its context, (iii) it is hard to remain local, especially the local events as they might magnify internationally, (iv) the interpretation of global events is more likely to occur locally, and finally (v) historically, technology has been dependent. Berthon *et al.* (2012) suggest that, keeping this ever-changing scenario in mind, marketers must act accordingly and engage consumers to utilize the powers of Web 2.0 technologies.

Managers must provide multiple ways to interact online as this is an era of omni-channeling (McKinsey 2014). As suggested by Berthon *et al.* (2012), whether marketers like it or not, they have to identify the Web 2.0 / social networking sites that enable a certain phenomenon, such as understanding consumers in order to know where they exist and to address their needs accordingly. Due to the rise in Web 2.0 technologies the locus of power has shifted from firms to individuals / collectives and from the desktop to the worldwide web, and the value of production has shifted from firms to citizens. Traditionally, consumers exercised little power over marketers, but now consumers possess huge influence, powered by social media, and the whole scenario involves value co-creation from the consumers' side rather than mere consumption.

Especially, this study suggests that studying social commerce in developing countries (see Study 2) can lead to unexpected findings and new models. This can enable practitioners to develop new approaches to tap into the unexplored market, where Internet penetration is increasing, which will lead to higher usage rates of social media. There are some constraints in the developing world regarding the usage of social media due to Internet connectivity, however those constraints are outweighed by the benefits and managers need to especially focus on these unexplored segments. Berthon *et al.* (2012) argue that the acceptance of technology is remarkably dependent on three main aspects; the history of technology, culture, and government. Consumers in different parts of the world will view technology differences based on the aforementioned factors. This study incorporates empirical

evidence from three different countries, where the aim is not to study cross-cultural differences but to study the acceptance of social commerce in their capacities. When it comes to social media usage, the strategy of one-size-fits-all is invalid and any other form of standardized approach for all countries may not be workable (Berthon *et al.* 2012).

Thirdly, consumers may appear as a homogenous group on social networking sites, but they are not. Managers should identify each group and address them accordingly as their shopping behaviors may vary remarkably and managers should incorporate more sophisticated methods (such as FMSEM) to identify latent classes. This study has identified three different consumer segments, referred to as social patrons, wary explorers, and sporadic explorers. To reach social patrons, managers need to provide them with a more enjoyable experience, for instance by developing games related to brands, through which social patrons can earn discount points. Such measures by managers will help social patrons to be more engaged online, which is highly beneficial for the company as previous research has suggested that four out of ten people ultimately end up buying the product after merely liking or sharing it on Facebook (Stadd 2013). To reach wary explorers, the efforts of managers should be invested in providing them with more trustworthy information, as if they find authentic information about their preferred products and items on the Facebook outlets of e-tailers, this segment's trust in the e-tailers is going to be enhanced. In order to reach the sporadic explorers, managers should also target consumers through offline means, such as by instructing the sales persons at physical stores to ask consumers to go online and *like* their e-tailers page on Facebook in order to get discounts. This type of measure will help to engage sporadic explorers to go online, as they only come to Facebook on an irregular basis.

Fourthly, this study has shown the importance of trust, security, and privacy in social commerce settings. Previous research has shown that distrust is the main reason for the lack of a positive relationship between consumers and companies online (Jones & Leonard 2008). For the successful utilization of the social capital present on Facebook, managers must give a sense of security, privacy, and trust to consumers. This study has shown that consumers feel that shopping through Facebook is secure, however consumers have shown privacy concerns that can possibly be addressed by providing privacy statements and seals for consumers from the companies' side. With regards to the risks for the companies, employee trainings can be very important. Especially, the employees of the companies need to be trained in using social media effectively, which requires basic IT and communication skills. In a previous study by Deloitte (2009) the surveyed

employees revealed that it is easy to destroy the company's reputation online and few companies (17%) have proper social media training in place in order to mitigate and monitor the potential reputational risks. Further, Leonard (2009) argued that it is imperative to have social media training for the success of companies.

Overall, the findings will enable managers to identify the attitudes of consumers on social networking sites in regard to the purchasing process. The managerial contributions have provided the tools to reach their consumers and potential consumers effectively through social networking sites (Facebook in particular).

5.4 Limitations and future research

As every research has limitations, and therefore this study also opens up avenues that can be addressed by the future research. Concerning Study 1, using SEM through LISREL software was employed, which shows a linear relationship, and, in the case of online consumers' engagement, this approach can be considered an oversimplified assumption. Therefore more novel approaches in terms of methodology can be incorporated as research regarding social media is at an embryonic stage (Ngai *et al.* 2015). In this study, only Generation Y (born between 1981—1999) (Bolton *et al.* 2013) was targeted and further studies could incorporate Generation X (born 1961—1981) (Brosdahl & Carpenter 2011) who are working professionals and not just young adults. Also, in this study, student consumers have been taken into account, however future research can incorporate various types of consumers online and this research focused on only one category of clothing consumers, however future research can replicate it using other product categories (such as books, electronics, and tourism), which will help draw interesting findings.

Also, this study was done in online settings to identify the consumers' engagement online; however future studies could possibly throw light on brick-and-mortar settings and even with methods such as conducting interviews in a qualitative stream of research. In this study conventional constructs such as trust, attitude, and loyalty intentions were employed to meld with new constructs such as peer recommendations, however, future research can incorporate social commerce constructs (Hajli *et al.* 2015) in order to come up with different perspectives and different research frameworks. Only one social networking website (Facebook) was employed. Future studies may incorporate more than one social networking site or even all the different ones.

With regards to Study 2, the recently devised UTAUT2 model has been incorporated, which did not turn out to be a workable model while analyzing it through the SEM technique—especially researchers who advocate the supremacy of confirmatory research may view this as a limitation. In this study, the role of moderators (age, gender, experience) has not been identified as it is in the original UTAUT2, thus future research can possibly incorporate these moderators in order to have a more holistic view. Further, the data has been collected from the students (who relied on Facebook for shopping) at a large university; however, future research could collect data from consumers who are not students as this may hinder the generalizability of the results. In this study, it is clearly shown that the role of trust varies with the various heterogeneous groups, and future research must be employed to identify the cause of this variation.

Also, only trust has been added to the UTAUT2 model, however, many other significant contributors can be blended with UTAUT2—such as perceived behavioral control—in order to have more insight into this phenomenon. Further, studying culture will possibly lead to drawing interesting conclusions. In line with Study 1, this study has also focused on one product category; clothing. Future research could possibly focus on games, mobiles, or electronics, and possibly look at other social media sites such as YouTube, Twitter, and Pinterest. In terms of data analysis, using FMSEM, MPlus was used, the use of which is scarce at best in the marketing discipline. The main highlight of this paper was that using FMSEM, as the model was initially tested through SEM and it turned out to be insignificant, therefore it is strongly urged that the FMSEM approach is used to address the possible unobserved heterogeneity in the data.

Concerning Study 3, the data was predominantly collected from the student consumers at a university in Australia who rely on Facebook for shopping. The student sample were easily questioned, therefore future research could possibly use consumers at other platforms. Moreover, there were five path relationships that turned out to be insignificant, but they were kept to obtain a more holistic view of the structural model and infer results accordingly. Also, a limitation of this study is that there is no cross-cultural validation of the results (for instance, validating if behavior varies in different cultural settings), which could be addressed through future research. In line with Study 1 and Study 2, this study was piloted on Facebook in order to understand the social commerce phenomenon, whereas respondents in this study mentioned that they are active on more than one social networking site, so future research could employ other sites such as Google+, YouTube, Pinterest, Instagram, and possibly Chinese social media sites such as QQ,

Weibo, and Renren. Also this study, in line with Study 1, focused only on the environment, taking into account the consumers' perspective, whereas future research may focus on interviews with the personnel responsible for moderating and communicating with consumers at social networking sites.

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