Analyzing the Factors that Influence Consumers' Adoption of Social Commerce – A Literature Review

Full Papers

Thomas Friedrich

University of Bamberg thomas.friedrich@uni-bamberg.de

Abstract

Social commerce, the use of social media in e-commerce, has become an attractive means for companies to generate business value from consumers' online social interactions. However, many e-commerce companies today are still trying to understand which factors drive consumers to participate in social commerce. While first empirical studies have examined one or more factors that influence consumers' adoption of social commerce, the findings of these studies are scattered across the literature base, sometimes not transparent, and not straightforwardly comparable. To synthesize these findings, we conduct a systematic literature review. After analyzing 38 academic publications, we contribute a comprehensive and structured list of factors that influence consumers' adoption of social commerce. The results of our work provide implications for future research to develop a more complete understanding of consumers' adoption of social commerce. Practitioners can use our results to improve the effectiveness of their social commerce initiatives.

Keywords

Social commerce, adoption, e-commerce, social media, literature review.

Introduction

In recent years, the increasing popularity of social media and social networking sites has given rise to a new stream of electronic commerce (e-commerce), called social commerce (Wang and Zhang 2012; Zhou et al. 2013). By combining e-commerce activities with social media, social commerce enables consumers to participate, communicate, and interact in the online selling and buying of products and services (Curty and Zhang 2011; Zhou et al. 2013). In this way, consumers can share their shopping experiences, get advice from trusted peers, and collaborate online to custom-design products or receive price discounts (Leitner and Grechenig 2009). For companies, social commerce provides the potential to generate business value from consumers' online social interactions (Stephen and Toubia 2010). However, many e-commerce companies today are still trying to find out which factors influence consumers to participate in social commerce (Turban et al. 2010; Zhou et al. 2013).

Together with its growing potential for practice, social commerce has received increasing interest in research during the last decade (Wang and Zhang 2012; Zhou et al. 2013). So far, research on social commerce has focused on the theoretical foundations, for example, the concept itself and its historical evolution (Wang and Zhang 2012; Zhou et al. 2013), its activities (Saundage and Lee 2011; Turban et al. 2010), business models (Leitner and Grechenig 2007b; Leitner and Grechenig 2008), technological features (Curty and Zhang 2013; Huang et al. 2012), and design principles (Huang and Benyoucef 2013). First empirical studies have also explored factors that influence consumers' adoption of social commerce. However, understanding the results of these studies is difficult due to the following reasons: First, the examined factors, such as trust, have been conceptualized in different ways – for example, trust in company (Chow and Shi 2014), trust towards community (Chen et al. 2014), or trust in website (Hsiao et al. 2010). Second, different impact directions have been identified between the same factors, such as trust positively affects perceived usefulness (Hajli 2014), or perceived usefulness positively affects trust (Hajli

2012d). Third, different outcome variables, such as consumers' sharing intention (Chen et al. 2014; Liu et al. 2013a), buying intention (Kwahk and Ge 2012; Lu and Fan 2014), or continuance intention (Jang et al. 2013; Liang et al. 2011), have been used to explain consumers' adoption of social commerce. As a consequence, the current social commerce literature does not provide a clear understanding of what factors influence consumers to adopt to social commerce. Therefore, researchers investigating this topic first have to synthesize the various conceptions in the literature. A glance at the number of existing social commerce publications (see Appendix) indicates that this task can easily become cumbersome and time-consuming, however. Moreover, there is a risk that already existing conceptualizations are overlooked and reinvented, which will make the understanding of social commerce adoption even more complicated.

In the present paper, we consequently aim to synthesize the different conceptions in the social commerce literature and contribute to a better understanding of consumers' adoption of social commerce. We address the following research question:

What factors influence consumers' adoption of social commerce?

To identify these factors, we systematically review the literature on social commerce adoption. To the best of our knowledge, this is the first literature review on this topic. With the review, we contribute to the social commerce literature by synthesizing past research to provide a comprehensive and structured list of factors and their potential impact on consumers' adoption of social commerce. Researchers can use the list as a starting point to verify the importance of the identified factors and to explore additional factors. For practitioners, the list serves as a guideline to determine which factors may drive the success of their social commerce initiatives.

The remainder of this paper is structured as follows: First, we briefly explain the concept of social commerce and illustrate the basic theories behind social commerce adoption. Second, we describe our research approach to systematically review the literature on social commerce adoption. Third, we present the identified factors and their potential impact on consumers' adoption of social commerce. In the subsequent section, we discuss the implications and limitations of our results. Finally, we conclude our findings and highlight the contribution.

Theoretical Background

In this section, we provide background information on the concept of social commerce and on the basic theories behind social commerce adoption.

Concept of Social Commerce

Historically, the roots of social commerce can be traced back to the late 1990s (Curty and Zhang 2011; Wang and Zhang 2012). At this time, e-commerce pioneers, such as Amazon and eBay, introduced features on their websites that enabled consumers to write reviews on products or rate the performance of sellers, which is then made publicly available (Saundage and Lee 2011). With the emergence of web 2.0 and social media, e-commerce companies began to integrate new technologies into their websites to provide consumers with a more social and interactive shopping experience (Curty and Zhang 2013; Ickler et al. 2009). In 2005, Yahoo! introduced the term social commerce to describe a new collaborative shopping feature on its shopping platform that allowed consumers to create, share and comment on product lists (Wang and Zhang 2012). In 2007, first academic articles appeared that explicitly used the term social commerce (e.g., Leitner and Grechenig 2007a; Leitner and Grechenig 2007b).

By combining business, informational, technological, and social aspects (Wang and Zhang 2012), social commerce involves multiple disciplines, such as marketing, computer science, sociology, and psychology (Huang and Benyoucef 2013). As a result, various definitions of social commerce have been proposed (Wang and Zhang 2012). From a marketing perspective, for example, social commerce is defined as "the concept of word-of-mouth, applied to e-commerce" (Dennis et al. 2009, p. 2). From an e-commerce perspective, Liang and Turban (2011, p. 6) define social commerce as "a subset of e-commerce that involves using social media to assist in e-commerce transactions and activities". In a similar way, Wang and Zhang (2012, p. 106) describe social commerce as "a form of commerce that is mediated by social media and is converging both online and offline environments".

Comparing social commerce with e-commerce, social commerce is defined as a subset of e-commerce, which builds on consumers' interactions and relationships while e-commerce focuses on efficiency and transactions (Wang and Zhang 2012). Conceptually similar to social commerce are the terms "social shopping", "collaborative shopping" and "collaborative commerce". In research, all three terms have been used interchangeably with social commerce or treated as a subset of social commerce (Hsiao et al. 2010; Olbrich and Holsing 2012; Wang and Zhang 2012; Zhou et al. 2013).

Basic Theories behind Social Commerce Adoption

Since social commerce is closely related to e-commerce, basic theories used to explain e-commerce adoption are also used to explain consumers' adoption of social commerce (Liang et al. 2011; Shen 2012a; Wang and Zhang 2012). Drawing on the e-commerce literature, an individual consumer's adoption of e-commerce is defined as the "the consumer's engagement in online exchange relationships with Web vendors" (Pavlou and Fygenson 2006, pp. 115-116). To explain consumers' e-commerce adoption, two well-known and frequently applied theories are the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) (Grandón et al. 2011). Originated in social psychology, TRA, proposed by Fishbein and Icek (1975), posits that an individual's behavior is predicted by his or her intention to perform the behavior. Behavioral intention, in turn, depends on the individual's attitudes and subjective norms concerning the behavior. As an extension of TRA, TPB introduces a third element that influences an individual's behavioral intention (Ajzen 1985). Perceived behavioral control is an individual's perceived ease or difficulty of performing the particular behavior (Ajzen 1991).

To engage in e-commerce, consumers typically have to interact with information technology (IT), such as a commercial website (Koufaris 2002). On this basis, the Technology Acceptance Model (TAM), which explains the user's acceptance of an IT system, has also been widely applied in the context of e-commerce adoption (Gefen et al. 2003; Gefen and Straub 2000). Building upon the TRA, TAM defines that the user's actual system use is predicted by the user's behavioral intention to use the system (Davis 1989). The user's behavioral intention, on the one hand, depends on the user's attitude towards using the system, which is determined by the user's perceived usefulness and perceived ease of use concerning the system. On the other hand, the user's behavioral intention is also directly influenced by perceived usefulness.

In line with the TRA, TPB, and TAM, we focus in our research on factors that influence consumers' intentions and/or behaviors towards social commerce.

Research Methodology

To identify the factors that influence consumers' adoption of social commerce, we conducted a systematic literature review that follows the recommendations of Webster and Watson (2002). Two fundamental steps to conduct a literature review are (1) identifying the relevant literature and (2) structuring the review (Webster and Watson 2002). We use this section to document how we performed these steps.

Identification of Relevant Literature

First, we specified our literature search process. In general, a literature search comprises the querying of scholarly literature databases and conducting backward and/or forward searches (Webster and Watson 2002). Figure 1 illustrates our literature search process.

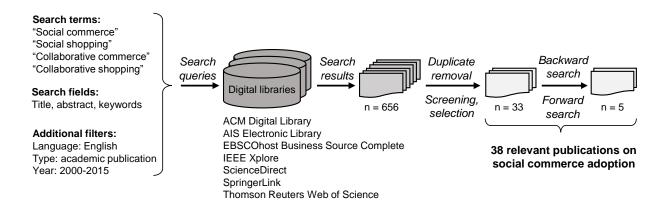


Figure 1. Literature search process (adapted from Rickenberg et al. 2012)

For the search, we used the following digital libraries: ACM Digital Library, AIS Electronic Library, EBSCOhost Business Source Complete, IEEE Xplore, ScienceDirect, SpringerLink, and Thomson Reuters Web of Science. In this way, our literature search covered a broad range of academic publications, including high-quality IS journals and conference proceedings. Following the methodology of Webster and Watson (2002), we did not limit our search to a specific set of journals because we wanted to obtain a complete picture of the social commerce knowledge base. Regarding the search terms, we followed the procedure of Zhou et al. (2013), who conducted a bibliometric study on social commerce, and used the phrases "social commerce" and the conceptually similar phrases "social shopping", "collaborative commerce", and "collaborative shopping" (exact phrase as search term). We did not add "adoption" to these phrases because not all publications addressing social commerce adoption explicitly mention this term. As search fields, we used title, abstract, and keywords were applicable. Since social commerce emerged during the last decade (Zhou et al. 2013), we restricted our search to the time period between 2000 and 2015. To ensure a certain quality level, we only considered peer-reviewed academic publications (including journal articles, conference papers, and book sections). Reports, whitepapers, and other types of literature were excluded. Additionally, we only focused on publications written in English.

By following the above described procedure, we identified 656 publications related to the concept of social commerce (see Appendix for detailed database search results). After removing duplicate entries, we obtained 442 unique publications. We then screened these publications on their relevance to our research question. The screening based on the publications titles, abstracts, and, if necessary, on the full texts. Consequently, publications that examine one or more factors influencing consumers' intentions and/or behaviors towards social commerce were classified as relevant. Furthermore, relevant publications must provide empirical evidence about the impacts of the identified factors. Conceptual studies and research proposals were excluded. In this way, we reduced the list of relevant publications to 33. As recommended by Webster and Watson (2002), we performed backward and forward searches on these publications. By doing so, we additionally identified 5 relevant publications. Finally, our list consisted of 38 relevant publications.

Structuring the Review

To synthesize our results, we followed Webster and Watson (2002) to take a concept-centric approach. While carefully reading each article, we first captured all examined influence factors and outcome variables. Furthermore, we captured all empirically observed impacts between the factors and outcome variables. Next, we filtered out factors which did not have a direct impact on any of the outcome variables. For example, the collectivism factors examined by Noh et al. (2013) have only been reported with an impact on perceived usefulness and thus were excluded. A complete list of the excluded factors can be found in the Appendix. Subsequently, we grouped conceptually similar factors together; for example, trust-related factors such as "Trust in members" or "Trust in company" were grouped under the factor "Trust". Conceptually different factors that had only been examined in one article were grouped under "Others". In the same way, we grouped the outcome variables, for example, "Intention to purchase products", "Intention to buy" and "Buying behavior" were grouped under the variable "Buying

intention/behavior". The result of this procedure was a classification scheme that covers the frequently examined influence factors and outcome variables on social commerce adoption (see Figure 2).



Figure 2. Classification of literature review results

In the following sections, we will focus on the influence factors that have been empirically examined in more than one publication.

Results

In this section, we describe the results of our literature review. According to our developed classification scheme, we concentrate on the frequently examined factors influencing consumers' adoption of social commerce. For each factor, we illustrate the conceptualizations used in the literature and we list the factor's impact on other factors and on the adoption-related outcome variables.

According to the empirical data provided in the relevant publications, we differentiate between significant positive, significant negative, and non-significant impacts. Impacts of the same type are counted together, which corresponds to the vote-counting method developed by Light and Smith (1971). Vote-counting is a simple meta-analysis technique in which the number of significant positive, significant negative and non-significant findings is compared and the category with the largest number is used to determine the direction of a relationship (Cooper 1998). However, vote-counting has several drawbacks; for example, differences in sample sizes, impact weights, or data analysis approaches are not taken into account. The illustrated impact numbers should therefore be interpreted with caution. Nevertheless, we use vote-counting for the following reasons: First, vote-counting allows us to provide a brief summary of the reported impacts. Second, vote-counting supports us in identifying under-researched relationships. Third, the limitations of vote-counting are appropriate for our context since not all of the relevant publications provide information about the sample size or the applied data analysis approach.

Table 1, Table 2, and Table 3 list the results of our concept-centric classification. Factors are ordered descending by the number of publications (n). Numbers in square brackets refer to the relevant references, which can be found at the end of Table 3. Studies examining different impacts for one factor have been counted separately. For example, Kwahk and Ge (2012) identify a significant positive impact of informational social influence and a significant negative impact of normative social influence on consumers' buying intention/behavior. Accordingly, we counted one positive and one negative impact of social influence on the buying intention/behavior.

Trust (n = 17)					
Conceptualizations	Trust[1,7,8,9,10,11,13,22,28,30,32,34], tru	st towards commur	nity ^[3] /members ^[3]	^{,28]} , information-	
-	based trust ^[5] , identification-based trust ^[5] , company trust ^[5,28] , trust in product				
	recommendation ^[12] , trust in website ^[12] , trustworthiness of SNSs ^[15] , trust in sellers ^[25]				
		Impact			
Influence on	Factor	Positive	Negative	Non-significant	
	Usefulness	1 [9]			
	Commitment	1 ^[3]			
	Value	1 ^[1]			
	Uncertainty		1[13]		
	Outcome variable				
	Using intention/behavior	4[7,28,32,34]		1[30]	
	Buying intention/behavior	6[3,8,9,12,15,25]			
	Sharing intention/behavior	3[3,5,22]		2 [3,5]	
Usefulness (n = 11)	,		U	,	
Conceptualizations	Perceived usefulness[7,8,9,19,26,29,	30,31,32,34], performa	nce expectancy ^[6]		
Influence on	Factor	Positive	Negative	Non-significant	
	Trust	1[8]		1 1 8 1 11 1	
	Outcome variable				
	Using intention/behavior	7[6,7,26,29,30,31,32]			
	Buying intention/behavior	3 ^[8,9,19]		1 [34]	
Social presence (n					
Conceptualizations	Social presence ^[7,13,21,28,29,31] , soc	ial presence of web	[25] social presen	ce of interaction ^[25]	
Influence on	Factor	Positive	Negative	Non-significant	
illinuciace oii	Trust	3 ^[7,13,25]	regative	1 ^[25]	
	Usefulness	2[29,31]		1 1	
	Enjoyment	2[29,31]			
	Uncertainty	21 7/0 1	1[13]		
	Outcome variable		1 1° °°		
	Buying intention/behavior			1[28]	
	Sharing intention/behavior	1 ^[21]		Tr y	
Social influence (n		11,,			
Conceptualizations	Social influence ^[6] , informational	l gogial influence[1]	7] normativa agai	al influence[17]	
Conceptualizations	subjective norm ^[21,28,32] , conform		, normative socia	ai iiiiueiice.	
Influence on	Factor	Positive	Negative	Non significant	
minuence on	Trust	1 ^[15]	Negative	Non-significant	
		1 ^[15]			
	Opinion-seeking in SNSs	It-oi			
	Outcome variable	4[6,15,28,32]	<u> </u>		
	Using intention/behavior	1 ^[17]	1[17]		
	Buying intention/behavior		1[1/]		
	Sharing intention/behavior	1[21]			
<u> </u>	Visiting intention/behavior	1[17]			
	components (n = 6)	1	0f 1 [0] C		
Conceptualizations	Social commerce components[7]				
T (1	communities[8], ratings & review				
Influence on	Factor	Positive	Negative	Non-significant	
	Trust	4 ^[8,9,10,11]		1 ^[8]	
	Social presence	1[7]			
	Ease of use	1 ^[7]			
	Social support	1[35]			
	Relationship quality	1[35]			
	Familiarity	1 ^[7]			
	Outcome variable				
	Sharing intention/behavior	1 ^[35]			

Table 1. Factors and impacts (I/III)

[...] = reference (see Table 3) n = number of publications

Website quality (n	= 6)					
Conceptualizations	Website quality ^[20] , perceived web	quality[12], info	rmation quality[2,28	8], system quality ^[2] ,		
·	online service quality ^[1,18]					
	-		Impact			
Influence on	Factor	Positive	Negative	Non-significant		
	Trust	$1^{[12]}$	Ü			
	Value	$2^{[1,18]}$		1[18]		
	Satisfaction	1 ^[2]				
	Relationship quality	1 ^[20]				
	Psychological empowerment	1 ^[2]				
	Outcome variable					
	Using intention/behavior	2[20,28]				
	Continuance intention/behavior	2[18,20]		1[18]		
Ease of use $(n = 5)$	·					
Conceptualizations	Perceived ease of use ^[7,19,26,34] , effe	ort expectancy[6]				
Influence on	Factor	Positive	Negative	Non-significan		
	Usefulness	$3^{[7,26,34]}$				
	Learning & training	1 ^[7]				
	Outcome variable		1	•		
	Using intention/behavior	$3^{[6,7,26]}$		1 [34]		
		1 ^[19]				
Value (n = 5)	, , ,	1	4	•		
Conceptualizations	Perceived value ^[4,18] , hedonic valu	e ^[37,38] , utilitaria	n value[37], inform	ation value ^[1,38] ,		
1	social value ^[1,38]	,	,	,		
Influence on	Factor	Positive	Negative	Non-significant		
	Satisfaction	2 ^[1,38]				
			I.			
	Using intention/behavior	2 ^[37,38]				
		_				
	Buying intention/behavior	2 ^[37,38] 1 ^[4] 1 ^[18]				
Centrality (n = 5)		1 ^[4]				
Centrality (n = 5) Conceptualizations	Buying intention/behavior Continuance intention/behavior	1 ^[4] 1 ^[18]	entrality ^[22] , networ	k centrality ^[27] .		
Centrality (n = 5) Conceptualizations	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[1]	1 ^[4] 1 ^[18] 2 ^{22]} , outdegree ce	entrality ^[22] , networ	k centrality ^[27] ,		
Conceptualizations	Outcome variable Using intention/behavior Buying intention/behavior 1 Using intention/behavior 1 Using intention/behavior 1 Derceived value [4,18], hedonic value [37, social value [1,38]] Intence on Factor Satisfaction Outcome variable Using intention/behavior Buying intention/behavior Continuance intention/behavior Interality (n = 5) Ceptualizations Centrality [23], indegree centrality [22], of social ties [21], social media interaction	1 ^[4] 1 ^[18] 2 ^{22]} , outdegree cetion ties ^[17]	-			
Centrality (n = 5) Conceptualizations Influence on	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[23] , social ties ^[21] , social media interaction	1 ^[4] 1 ^[18] 2 ^{22]} , outdegree cetion ties ^[17] Positive	entrality ^[22] , networ	•		
Conceptualizations	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[3] , social ties ^[21] , social media interaction Factor Social influence	1 ^[4] 1 ^[18] 2 ^{22]} , outdegree cetion ties ^[17] Positive 1 ^[17]	-	•		
Conceptualizations	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[3] , social ties ^[21] , social media interaction Factor Social influence Affective/cognitive involvement	1 ^[4] 1 ^[18] 2 ^{22]} , outdegree cetion ties ^[17] Positive	-	k centrality ^[27] , Non-significant		
Conceptualizations	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[3] , social ties ^[21] , social media interaction Factor Social influence Affective/cognitive involvement Outcome variable	1 ^[4] 1 ^[18] 2 ^{22]} , outdegree cetion ties ^[17] Positive 1 ^[17]	-	•		
Conceptualizations Influence on	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[3] , social media interaction Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior	1[4] 1[18] 22], outdegree cettion ties[17] Positive 1[17] 1[27]	-			
Conceptualizations Influence on Social support (n =	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[3] , social media interaction Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4)	1[4] 1[18] 22], outdegree cettion ties[17] Positive 1[17] 1[27]	-			
Conceptualizations Influence on Social support (n = Conceptualizations	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[3] , social media interaction Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4) Social support ^[19,20,32,35]	1[4] 1[18] 22], outdegree cettion ties[17] Positive 1[17] 1[27] 3[21,22,23]	Negative	Non-significan		
Conceptualizations Influence on Social support (n =	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[3] social ties ^[21] , social media interactor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4) Social support ^[19,20,32,35] Factor	1[4] 1[18] 22], outdegree certion ties[17] Positive 1[17] 1[27] 3[21,22,23]	-	Non-significan		
Conceptualizations Influence on Social support (n = Conceptualizations	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[23] , social media interaction Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4) Social support ^[19,20,32,35] Factor Relationship quality	1[4] 1[18] 22], outdegree cettion ties[17] Positive 1[17] 1[27] 3[21,22,23]	Negative	Non-significan		
Conceptualizations Influence on Social support (n = Conceptualizations	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[23] , social media interaction Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4) Social support ^[19,20,32,35] Factor Relationship quality Outcome variable	1[4] 1[18] 22], outdegree centrion ties[17] Positive 1[17] 1[27] 3[21,22,23] Positive 3[20,32,35]	Negative	Non-significan		
Conceptualizations Influence on Social support (n = Conceptualizations	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[23] , social media interaction Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4) Social support ^[19,20,32,35] Factor Relationship quality Outcome variable Using intention/behavior	1[4] 1[18] 22], outdegree centrion ties[17] Positive 1[17] 1[27] 3[21,22,23] Positive 3[20,32,35]	Negative	Non-significan		
Conceptualizations Influence on Social support (n = Conceptualizations	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[23] , social media interaction Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4) Social support ^[19,20,32,35] Factor Relationship quality Outcome variable Using intention/behavior Buying intention/behavior	1[4] 1[18] 22], outdegree certion ties[17] Positive 1[17] 1[27] 3[21,22,23] Positive 3[20,32,35] 1[20] 1[19]	Negative	Non-significan		
Conceptualizations Influence on Social support (n = Conceptualizations Influence on	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[23] , social media interaction Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4) Social support ^[19,20,32,35] Factor Relationship quality Outcome variable Using intention/behavior	1[4] 1[18] 22], outdegree centrion ties[17] Positive 1[17] 1[27] 3[21,22,23] Positive 3[20,32,35]	Negative	Non-significan		
Conceptualizations Influence on Social support (n = Conceptualizations Influence on Enjoyment (n = 4)	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[23] , social media interaction Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4) Social support ^[19,20,32,35] Factor Relationship quality Outcome variable Using intention/behavior Buying intention/behavior Continuance intention/behavior	1[4] 1[18] 22], outdegree certion ties[17] Positive 1[17] 1[27] 3[21,22,23] Positive 3[20,32,35] 1[20] 1[19]	Negative	Non-significan		
Conceptualizations Influence on Social support (n = Conceptualizations Influence on Enjoyment (n = 4) Conceptualizations	Buying intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[23] , social media interaction Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior	1[4] 1[18] 22], outdegree cettion ties[17] Positive 1[17] 1[27] 3[21,22,23] Positive 3[20,32,35] 1[20] 1[19] 1[20]	Negative Negative	Non-significant Non-significant		
Conceptualizations Influence on Social support (n = Conceptualizations Influence on Enjoyment (n = 4) Conceptualizations	Buying intention/behavior Continuance intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[3] social ties ^[21] , social media interactive factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4) Social support ^[19,20,32,35] Factor Relationship quality Outcome variable Using intention/behavior Buying intention/behavior Continuance intention/behavior Perceived enjoyment ^[28,29,31,32] Outcome variable	1[4] 1[18] 22], outdegree certion ties[17] Positive 1[17] 1[27] 3[21,22,23] Positive 3[20,32,35] 1[20] 1[19] 1[20] Positive	Negative	Non-significan Non-significan		
Conceptualizations Influence on Social support (n = Conceptualizations Influence on Enjoyment (n = 4) Conceptualizations Influence on	Buying intention/behavior Continuance intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[3] social ties ^[21] , social media interact Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4) Social support ^[19,20,32,35] Factor Relationship quality Outcome variable Using intention/behavior Buying intention/behavior Continuance intention/behavior Perceived enjoyment ^[28,29,31,32] Outcome variable Using intention/behavior	1[4] 1[18] 22], outdegree cettion ties[17] Positive 1[17] 1[27] 3[21,22,23] Positive 3[20,32,35] 1[20] 1[19] 1[20]	Negative Negative	Non-significan Non-significan		
Conceptualizations Influence on Social support (n = Conceptualizations Influence on Enjoyment (n = 4) Conceptualizations Influence on Satisfaction (n = 4)	Buying intention/behavior Continuance intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[3] social ties ^[21] , social media interact Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4) Social support ^[19,20,32,35] Factor Relationship quality Outcome variable Using intention/behavior Buying intention/behavior Continuance intention/behavior Perceived enjoyment ^[28,29,31,32] Outcome variable Using intention/behavior	1[4] 1[18] 22], outdegree certion ties[17] Positive 1[17] 1[27] 3[21,22,23] Positive 3[20,32,35] 1[20] 1[19] 1[20] Positive 4[28,29,31,32]	Negative Negative Negative	Non-significan Non-significan Non-significan		
Conceptualizations Influence on Social support (n = Conceptualizations Influence on Enjoyment (n = 4) Conceptualizations Influence on Satisfaction (n = 4) Conceptualizations	Buying intention/behavior Continuance intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[3] social ties ^[21] , social media interact Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4) Social support ^[19,20,32,35] Factor Relationship quality Outcome variable Using intention/behavior Buying intention/behavior Continuance intention/behavior Perceived enjoyment ^[28,29,31,32] Outcome variable Using intention/behavior Customer satisfaction ^[1,2,38] , site s	1[4] 1[18]	Negative Negative Negative Negative Dupon satisfaction Negative Negative	Non-significant Non-significant Non-significant Non-significant		
Conceptualizations Influence on Social support (n = Conceptualizations Influence on Enjoyment (n = 4) Conceptualizations Influence on Satisfaction (n = 4)	Buying intention/behavior Continuance intention/behavior Continuance intention/behavior Centrality ^[23] , indegree centrality ^[3] social ties ^[21] , social media interact Factor Social influence Affective/cognitive involvement Outcome variable Sharing intention/behavior 4) Social support ^[19,20,32,35] Factor Relationship quality Outcome variable Using intention/behavior Buying intention/behavior Continuance intention/behavior Perceived enjoyment ^[28,29,31,32] Outcome variable Using intention/behavior	1[4] 1[18] 22], outdegree certion ties[17] Positive 1[17] 1[27] 3[21,22,23] Positive 3[20,32,35] 1[20] 1[19] 1[20] Positive 4[28,29,31,32]	Negative Negative Negative	Non-significant Non-significant Non-significant		

Table 2. Factors and impacts (II/III)

[...] = reference (see Table 3) n = number of publications

Commitment (n = 3	3)						
Conceptualizations	Commitment ^[21] , community commitment ^[3] , social media commitment ^[17]				t ^[17]		
		Impact					
Influence on	Factor			Positive Neg		Non-significant	
	Social influence		1 ^[17]				
	Outcome variable					_	
	Buying intention/behavior		1[3]				
	Sharing intention/behavior 2 ^[3,21]						
Familiarity (n = 3)							
Conceptualizations	Familiarity ^[7,28] , vendor familiarity ^[34]				1		
Influence on	Factor		Positive Negative		gative	ve Non-significant	
	Trust		2 ^[7,34]	2[7,34]			
	Outcome variable						
	Using intention/behavior		1[28]				
Relationship quali							
Conceptualizations	Relationship quality (comb	nation					
Influence on	Outcome variable		Positive	Ne	gative	Non-significant	
	Using intention/behavior		1[20]				
	Sharing intention/behavior		1 [35]				
	Continuance intention/beh	avior	1 ^[20]				
Others (n = 1/per fac						[06]	
Factors	Ability ^[33]	Enjoyment in helping		Parasocial interaction ^[36]			
	Affective/cognitive others ^[24] involvement ^[27] Extraversion ^[37]		Perceived risk control ^[19]				
	Anticipated extrinsic	Extraversion ^[37] Facilitating conditions ^[6]		Price fairness perception ^[16]			
	rewards ^[24]		ification ^[22]	-1	Privacy risk ^[21] Psychological		
	Anticipated reciprocal		activity ^[21]		empowerment ^[2]		
	relationships ^[24]		ledge self-efficacy	[24]	Reciprocity ^[23]		
	Consumer knowledge ^[19]	Learr	ning & training ^[7]		Reputation ^[23]		
	Consumer self-		ation ^[33]		Shared language ^[22]		
	confidence ^[15]		ness to experience	[37]	Shared vision ^[22]		
	Consumption emotion ^[37]	Opini	Opinion-seeking in SNSs ^[15] Opportunity ^[33] Outcome expectations ^[21]		Sociability ^[15]		
	Cool & new trend ^[28]				Uncertainty ^[13]		
	Customer expertise ^[23]				_		
References	1 = Alshibly (2014a);	14 = 3	14 = Jang et al. (2013)		27 = Park et al. (2014)		
	2 = Alshibly (2014b)	15 = Kang and Johnson (2013) 16 = Kim et al. (2013)		28 = Sharma and Crossler			
	3 = Chen et al. (2014)			(2014)			
	4 = Cho et al. (2012)			29 = Shen (2012a)			
	5 = Chow and Shi (2014)	17 = Kwahk and Ge (2012)		30 = Shen (2012d)			
	6 = Gatautis and	18 = Lee et al. (2012)		31 = Shen and Eder (2009)			
	Medziausiene (2014)	19 = Li et al. (2014)		32 = Shin (2013)			
	7 = Hajli (2012a)	20 = Liang et al. (2011)		33 = Teh and Ahmed (2011)			
	8 = Hajli (2012d) 9 = Hajli (2014)	21 = Lin et al. (2013)		34 = Teh and Ahmed (2012) 35 = Wang and Hajli (2014)			
	9 = Hajli (2014) 10 = Hajli et al. (2013)	22 = Liu et al. (2013a)		35 = Wang and Hajii (2014) 36 = Xiang et al. (2014)			
	11 = Hajli et al. (2014)	23 = Liu et al. (2013d)		36 = Xiang et al. (2014) 37 = Yang and Woo (2013)			
	12 = Hsiao et al. (2014)	24 = Liu et al. (2014) 25 = Lu and Fan (2014) 26 = Noh et al. (2013)		37 = 1 and and woo (2013) 38 = Yen (2013)			
	13 = Hwang et al. (2014)			Jo - 1011 (2013)			
		20 - 1	11011 (1 (2013)		I .	[] _ nofonon oo	

Table 3. Factors and impacts (III/III)

[...] = reference n = number of publications

To interpret the results, we first provide details on the identified outcome variables. As illustrated in our classification scheme (see Figure 2), consumers' adoption of social commerce is predicted by different intentions and/or behaviors. Most studies (14) focus on consumers' intention/behavior to generally use a social commerce website. 11 studies address consumers' intention/behavior to buy from a social commerce website, while 7 studies observe consumers' intention/behavior to share information. To measure costumers' loyalty, 4 studies examine the intention/behavior to continue using (and returning to) a social commerce website. Finally, 1 study targets consumers' intention/behavior to visit a social commerce website.

Referring to the influence factors, trust has received the most attention in the literature on social commerce adoption (n = 17). However, comparing the results is difficult because trust has been conceptualized in different ways. Most studies address trust in general, while others conceptualize it as trust towards community/members, company trust, trust in product recommendation, or trust in website. Some of these differences can be traced back to the e-commerce literature, which has produced a variety of trust conceptualizations (Gefen et al. 2003). Looking at the impacts of trust, studies demonstrate that trust has a positive impact on consumers' using (4/5), buying (6/6), and sharing (3/3) intention/behavior. Also trust may positively affect the consumers' commitment, the perceived value, and the usefulness of a website. However, each of these impacts has only been examined in one study. Furthermore, evidence is given that trust is influenced by many other factors. For example, trust is positively influenced by social presence (3/3), social influence (1/1), social commerce components (4/5), usefulness (1/1), website quality (1/1), and familiarity (2/2).

In line with the Technology Acceptance Model (see section 2), studies demonstrate that both the usefulness and ease of use of a website play an important role in consumers' adoption of social commerce. Positive impacts of usefulness and ease of use have been examined on consumers' using (7/7; 3/4) and buying (3/4; 1/1) intention/behavior. Besides these utilitarian-related factors, it has also been demonstrated that consumers' enjoyment plays a significant role in social commerce adoption. 4/4 studies confirm a positive impact of enjoyment on consumers' using intention/behavior. These findings underpin the proposition of Wang and Zhang (2012) that social commerce is both utilitarian and hedonic.

To facilitate consumers' social interactions, an effective social commerce platform should provide users with features to represent themselves, for example, by creating a personal profile with real name and picture (Huang and Benyoucef 2013). In this context, studies have shown that the factor social presence positively influences trust (3/3), usefulness (2/2), and enjoyment (2/2). However, the role of social presence on consumers' intentions/behaviors has only been examined by two studies with varying results (1 positive impact on sharing and 1 non-significant impact on buying intention/behavior).

In contrast to social presence, it seems that the factor social influence has a clearer impact on consumers' intentions/behaviors in social commerce. 4/4 studies address a positive impact of social influence on the using, 1/1 on the sharing, and 1/1 on the visiting intention/behavior. As already explained in the counting procedure above Table 1, one study identifies a positive impact of informational social influence and a negative impact of normative social influence on the consumers' buying intention/behavior.

Attention has also been given to the components of social commerce, such as, ratings and reviews, forums and communities, or recommendations and referrals. Evidence is given that these components primarily influence other factors in a positive way, such as trust (4/5), social presence (1/1), ease of use (1/1), social support (1/1), relationship quality (1/1), and familiarity (1/1). 1/1 study observes a positive impact of these components on consumers' sharing intention/behavior. As demonstrated by Hajli (2012d), impacts can vary for each component. For example, forums and communities can have a significant positive impact on trust, while ratings and reviews may not have any significant impact (Hajli 2012d).

Despite its importance to e-commerce (DeLone and McLean 2004), the factor website quality, which comprises system quality, information quality, and service quality (Jiang et al. 2008), also seems to play a critical role in consumers' adoption of social commerce. Positive impacts of website quality have been reported on trust (1/1), value (2/3), satisfaction (1/1), relationship quality (1/1), customers' psychological empowerment (1/1), and on the using (2/2) and continuance (2/3) intention/behavior.

Centrality, also described as social ties, is used in the social commerce literature to define the total number of connections between one focal consumer and the other consumers (Lin et al. 2013; Liu et al. 2013a; Liu et al. 2013d). Studies have demonstrated that consumers with a higher centrality (i.e., a higher number of connections) have a significant higher sharing intention/behavior (3/3).

In the marketing literature, the concept of value is used to describe the consumers' overall assessment of benefits and costs when purchasing a product or service (Zeithaml 1988). In the social commerce literature, different forms of value have been examined, such as perceived value, hedonic value, utilitarian value, information value, and social value. In general, value has a positive impact on satisfaction (2/2) and on the using (2/2), buying (1/1), and continuance (1/1) intention/behavior. Also derived from marketing literature, the factor satisfaction has been confirmed with a positive impact on consumers' using (1/1) and continuance (1/1) intention/behavior.

A factor that has generally been associated with the establishment of a long-term relationship is commitment (Li et al. 2006). However, the relationship between commitment and consumers' continuance intention/behavior has not been examined so far in the social commerce literature. Instead, commitment has been associated with a positive impact on social influence (1/1) and on the buying (1/1) and sharing (2/2) intention/behavior.

In the social commerce literature, little attention has been given to the factor familiarity (n = 3). Besides its positive influence on trust (2/2), one study provides evidence that familiarity positively influences consumers' using intention/behavior (1/1).

Relationship quality is used as a combination of trust, commitment, and satisfaction (Liang et al. 2011; Wang and Hajli 2014). According to Liang and Turban (2011), relationship quality is critical in affecting customers' loyalty which results in an increased continuance intention/behavior. However, in the social commerce literature, only one study examines the influence of relationship quality on consumers' continuance intention/behavior (demonstrating a positive impact). A factor that clearly seems to positively influence relationship quality is social support (3/3). Additionally, social support is associated with a positive impact on the using (1/1), buying (1/1), and continuance intention (1/1).

Factors that have only been examined in one publication are listed in Table 3. The factors perceived risk control (Li et al. 2014) and privacy risk (Lin et al. 2013) were not grouped together because they point in different directions.

Discussion

In this section, we discuss the implications and limitations of our literature review.

Implications

Our results demonstrate that research on social commerce adoption so far has examined a broad variety of factors. However, most factors have only been examined in one study (see Table 3), which makes it difficult to assess their importance. Further investigations on these factors are necessary. Besides, researchers should be careful when defining their own factors. To facilitate a comparison, established conceptualizations in the literature should be preferred whenever possible. When looking at the frequently examined factors, about half of the impacts have only been evaluated by one study and highlight need for further empirical evaluation. Many impacts have not yet been explored in context of social commerce, such as the impact of trust on consumers' continuance intention/behavior, the impact of centrality on consumers' buying intention/behavior, or the impact of enjoyment on consumers' sharing intention.

As illustrated by the identified outcome variables (see Figure 2), consumers' adoption of social commerce has been explained with different intentions/behaviors. However, looking at consumers' activities in social commerce (Ickler et al. 2009; Rad and Benyoucef 2010; Saundage and Lee 2011), there is room for research to investigate additional behaviors. For example, examining consumers' intention/behavior to collaborate online or to support other consumers. Future research on social commerce adoption should also consider to examine more than one consumer intention/behavior, such as demonstrated by Chen et al. (2014), Hsiao et al. (2010), Kwahk and Ge (2012), and Liang and Turban (2011). By combining the identified influence factors and outcome variables, researchers may develop a more complete understanding of consumers' behaviors in social commerce.

For practice, our results suggest that a variety of factors influence consumers to participate in social commerce. Moreover, there exist different side effects between these factors. Practitioners can therefore use the results of our literature review as a guideline to determine which factors may be critical for their social commerce initiatives. For example, if a company wants to increase consumers' intention/behavior to return to a social commerce website, special attention should be given to the factors trust, website quality, commitment, satisfaction, and relationship quality.

Limitations

Nevertheless, our research is subject to several limitations. Regarding our literature search, we only concentrated on academic publications written in English. Moreover, some studies were excluded because the full text was not available due to access restrictions. Furthermore, the search process can be improved by including additional digital libraries.

In terms of influence factors, we excluded all factors that did not have a direct impact on consumers' adoption of social commerce (see Appendix). Additionally, we only concentrated on factors that have been examined in more than one publication. When counting the impacts, we did not differentiate between impacts that have been reported by the same researchers and impacts that have been reported by different researchers. For example, the positive impact of social commerce components on trust (4/5) refers to Hajli (2012c), Hajli (2014), Hajli et al. (2013), Hajli et al. (2014). Moreover, we did not consider differences in the sample sizes, contexts, impact weights, or data analysis approaches. To derive additional information about the weights and directions of the impacts, further meta-analysis techniques, such as a sign test (Cooper 1998), can be applied.

Conclusion

In this paper, we examined the factors that influence consumers' adoption of social commerce. By conducting a systematic literature review, we summarized and synthesized the results of 38 academic publications on social commerce adoption. To present the results in a concept-centric way, we developed a classification scheme that covers the frequently examined factors and consumer intentions/behaviors addressed in the social commerce adoption literature. On the basis of this scheme, we presented a comprehensive and structured list of factors and their potential impacts on consumers' adoption of social commerce. Several implications for research and practice were discussed. Main implications for research are: use our list to (1) examine the importance of the factors which have only been analyzed in one study; (2) verify the consolidated impacts of the frequently examined factors and explore new impacts; (3) combine the identified influence factors and outcome variables to develop a better understanding of social commerce adoption. By pointing out the limitations of our work, we also highlighted room for improvements.

The results of our literature review demonstrate that research on social commerce adoption is still in an early stage. To support companies in their social commerce initiatives, it is necessary for research to further explore the factors that influence consumers to adopt to social commerce.

References

- Ajzen, I. 1985. From Intentions to Actions: A Theory of Planned Behavior. Heidelberg: Springer.
- Ajzen, I. 1991. "The Theory of Planned Behavior," Organizational Behavior and Human Decision Processes (50:2), pp. 179-211.
- Alshibly, H. H. 2014a. "Customer Perceived Value in Social Commerce: An Exploration of Its Antecedents and Consequences," Journal of Management Research (7:1), p. 17.
- Alshibly, H. H. 2014b. "A Free Simulation Experiment to Examine the Effects of Social Commerce Website Quality and Customer Psychological Empowerment on Customers' Satisfaction," Journal of Business Studies Quarterly (5:4), pp. 21-40.
- Chen, J., Shen, X.-L., and Chen, Z.-J. 2014. "Understanding Social Commerce Intention: A Relational View," Proceedings of the 47th Hawaii International Conference on System Sciences (HICSS): IEEE, pp. 1793-1802.
- Cho, Y.-S., Heo, J.-Y., and Youn, M.-K. 2012. "Korean Customer Attitudes Towards SNS Shopping," Journal of Distribution Science (10:8), pp. 7-14.
- Chow, W. S., and Shi, S. 2014. "Understanding Consumer Trust in Social Commerce Websites," Proceedings of the 18th Pacific Asia Conference on Information Systems (PACIS), pp. 1-20.
- Cooper, H. M. 1998. Synthesizing Research: A Guide for Literature Reviews, (3 ed.). USA: Sage Publications.
- Curty, R., and Zhang, P. 2011. "Social Commerce: Looking Back and Forward," Proceedings of the American Society for Information Science and Technology, pp. 1-10.

- Curty, R., and Zhang, P. 2013. "Website Features that Gave Rise to Social Commerce: A Historical Analysis," Electronic Commerce Research and Applications (12:4), pp. 260-279.
- Davis, F. D. 1989. "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," MIS Quarterly (13:3), pp. 319-340.
- DeLone, W. H., and McLean, E. R. 2004. "Measuring e-Commerce Success: Applying the DeLone & McLean Information Systems Success Model," International Journal of Electronic Commerce (9:1).
- Dennis, C., Jayawardhena, C., and Tiu Wright, L. 2009. "An Empirical Investigation into E-Shopping Excitement: Antecedents and Effects," European Journal of Marketing (43:9/10), pp. 1171-1187.
- Fishbein, M., and Icek, A. 1975. Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Reading, USA: Addison-Wesley.
- Gatautis, R., and Medziausiene, A. 2014. "Factors Affecting Social Commerce Acceptance in Lithuania," Procedia - Social and Behavioral Sciences (110:0), pp. 1235-1242.
- Gefen, D., Karahanna, E., and Straub, D. W. 2003. "Trust and TAM in Online Shopping: An Integrated Model," MIS Quarterly (27:1), pp. 51-90.
- Gefen, D., and Straub, D. W. 2000. "The Relative Importance of Perceived Ease of Use in IS Adoption: A Study of E-Commerce Adoption," Journal of the Association for Information Systems (1:1), pp. 1-28.
- Grandón, E. E., Nasco, S. A., and Mykytyn, P. P. 2011. "Comparing Theories to Explain E-Commerce Adoption," Journal of Business Research (64:3), pp. 292-298.
- Hajli, M. 2012a. "An Integrated Model for E-Commerce Adoption at the Customer Level with the Impact of Social Commerce," International Journal of Information Science and Management: Special Issue), pp. 77-97.
- Hajli, M. 2012c. "Social Commerce Adoption Model," Proceedings of the UK Academy for Information Systems Conference, pp. 1-26.
- Hajli, M. 2012d. "Social Commerce: The Role of Trust," Proceedings of the 18th Americas Conference on Information Systems (AMCIS), pp. 1-11.
- Hajli, M. 2014. "A Study of the Impact of Social Media on Consumers," International Journal of Market Research (56:3), pp. 387-404.
- Hajli, M., Hajli, M., and Khani, F. 2013. "Establishing Trust in Social Commerce through Social Word of Mouth," International Journal of Information Science and Management: Special Issue), pp. 39-53.
- Hajli, N., Lin, X., Featherman, M. S., and Wang, Y. 2014. "Social Word of Mouth: How Trust Develops in the Market," International Journal of Market Research (56:5), pp. 673-689.
- Hsiao, K. L., Chuan-Chuan Lin, J., Wang, X. Y., Lu, H. P., and Yu, H. 2010. "Antecedents and consequences of trust in online product recommendations," Online Information Review (34:6), pp. 935-953.
- Huang, Z., and Benyoucef, M. 2013. "From E-Commerce to Social Commerce: A Close Look at Design Features," *Electronic Commerce Research and Applications* (12:4), pp. 246-259.
- Huang, Z., Yoon, S. Y., and Benyoucef, M. 2012. "Adding Social Features to E-Commerce," Proceedings of the Conference on Information Systems Applied Research, pp. 1-11.
- Hwang, I. J., Lee, B. G., and Kim, K. Y. 2014. "Information Asymmetry, Social Networking Site Word of Mouth, and Mobility Effects on Social Commerce in Korea," Cyberpsychology Behavior and Social Networking (17:2), pp. 117-124.
- Ickler, H., Schülke, S., Wilfling, S., and Baumöl, U. 2009. "New Challenges in E-Commerce: How Social Commerce Influences the Customer Process," Proceedings of the 5th National Conference on Computing and Information Technology (NCCIT), pp. 51-57.
- Jang, H., Ko, I., and Kim, J. 2013. "The Effect of Group-Buy Social Commerce and Coupon on Satisfaction and Continuance Intention - Focusing on the Expectation Confirmation Model (ECM)," Proceedings of the 46th Hawaii International Conference on System Sciences (HICSS), pp. 2938-2948.
- Jiang, L., Srivastava, S. C., and Teo, T. S. H. 2008. "Trust and Electronic Government Success: An Empirical Study," Journal of Management Information Systems (25:3), pp. 99-132.
- Kang, J.-Y., M., and Johnson, K. K. P. 2013. "How Does Social Commerce Work for Apparel Shopping? Apparel Social E-Shopping with Social Network Storefronts," Journal of Customer Behaviour (12:1),
- Kim, Y., Lim, K., and Jung, N. 2013. "A Social Commerce Customers' Price Fairness Perception Affects Their Repurchase Intention," Proceedings of the 15th International Conference on Advanced Communication Technology (ICACT), pp. 1042-1048.

- Koufaris, M. 2002. "Applying the Technology Acceptance Model and Flow Theory to Online Consumer Behavior," Information Systems Research (13:2), pp. 205-223.
- Kwahk, K.-Y., and Ge, X. 2012. "The Effects of Social Media on E-Commerce: A Perspective of Social Impact Theory," Proceedings of the 45th Hawaii International Conference on System Sciences (HICSS), R.H. Sprague (ed.): IEEE, pp. 1814-1823.
- Lee, J., Cha, M. S., and Cho, C. 2012. "Online Service Quality in Social Commerce Websites," in Contemporary Research on E-Business Technology and Strategy, V. Khachidze, T. Wang, S. Siddiqui, V. Liu, S. Cappuccio and A. Lim (eds.). Heidelberg: Springer, pp. 335-351.
- Leitner, P., and Grechenig, T. 2007a. "Community Driven Commerce: Design of an Integrated Framework for Social Shopping," Proceedings of the International Conference E-Commerce (IADIS), pp. 1-4.
- Leitner, P., and Grechenig, T. 2007b. "Next Generation Shopping: Case Study Research on Future E-Commerce Models," Proceedings of the International Conference E-Commerce (IADIS), pp. 312-316.
- Leitner, P., and Grechenig, T. 2008. "Collaborative Shopping Networks: Sharing the Wisdom of Crowds in E-Commerce Environments," Proceedings of the 21th Bled eConference, pp. 321-335.
- Leitner, P., and Grechenig, T. 2009. "Scalable Social Software Services: Towards a Shopping Community Model Based on Analyses of Established Web Service Components and Functions," Proceedings of the 42nd Hawaii International Conference on System Sciences (HICSS), R.H. Sprague (ed.): IEEE, pp. 1-
- Li, D., Browne, G. J., and Wetherbe, J. C. 2006. "Why Do Internet Users Stick with a Specific Web Site? A Relationship Perspective." International Journal of Electronic Commerce (10:4), pp. 105-141.
- Li, H., Yao, Z., and Bai, Y. 2014. "Social Commerce User Purchase Intention Study: What Factors Are Taking Effect?," Proceedings of the 18th Pacific Asia Conference on Information Systems (PACIS).
- Liang, T.-P., Ho, Y.-T., Li, Y.-W., and Turban, E. 2011. "What Drives Social Commerce: The Role of Social Support and Relationship Quality," International Journal of Electronic Commerce (16:2), pp. 69-90.
- Liang, T.-P., and Turban, E. 2011. "Introduction to the Special Issue Social Commerce: A Research Framework for Social Commerce." International Journal of Electronic Commerce (16:2), pp. 5-14.
- Light, R. J., and Smith, P. V. 1971. "Accumulating Evidence: Procedures for Resolving Contradictions among Different Research Studies," Harvard Educational Review (41:4), pp. 429-471.
- Lin, X., Featherman, M., and Sarker, S. 2013. "Information Sharing in the Context of Social Media: An Application of the Theory of Reasoned Action and Social Capital Theory," Proceedings of the 2013 AIS SIGHCI Workshop on HCI Research in MIS, pp. 1-5.
- Liu, I. L. B., Cheung, C. M. K., and Lee, M. K. O. 2013a. "Customer Information Sharing Behavior in Social Shopping Communities: A Social Capital Perspective," Proceedings of the 17th Pacific Asia Conference on Information Systems (PACIS).
- Liu, I. L. B., Cheung, C. M. K., and Lee, M. K. O. 2013d. "Customer Knowledge Contribution Behavior in Social Shopping Communities," Proceedings of the 46th Hawaii International Conference on System Sciences (HICSS), pp. 3604-3613.
- Liu, L., Yin, C., and Yang, J. 2014. "Understanding User Intention to Share Information in Online Social Shopping Communities: The Moderating Effect of Community Equity," Proceedings of the 18th Pacific Asia Conference on Information Systems (PACIS).
- Lu, B., and Fan, W. 2014. "Social Presence, Trust, and Social Commerce Purchase Intention: An Empirical Research," Proceedings of the 18th Pacific Asia Conference on Information Systems (PACIS).
- Noh, M., Lee, K., Kim, S., and Garrison, G. 2013. "Effects of Collectivism on Actual S-Commerce Use and the Moderating Effect of Price Consciousness," *Journal of Electronic Commerce Research* (14:3), pp.
- Olbrich, R., and Holsing, C. 2012. "Modeling Consumer Purchasing Behavior in Social Shopping Communities with Clickstream Data," International Journal of Electronic Commerce (16:2), pp. 15-
- Park, M.-S., Shin, J.-K., and Ju, Y. 2014. "The Effect of Online Social Network Characteristics on Consumer Purchasing Intention of Social Deals," *Global Economic Review* (43:1), pp. 25-41.
- Pavlou, P. A., and Fygenson, M. 2006. "Understanding and Predicting Electronic Commerce Adoption: An Extension of the Theory of Planned Behavior," MIS Quarterly), pp. 115-143.
- Rad, A. A., and Benyoucef, M. 2010. "A Model for Understanding Social Commerce," Proceedings of the 3rd Annual Conference on Information Systems Applied Research, pp. 1-11.
- Rickenberg, T. A., Neumann, M., Hohler, B., and Breitner, M. 2012. "Enterprise Content Management A Literature Review," Proceedings of the 18th Americas Conference on Information Systems (AMCIS), pp. 1-13.

- Saundage, D., and Lee, C. Y. 2011. "Social Commerce Activities a Taxonomy," Proceedings of the Australiasian Conference on Information Systems (ACIS), P. Seltsikas, D. Bunker, L. Dawson and M. Indulska (eds.), pp. 1-9.
- Sharma, S., and Crossler, R. E. 2014. "Intention to Engage in Social Commerce: Uses and Gratifications Approach," Proceedings of the 20th Americas Conference on Information Systems (AMCIS), pp. 1-12.
- Shen, J. 2012a, "Social Comparison, Social Presence, and Enjoyment in the Acceptance of Social Shopping Websites," *Journal of Electronic Commerce Research* (13:3), pp. 198-212.
- Shen, J. 2012d. "Understanding User's Acceptance of Social Shopping Websites: Effects of Social Comparison and Trust," in Enterprise Information Systems, R. Zhang, J. Zhang, Z. Zhang, J. Filipe and J. Cordeiro (eds.). Heidelberg: Springer, pp. 365-373.
- Shen, J., and Eder, L. 2009. "Determining Factors in the Acceptance of Social Shopping Websites," Proceedings of the 15th Americas Conference on Information Systems (AMCIS), pp. 1-9.
- Shin, D.-H. 2013. "User Experience in Social Commerce: In Friends We Trust," Behaviour & Information Technology (32:1), pp. 52-67.
- Stephen, A. T., and Toubia, O. 2010. "Deriving Value from Social Commerce Networks," Journal of Marketing Research (47:2), pp. 215-228.
- Teh, P.-L., and Ahmed, P. K. 2011. "MOA and TRA in Social Commerce: An Integrated Model," Proceedings of the IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), pp. 1375-1379.
- Teh, P.-L., and Ahmed, P. K. 2012. "Understanding Social Commerce Adoption: An Extension of the Technology Acceptance Model," Proceedings of the International Conference on Management of Innovation and Technology (ICMIT): IEEE, pp. 359-364.
- Turban, E., Bolloju, N., and Liang, T.-P. 2010. "Social Commerce: An E-Commerce Perspective," Proceedings of the 12th International Conference on Electronic Commerce (ICEC), T. Bui (ed.): ACM,
- Wang, C., and Zhang, P. 2012. "The Evolution of Social Commerce: The People, Management, Technology, and Information Dimensions," Communications of the Association for Information Sustems (31:5), pp. 105-127.
- Wang, Y., and Hajli, M. 2014. "Co-Creation in Branding through Social Commerce: The Role of Social Support, Relationship Quality and Privacy Concerns," Proceedings of the 20th Americas Conference on Information Systems (AMCIS), pp. 1-16.
- Webster, J., and Watson, R. T. 2002. "Analyzing the Past to Prepare for the Future: Writing a Literature Review," MIS Quarterly (26:2), pp. xiii-xxiii.
- Xiang, L., Zheng, X., and Hu, X. 2014. "What Drives Social Commerce: The Role of Parasocial Interaction," *Proceedings of the 18th Pacific Asia Conference on Information Systems (PACIS)*.
- Yang, H.-C., and Woo, M.-S. 2013. "The Effect of Consumers' Personal Characteristics on Attitude toward Social Commerce: Focused on the Theory of Reasoned Action," Journal of Distribution Science
- Yen, Y.-S. 2013. "Exploring Perceived Value in Social Networking Sites: The Mediation of Customer Satisfaction," International Journal of Computer and Information Technology (2:3), pp. 386-391.
- Zeithaml, V. A. 1988. "Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence," Journal of Marketing (52:3), pp. 2-22.
- Zhou, L., Zhang, P., and Zimmermann, H.-D. 2013. "Social Commerce Research: An Integrated View," Electronic Commerce Research and Applications (12:2), pp. 61-68.

Appendix

Table 4 illustrates the results of our literature search in the digital libraries.

Digital library	Search fields	Additional filters	Search terms	Hits	Relevant
ACM Digital	Title, abstract, Published since		Social commerce	19	0
Library	keywords	2000	Social shopping	6	0
			Collaborative commerce	3	0
			Collaborative shopping	1	0
AIS Electronic	Title, abstract,	Date range: 01/01/2000- 31/01/2015	Social commerce	42	6
Library	keywords		Social shopping	16	4
			Collaborative commerce	9	0
			Collaborative shopping	4	0
EBSCOhost	Title, abstract,	Lang.: EN Pub. type: acad. journal, conf. paper/proceeding	Social commerce	45	2
Business Source Complete	subject terms		Social shopping	23	0
Complete			Collaborative commerce	73	0
		Year: 2000-2015	Collaborative shopping	2	0
IEEE Xplore	Title text,	Year range: 2000- present	Social commerce	24	5
	abstract, indexing terms		Social shopping	13	3
			Collaborative commerce	59	0
			Collaborative shopping	8	0
ScienceDirect	Title, abstract, keywords	Year: 2000-present	Social commerce	29	1
			Social shopping	5	0
			Collaborative commerce	13	0
			Collaborative shopping	1	0
SpringerLink	Title only (other fields n/a)	Language: EN Between 2000- 2015	Social commerce	9	0
			Social shopping	3	1
			Collaborative commerce	7	0
			Collaborative shopping	1	0
Thomson Reuters Web of Science	Topic (incl. title, abstract, keywords)	Language: EN From 2000 to 2015	Social commerce	85	7
			Social shopping	36	4
Defence			Collaborative commerce	107	0
			Collaborative shopping	13	0
			n =	656	33

Table 4. Detailed results of the database search

Table 5 lists the factors which were excluded from our literature review because they have not been associated with a direct impact on consumers' adoption of social commerce.

Excluded from literature review					
Factors	Contact ^[18]	Perceived critical mass[12]	Quantity- & time-limited		
	Coupon/site	Perceived institution	message ^[4]		
	confirmation ^[14]	assurance ^[12]	Required minimum numbers		
	Equity ^[24]	Perceived privacy ^[28]	of shoppers ^[4]		
	Expertise ^[36]	Perceived security ^[28,33]	Responsiveness ^[18]		
	Homophily ^[27]	Perceived source	Similarity ^[36]		
	Illusion of control ^[16]	competency ^[28]	Situational normality ^[33]		
	Information	Perceived web	SNS word of mouth ^[13]		
	asymmetry ^[13]	reputation ^[12]	Social attraction ^[36]		
	Information fit to	Personal value ^[37]	Structural assurance ^[33]		
	task ^[36]	Physical attraction ^[36]	Task attraction ^[36]		
	Involvement ^[16]	Price change type ^[16]	Tendency to social		
	Likeability ^[36]	Price consciousness ^[26]	comparison online ^[29,30,31]		
	Mobility ^[13]	Price reduction ^[4]	Tie strength ^[27]		
	Network density ^[27]	Prior experience ^[5]	User experience ^[7]		
	Perceived ability ^[12]	Privacy concerns[35]	Visual appeal ^[36]		
	Perceived benevolence/ integrity ^[12]	Product variety ^[4]	WOM quality ^[28]		
References	4 = Cho et al. (2012)	18 = Lee et al. (2012)	30 = Shen (2012d)		
	5 = Chow and Shi (2014)	24 = Liu et al. (2014)	31 = Shen and Eder (2009)		
	7 = Hajli (2012a)	26 = Noh et al. (2013)	33 = Teh and Ahmed (2011)		
	12 = Hsiao et al. (2010)	27 = Park et al. (2014)	35 = Wang and Hajli (2014)		
	13 = Hwang et al. (2014)	28 = Sharma and Crossler	36 = Xiang et al. (2014)		
	14 = Jang et al. (2013)	(2014)	37 = Yang and Woo (2013)		
	16 = Kim et al. (2013)	29 = Shen (2012a)			

Table 5. Excluded factors

[...] = reference