

# Winning engaged consumers

## The rules of brand engagement and intention of co-creation in social commerce

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### Abstract

**Purpose** – Under the sunlight of social commerce, few concepts have blossomed like value co-creation. But when blurred strategies are implemented, the opportunity to wilt a brand is high. To avoid the miscues and the controversies, an ascendant step is to engage consumers with social commerce sites. The purpose of this paper is to propose three antecedents to engage consumers with social commerce sites, namely, social support, social commerce value and social commerce information sharing, and the effect of brand engagement on the intention of brand co-creation.

**Design/methodology/approach** – This study used survey data from 234 Iranians with experience using social commerce sites. Variance-based structural equation modeling using the partial least squares path modeling approach was adopted to analyze the structural model.

**Findings** – The authors found that social support, social commerce value and social commerce information sharing positively foster brand engagement. The study also revealed that brand engagement is a significant predictor of brand co-creation intention.

**Originality/value** – The study is the first study that considers and explains brand engagement from social support theory, social commerce value theory and social commerce information exchange. Also, the study shows how consumers can be an integral part of a brand. Unlike other studies which were done in industrialized countries, this study was employed in Iran.

**Keywords** Co-creation, Brand engagement, Information exchange, Perceived value, Social media, Social support, Social networking, Social commerce

**Paper type** Research paper

### 1. Introduction

Nowadays, it is essential for companies and firms to have a social media presence and to interact with existing customers and develop new potential customers. According to We Are Social (2019) statistics, there are 3.48bn active social media users worldwide, approximately 93 percent of these being active mobile social media users. Because of its popularity, social media facilitates an innovative channel for branding at the core of its customer engagement (e.g. Ahmad and Laroche, 2016; Zheng *et al.*, 2015), thus changing business practice and service. A report issued by Marketo (2016) revealed that social media sites are among the most useful platforms to engage customers with brands at each stage of the consumer journey, which, in turn, allows for co-creation of value for the brand within customer networks.



As such, social media has become a popular platform for a variety of commercial activities such as customer review and customer interaction, being referred to as the social commerce phenomenon (Lin *et al.*, 2017). In the context of social commerce, customers can offer product assessment, recommend products, and share their personal experience about using products, thus creating value for branding. In such a scenario, customers could be considered as co-creators of value (Xie *et al.*, 2008). Social commerce websites that help companies to create “efficiency, novelty and lock-in” value propositions (Zheng *et al.*, 2017) and progressive advances in social commerce has revealed co-creation to be capable of increasing brand competitiveness (Bendapudi and Leone, 2003). In essence, consumers have become a glorified source of brand innovativeness (Klink and Athaide, 2010), particularly in the context of social commerce. Therefore, social commerce offers an effective approach for value co-creation, which is beneficial for both firms and customers (Franke and Schreier, 2010; Fuchs and Schreier, 2011). For example, ideas that are co-created with customers can outperform those that are generated by a firm’s professionals, designers and marketers with regards to novelty and benefit (Poetz and Schreier, 2012). Social commerce is now gaining much attention from practitioners for facilitating value co-creation for gaining business profitable values. Therefore, it is essential for both academics and practitioners to understand the role of social commerce in value co-creation from the customer perspective.

Research on value co-creation has primarily focused on explaining the concept, demonstrating the nature, process and practices of brand value co-creation, and exploring it as a co-creation process (e.g. Grönroos and Voima, 2013; Hatch and Schultz, 2010; Ramaswamy and Ozcan, 2016). There are few studies that attempted to empirically investigate the antecedents of co-creation. For example, Xie *et al.* (2008) explored the underlying motivational mechanism that influence consumers’ intention to prosume (co-creation value intention) in the context of food prosumption, based on the theory of trying. Results revealed that global values can influence domain-specific values in food prosumption, and domain-specific values then affect attitudes, self-efficacy and ongoing behavior, which can positively influence consumers’ intention to prosume. In another study, Payne *et al.* (2009) found that a booking system with brief tutorials on a car rental process can help customers understand how to obtain the additional benefits of membership, thus enhancing co-creation activities. Although these studies have begun to explore the factors shaping customers’ value co-creation, there remains a paucity of understanding about how value co-creation could be facilitated in the social commerce environment. In social commerce, consumers can co-create value through their interactions with peer consumers, and their role shift from passive audiences to active partners, thus co-creating values (Prahalad and Ramaswamy, 2004). In other words, customers tend to participate in the co-creation process with other peer customers and exchange their knowledge and experience about brand/product, thus helping each other with their purchase decision making. Therefore, social commerce can be considered to emphasize the new service-dominant logic (S-DL) which argues that brand value co-creation is enhanced when consumers’ interactions are supported (Vargo and Lusch, 2004). S-DL is a major stream in value co-creation with customers (Grönroos, 2006), being one which can be actively promoted by social commerce sites (Baghdadi, 2016). Brand researchers and managers have started to be mindful of co-creation in building brands with the customers (Ind and Coates, 2013); in enhancing the brand relationship experience (Payne *et al.*, 2009), discussing the social support environment of online communities (Wang *et al.*, 2016) and in considering the motives behind engagement with co-creation in the social media context (Füller, 2010). Hajli (2014b) argued that social commerce sites are essentially greenfield locations for co-creating value with customers, but without proceeding to explain the impact of that state of affairs on branding.

In addition, customer engagement is central to facilitating value co-creation in the social commerce environment because customers have been actively exchanging their shopping information for supporting each other’s shopping outcomes (Liang and Turban, 2011;

Zhang and Benyoucef, 2016). It is essential to provide further insights into customer engagement to better understand why customers are willing to devote their effort and time in co-creating values in social commerce (Iglesias *et al.*, 2013). Hence, this study seeks to investigate empirically how customers can become an integral part of the brand (Ind *et al.*, 2013) by exploring its antecedents from a social commerce perspective and at the individual consumer level. Specifically, the study aims to answer the following questions:

*RQ1.* What are the primary constructs that influence customer engagement in social commerce?

*RQ2.* Does customer engagement influence value co-creation?

The remainder of this paper is organized as follows. First, we provide the literature review on value co-creation and customer engagement and identify three antecedents, including social commerce information sharing, social support, and social commerce value. Second, the research model and hypothesis development are provided, followed by a discussion on research methods. Finally, we provide concluding remarks, acknowledge limitations and suggest directions for future research.

## 2. Literature review

### 2.1 Value co-creation with customers

Value co-creation has become the focus of much intense debate in the marketing field (Bernard *et al.*, 2011). Prahalad and Ramaswamy (2004) introduced the concept of Value co-creation, which is the fundamental mechanism of Vargo and Lusch's (2004) S-DL. McColl-Kennedy *et al.* (2012, p. 370) define value co-creation as "benefit realized from integration of resources through activities and interactions with collaborators in the customer's service network." S-DL is not an exclusive theory in marketing (Lusch and Vargo, 2006), but encompasses other research areas such as information management (Yan *et al.*, 2010), branding (Merz *et al.*, 2009), consumer-cultural theory (Arnould, 2007), and industries such as tourism and travel (Buhalis and Foerste, 2015), hospitality (Shaw *et al.*, 2011), and music festivals (Szmigin *et al.*, 2017). Prahalad and Ramaswamy (2000) discuss the sense of paradigm switch in the moving of the position of the customer from simple recipient of firm values to active player in creating that value, which they describe as "value-in-experience." According to Lusch and Vargo (2006), the value co-creation concept has been extended to incorporate the value delivery phase.

Brands have been shaped by both value co-creation and S-DL (Merz *et al.*, 2009). Vargo and Lusch (2004) highlighted that customers can co-create value – which is an axiom in S-DL (Vargo and Lusch, 2008) – and Prahalad and Ramaswamy (2004) crystallized the connection between brand and co-creation in stating: "The experience is the brand. The brand is co-created and evolves with experiences" (p. 13). Brand co-creation material in the extant literature is scarce; however, customers play an influential and crucial role in how other customers perceive brands through their experience relationship (Payne *et al.*, 2009). France *et al.* (2015, p. 852) defined brand co-creation as "customer-led interactions between the customer and the brand," to co-create brand meaning (Vallaster and von Wallpach, 2013) and brand identity (Black and Veloutsou, 2017). Internet technology has empowered customers to craft interactions about brands and their offers. Merz *et al.* (2009) studied brand co-creation from a broader perspective and define it as "creating brand value through network relationships and social interactions among the ecosystem of all stakeholders" (p. 338), a view which is supported by Hatch and Schultz (2009), who emphasized that dialogue between stakeholders is an intrinsic aspect of brand co-creation. On the other hand, Gensler *et al.* (2013) argued that social media sites have become the theatre for consumers to tell brand stories and co-create brand value where they are acting as "authors of brands' stories."

## 2.2 Customer-brand engagement (CBE)

The concept of engagement and consumer-brand engagement has received considerable attention (Harmeling *et al.*, 2017). Higgins (2006) described engagement as “The state of being engaged is to be involved, occupied, and interested in something” (p. 442). Strong engagement is to concentrate on something, to be absorbed or engrossed with.” Engagement has been studied in different sciences, like sociology (Jennings and Stoker, 2004), psychology (Achterberg *et al.*, 2003; Huo *et al.*, 2010) and organizational behavior (Crawford *et al.*, 2010; Frank *et al.*, 2004). In the last decade, engagement has emerged into the marketing context sharply (Gambetti and Graffigna, 2010; Kumar *et al.*, 2010). Customer engagement is a multidimensional concept. Van Doorn *et al.* (2010, p. 253) defined it as “customer behavioral manifestation towards a brand or firm, beyond purchases, resulting from motivational drivers.” Engagement in marketing is undertaken between specific subjects and objects (Hollebeek, 2011). The literature is rich and offers substantial insights of studies on engagement in social media. Several previous studies on engagement and social media show wide and diverse area of implementation across different sectors and industries (Chae, 2015; Hennig-Thurau *et al.*, 2015) like politics (Golbeck *et al.*, 2010; Stieglitz and Dang-Xuan, 2013; Ye *et al.*, 2017), health (Beykikhoshk *et al.*, 2015), education (Williams *et al.*, 2013) and sport (Kim *et al.*, 2017). Okazaki *et al.* (2015) explored IKEA’s customer engagement on Twitter and found that their engagement can be classified into three types: subjective, objective and network sharing. In another study by Zheng *et al.* (2015), they concluded that customer engagement on Facebook influenced their brand loyalty.

Customer engagement is a multidimensional concept. Van Doorn *et al.* (2010, p. 253) defined it as “customer behavioral manifestation towards a brand or firm, beyond purchases, resulting from motivational drivers.” Engagement in marketing is undertaken between specific subjects and objects (Hollebeek, 2011). The focus of this study is on CBE, also referred to as brand engagement. Consumer-brand engagement is explained as activities manifested “beyond purchase” (Vivek *et al.*, 2012, p. 127), which stands on a “psychological state” in a “cognitive, emotional and behavioral” typology (Brodie *et al.*, 2011) that originate from a “voluntary” decision (Verleye *et al.*, 2014). Hollebeek *et al.* (2014, p. 154) defined consumer-brand engagement in the social media context as “consumer’s positively valenced brand-related cognitive, emotional and behavioral activity, during or related to focal consumer/brand interaction.” Social commerce provides and nurtures a fruitful space within which to build a brand community (Habibi *et al.*, 2014), that the firm and its enthusiasts can create, share, spread and co-create brand-related contents (Laroche *et al.*, 2012). These brand communities are able to improve the relationship between the members of the community and the brand (Zhou *et al.*, 2012).

## 2.3 Social commerce

Social commerce is defined as “any commercial activities facilitated by or conducted through the broad social media and Web 2.0 tools in consumer’s online shopping process or business’ interactions with their customers” (Lin *et al.*, 2017, p. 191). It empowers consumers to share their shopping experience, knowledge, habits, stories and word-of-mouth to help others in optimizing their purchasing choices among products and brands; thus, others can evaluate and compare market offerings and make tailored purchase decisions according to their peers’ evaluations (Hajli, 2015). In this section, we primarily draw upon the literature on social commerce in identifying three key antecedents: social support, social commerce information sharing and social commerce value.

## 2.4 Social support

Social support refers to “the social resources that individuals perceive to be available, or that are actually provided to them by non-professionals in the context of both formal support

groups and informal helping relationships” (Gottlieb and Bergen, 2010, p. 512). There is considerable literature indicating that social support is a multidimensional construct consisting of various forms of support such as informational support, emotional support, instrumental support and companionship (e.g. Berkman *et al.*, 2000; House, 1981; Lin *et al.*, 2016). Social support can be facilitated by the exchange of verbal and nonverbal messages between two or more individuals (Pfeil, 2009), the content of which can determine the type of social support. Social support has been identified as a primary factor that drives online user behaviour in social commerce in terms of two primary dimensions – informational support and emotional support (Liang and Turban, 2011). Specifically, informational support refers to problem solutions based on user-generated commercial information featuring factual information related to the brand/product, such as product rating and reviews, product recommendation and shopping experience sharing in a variety of social media platforms. Emotional support refers to supportive problem solutions based on psychosocial support with the intent to exchange care, backing and comfort to each other in supporting purchase decision making.

In social commerce, customers are more likely to join and share experiences when they obtain reputational information from others through social media communities (Chiu *et al.*, 2015) with some main advantages including being able to seek information conveniently, and share social support regardless of the extent of users’ geographic, cultural, national and organizational diversity (Sen *et al.*, 2010). According to the work of Kraut *et al.* (2002), social support tends to be more productive and influential in an online context than in an offline context. The two main forms of support customers receive in the online context are informational and emotional (Ridings and Gefen, 2004). Social support forges relationships between community members (Wellman and Wortley, 1990), and provides them with the emotional care and informational assistance (Bagozzi and Dholakia, 2002; Wellman *et al.*, 1996) that is nurtured within the social commerce environment (Liang and Turban, 2011).

### *2.5 Social commerce information sharing*

Information sharing requires a state of psychological willingness to disclose and share individual and personal information (Hsieh *et al.*, 2012) as well as knowledge (Wasko and Faraj, 2005). In social commerce, information sharing is a key reason for participating in social commerce sites (Li *et al.*, 2018). Information sharing refers to consumers’ willingness to share information with their peers (Bilgihan *et al.*, 2014). Within social commerce sites, customers trust and share other customers’ knowledge, experiences and opinions through ratings, reviews and recommendations (Hajli *et al.*, 2014). As such, ratings, reviews, rankings, recommendations, leaving comments, likings, sharing and following are the unique features and characteristics of social commerce information sharing (Baghdadi, 2016).

### *2.6 Social commerce value*

Perceived value refers to the tradeoff between giving and receiving, i.e. a consumer’s overall assessment of the use of a product/service based on what is received and what is given (Zeithaml, 1988). In social commerce, consumer-generated content covers a variety of information such as descriptions of product features, product offerings, peer consumers’ assessment of products, among others (Huang and Benyoucef, 2013). The large amount of such user-generated content can offer consumers opportunities to purchase products at a lower price and receive product promotions, and to become more-informed customers (Stephen and Toubia, 2010). Therefore, consumers can obtain utilitarian value in social commerce, thus improving their purchase outcomes. On the other side, social commerce can also increase playfulness in online shopping, thus adding hedonic values. The hedonic value of shopping reflects the values that consumers receive from the multisensory, fantastic and emotive aspects of their shopping experiences, such as entertainment and pleasure

(Jones *et al.*, 2006). For example, consumers may obtain enjoyment by commenting on products to help others and sharing their good experiences with others on social media when they are shopping on social commerce websites. In addition, social commerce is now creating a strong sense of sociability and interaction among consumers, which can add hedonic value to online shopping (Zhang *et al.*, 2014) as customers can experience fun and pleasure when they use social commerce features to interact with other consumers. Therefore, we argue that social commerce provides a significant step toward fostering the hedonic value of online shopping, which is defined as “the enjoyment received from using social commerce for online shopping.” In summary, we argue that customers can obtain two primary values from social commerce – perceived utilitarian value and hedonic value – thus capturing social commerce value in our study.

### 3. Research model and hypothesis development

Our research model is shown in Figure 1. Briefly, we identify three constructs (namely, social support, social commerce information sharing and social commerce value) from the literature on social commerce as antecedents of brand engagement, which, in turn, influence users’ value co-creation intention.

#### 3.1 The effect of social support on brand engagement

Social conditions refers to the set of circumstances that form part of the relationship between a recipient and a communicator, particularly in terms of intentions toward electronic word-of-mouth information, relating to receipt, use and spreading of recommendations, hence engaging other consumers in the content (Palka *et al.*, 2009). Social influence has been studied by Dholakia *et al.* (2004), who found that consumers’ participation in virtual communities is enhanced by social influence. Algesheimer *et al.* (2005) discussed the role of social influence in brand communities, where it is seen to play a key role in determining community engagement, which in turn leads users to be more eager to participate and retain their membership of the community. Lin *et al.* (2016) concluded that continuance in the use of social network sites is influenced by the degree of online social support users receive. Indeed, the relationships formed between social commerce site users’ leads to a better product recommendations (Yang *et al.*, 2013). Therefore, users seek social interaction with their peers in the online community in the form of social support (Kim *et al.*, 2011). Social support influences user interaction with other users through informational and emotional support (Phang *et al.*, 2009). Social support boosts users’ participation in social commerce sites by facilitating robust relationship quality (Liang *et al.*, 2011), and additionally, social support (in its two forms of

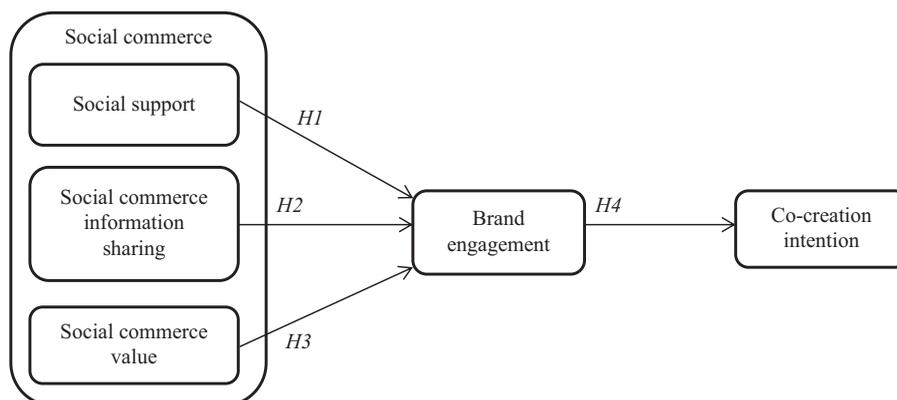


Figure 1.  
Research model

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Informational and Emotional support) provides a base from which enhanced credibility may be achieved, along with increased expectancy of participation from consumers (Hajli, 2018). Thus, we propose the following hypothesis:

*H1.* Social support has a positive impact on brand engagement.

### *3.2 The effect of social commerce information sharing on brand engagement*

Nowadays, sharing information in social technologies tends to be less risky (Hajli and Lin, 2016) and more beneficial (Li *et al.*, 2018). The notion of information sharing leads to voluntary self-disclosure of information (Lee *et al.*, 2008). Information sharing is a key activity in social commerce (Bai *et al.*, 2015). Social commerce sites encourage consumers to continue sharing and disclosing their knowledge about brands and products in a way that shapes the experiences of other consumers (Sotiriadis and Van Zyl, 2013), which, in turn, increases their level of engagement (Liu *et al.*, 2016). Osatuyi (2013) studied information sharing and established that information sharing can be utilized to enhance user engagement. Grace *et al.* (2015) concluded that users tend to use social network sites because they allow them to share their knowledge with other users. Therefore, given the strong relationship between information sharing and engagement in the social media and social commerce context, it is hypothesized that:

*H2.* Social commerce information sharing has a positive impact on brand engagement.

### *3.3 The effect of social commerce value on Brand engagement*

The preceding discussion forwards the argument that social commerce value consists of both utilitarian value and hedonic value, which are identified as the primary type of value that a social commerce website can offer. Some prior studies have demonstrated that perceived value has positive impacts on shopping outcomes including satisfaction and (re)purchase intentions (Chiu *et al.*, 2014; Jones *et al.*, 2006; Koufaris, 2002). For example, Koufaris (2002) reported that consumer purchase intention (more specially, intention to return) is affected by shopping enjoyment (hedonic value). Chiu *et al.* (2014) showed that utilitarian value and hedonic value are both positively associated with consumers' repeat purchase intentions. Mirkovski *et al.* (2017) indicated the positive effect of intrinsic and extrinsic motivations on social commerce users' information sharing. These research findings highlight that perceived utilitarian value and hedonic value can guide consumer behavior and regulate customer engagement, including behavioral intention and affective response (Bridges and Florsheim, 2008; Wang, 2008). In the context of social commerce, brand engagement captures users' cognitive, emotional and behavioral activities in relation to a brand. Accordingly, customers would have a higher level of branding engagement when they perceive a higher level of social commerce value exists. Consequently, we propose the following hypothesis:

*H3.* Social commerce value has a positive impact on brand engagement.

### *3.4 The effect of brand engagement on co-creation intention*

Analysis of the extant literature reveals discussions of the concept of value co-creation, which, in turn, results in the related concept of brand co-creation. Brand co-creation can be articulated in two ways; when the customer and the firm exchange information and form a connection (Vallaster and von Wallpach, 2013), and when the customer experiences the brand (Healy and McDonagh, 2013). Hajli *et al.* (2017) developed a framework explaining aspects of brand co-creation in the social commerce era, illustrating that for brand co-creation to occur, customers need to be engaged with the brand through a varied series of interactions, consisting of social interaction in the online community, relationship quality and brand loyalty. The relationship between brand engagement and value co-creation is

further acknowledged by Prahalad and Ramaswamy (2004) in stating that a “firm cannot create anything of value without the engagement of individuals.” Brand engagement is a solid base for brand value co-creation (Ramaswamy and Ozcan, 2016). This study proposes that brand engagement is an antecedent of brand co-creation (France *et al.*, 2015), and brand co-creation is a consequence of brand engagement (Hollebeek, 2011; Merrilees and Merrilees, 2016). Hence, we argue that with greater brand engagement, customers will be more able to co-create brand value. Therefore, we hypothesize:

*H4.* Brand engagement has a positive impact on co-creation intention.

## 4. Research methodology

### 4.1 Data collection

Studies investigating consumer acceptance and use of technologies have tended to focus on industrialized countries (Alsajjan and Dennis, 2010), and while such research, in general, is needed on the behavior of consumers in the social commerce context (Zhang and Benyoucef, 2016), regional and national variations in consumer behavior suggest that research is also required in diverse cultural settings. Hence, data for this study were collected in Iran. Iran provides a potentially useful setting for study as the Iranian people pay particular attention to social networking sites (SNSs), and make use of these sites for shopping. In addition, Iran was selected as a location due to the general lack of information relating to the Iranian market, with relatively few academic studies focusing on the country to date. A local co-author proved helpful in identifying attractive SNSs and social commerce websites/applications to focus upon during the research. A survey approach was employed, and in order to obtain a representative sample, we targeted potential participants who had been involved in making use of social commerce platforms in Iran. We randomly invited 1,200 such individuals through SNSs with an online questionnaire (40 percent) and paper questionnaire (60 percent). Data collection took place in 2017 in different cities within Iran, including Tehran, Shahriar, Karaj and others. In total, 240 responses were received, achieving a 20 percent response rate, with 234 of these responses being usable. Of the returns, 95 percent were provided through a paper-based questionnaire, and 5 percent from an electronic questionnaire. The sample comprised 60 percent male respondents, and 40 percent female.

### 4.2 Development of measurement items

We adopted and modified the measurement items employed from scales validated in previous studies. All items were measured with seven-point Likert scales, ranging from 1 (strongly disagree) to 7 (strongly agree). Social support is conceptualized as a second-order construct, having two contributing first-order factors; informational support and emotional support. These were measured using multiple items adapted from Liang *et al.* (2011) and (Hajli, 2014a). Items for social commerce info-sharing were adapted from Hajli (2015). Social commerce value is also conceptualized as a second-order construct using two dimensions including utilitarian value and hedonic value, the items of which are adapted from Baldus *et al.* (2015). Items for brand engagement were adapted from Kim and Johnson (2016), measuring a consumer’s cognitive, emotional and behavioral activities. Items for co-creation intention were adapted from (Hajli, 2014b). Table AI provides detailed items for each construct.

## 5. Data analysis and results

We used the partial least squares structural equation modeling (PLS-SEM) method as the primary tool to test the hypotheses proposed. SEM is a tool used to analyze multivariate data, which is also appropriate for theory testing (Horton, 1980). Additionally, PLS is a suitable method for testing path models (Marcoulides *et al.*, 2009).

5.1 Construct reliability and validity of measurement model

The measurement model was tested by following Hair *et al.* (1998). Our initial data pool included 28 items. In sum, 12 items were removed during the pilot study due to correlations issue. We assessed the convergent validity by analyzing factor loadings, composite reliability (CR) and average variance extracted (AVE).

Findings confirm that all factor loadings are above 0.65, therefore presenting an acceptable factor loading magnitude (Hair *et al.*, 2010). The minimum values for CR and AVE are 0.7 and 0.5, respectively (Hair *et al.*, 1998). The value of CR of all constructs is above 0.7, while the value of AVE for all constructs is above the threshold level. Thus, the outcomes show decent convergent validity (refer Table I). Discriminant validity confirms whether the construct measures are different from the other constructs or not. We measured the discriminant validity by following (Fornell and Larcker, 1981). As shown in Table I, the square root of AVE is more than the correlation between variables, therefore showing decent discriminant validity.

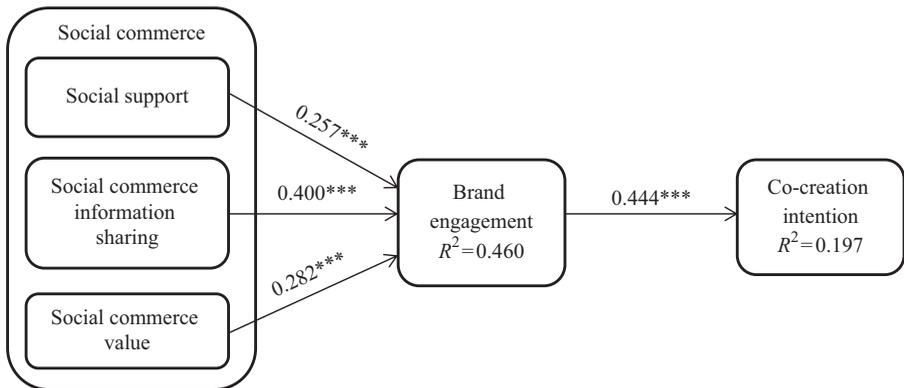
5.2 Results of structural model

After assessment of initial standards in the measurement model, we further examined the hypothesized relationship among constructs. Figure 2 displays the model test outcomes. The findings demonstrate that all intended path coefficients; *H1-H4* are positively significant. Social commerce information sharing (0.400) is the most significant contributor for co-creation intention; followed by social commerce value (0.282) and social support (0.257). Our findings are consistent with previous studies by Osatuyi (2013) and Liu *et al.* (2016), who reported that information sharing on social commerce platform increases user engagement; in this case, the brand engagement. Our study model explains that 46 percent of the variance is related to

**Table I.**  
Correlations matrix with composite reliability (CR), average variance extracted (AVE)

	AVE	CR	BG	CB	SCIS	RH	SI
BG	0.510	0.806	<i>0.714</i>				
CB	0.512	0.759	0.444	<i>0.716</i>			
SCIS	0.660	0.795	0.553	0.322	<i>0.813</i>		
RH	0.591	0.852	0.436	0.162	0.241	<i>0.769</i>	
SI	0.623	0.831	0.452	0.302	0.330	0.223	<i>0.790</i>

**Note:** Diagonal values shown in italics are square roots of AVEs



**Figure 2.**  
Structural model results

**Notes:** \**p*<0.05; \*\**p*<0.01; \*\*\**p*<0.001

brand engagement, while 19.7 percent is related to the dependent variable; co-creation intention. Though the model's predictive accuracy is relatively small at about 20 percent, we can conclude that the fitness of this model is reliable because a value of 20 is considered high in studies related to consumer behavior (Hair *et al.*, 2011). These results are supporting the fitness and acceptability of our hypothesized model as shown in Table II.

## 6. Discussion

### 6.1 Key findings

The purpose of this study is to investigate how consumers can be an integral part of the brand and co-create in the social commerce context. Our research findings show that brand co-creation intention increase with brand engagement, which is influenced by social support, social commerce information sharing and social commerce value. These findings underpin the argument that consumers are more likely to engage with social commerce websites or applications if: they share their experiences and recommendations with others, they receive social support from other consumers and they perceive a higher level of social commerce value in a social commerce website. Furthermore, enhanced engagement with a social commerce site or application will boost the intention of consumers to co-create branded-related content via the social commerce site or application. The theoretical and practical implications of the findings are discussed below.

### 6.2 Theoretical implications

First, our study extends the existing social commerce literature by exploring brand engagement and empirically testing its antecedents and impacts on value co-creation. Previous research studies have not attempted to examine how consumers' brand engagement can be facilitated in a social commerce environment. Hence, our research findings can advance our understanding about the social commerce phenomenon by providing some initial insights into brand engagement. Such findings are valuable for studies to understand how social commerce can be used to facilitate various consumer behaviors and outcomes, and thus providing further insights into its implementation of social commerce for business practices. As such, our results show the important role of social commerce in driving commercial activities, which is consistent with prior social commerce studies (e.g. Liang and Turban, 2011; Lin *et al.*, 2017).

Second, social support, social commerce information sharing and perceived social commerce value are identified as the key antecedents of brand engagement in the context of social commerce. These results indicate that social commerce can facilitate an efficient environment where consumers could be motivated to participate in the brand engagement management activities. As such, this study can advance our understanding about CBE by leveraging social commerce tools (Hollebeek, 2011). Specifically, social commerce sites need to create a sense of social support and value. It also needs to empower consumers to share commercial information with others. In particular, one interesting finding is that social

Hypothesis	Path coefficient	t-value	Support
H1: social support has a positive impact on brand engagement	0.257***	4.066	Yes
H2: social commerce information sharing has a positive impact on brand engagement	0.400***	5.558	Yes
H3: social commerce value has a positive impact on brand engagement	0.282***	4.397	Yes
H4: brand engagement has a positive impact on co-creation intention	0.444***	7.880	Yes

**Notes:** \*, \*\*, \*\*\*Significant at 10, 5 and 1 percent levels, respectively

**Table II.**  
Summary of  
hypotheses  
test results

commerce value is positively related to brand engagement. It suggests that consumers consider their benefits from social commerce in their decision making about engaging with brands. These results are consistent with some existing studies (Stephen and Toubia, 2010; Wang *et al.*, 2019), regarding the important role of consumers' perceived social commerce benefits. Our study provides further insights into how technological advances can benefit consumers, and thus serves as a foundation for further research examining consumers' perceived benefits and its impacts in different emerging research contexts.

Third, our findings refine the concept of co-creation and its importance in brand building. Consumers contribute to brand building by sharing their opinions and experiences without company involvement, therefore shedding the lights that co-creation intention is unlikely to be present without strong engagement with the brand. In fact, this study confirms the results of previous conceptual studies (France *et al.*, 2015; Merrilees and Merrilees, 2016) that brand engagement is a pre-requisite and indicator of brand co-creation intention. This study delineates co-creation intention and brand engagement in social commerce context and revealed that these two concepts have been rarely studied empirically within the context of social commerce. In a previous study by Hajli *et al.* (2017), the authors found that brand loyalty leads to brand co-creation; similarly, this study proves the power of brand engagement on co-creation intention. Integrating social support, social commerce value, information seeking and brand engagement have filtrated the process of brand co-creation in social commerce. Therefore, brands can be neglected if they do not effectively recognize and manage the importance of engagement concept in their marketing campaigns.

### *6.3 Practical implications*

Given that our research result demonstrate how social commerce can be used to trigger consumers' brand engagement and co-creation, it offers managers an enhanced understanding of the implementation of social commerce for business practices and achieving competitive advantages. Brand engagement is very important for business to promote products/services and improve word-of-mouth, and managers should make efforts to effectively engage with customers by implementing the relevant social commerce features. As such, our research results provide strong empirical evidence to clarify how companies can take advantages of social commerce and increase consumers' brand engagement and co-creation intentions in the social commerce context. In particular, it is critical for companies to develop strong engagement with their customers, and therefore, they should harness the potential impact of the application social commerce into business practices. For example, marketing managers of social commerce websites should integrate their firms' resources in order to enable consumers to share information with their peers and hence provide social support to other peers. Brand managers should also increase consumers' brand passion through building trusted and personalized relationships and encouraging discussion between consumers in their social commerce websites about their products and services. Introducing enjoyable and entertaining content on social commerce platform can also improve the level and strength of engagement between the company and consumers. Finally, continuing to use the social commerce websites to reveal the latest information about their products and services will encourage consumers to further engage with the brand. Further research may use this study as an example to study consumer behavior in advanced online environment and/or leveraging new information technologies. All these indicate that social commerce can be a good approach for business practices (Lin *et al.*, 2017), in particular, in terms of CBE and co-creation.

Further, our research results suggest three social commerce-based factors that may guide the successful implementation of social commerce into business practice. Specifically, social commerce information sharing, social support, and social commerce value all play an important role in driving CBE and, thereafter, co-creation. These findings provide further insights into the impacts of specific social commerce features on customer behavior in social commerce.

Taking advantages of these findings, managers may improve consumers' brand engagement experience and outcomes by creating an effective environment where consumers are willing to share their information and exchange social support. Managers may also want to create a sense of social commerce value in order to enhance CBE. On the other side, social commerce providers (such as Facebook) can also collaborate with companies to establish a reliable and comfortable environment for consumers to interact with brands, and thus being more likely to retain the memberships of companies. Therefore, our study can provide important implementations for both business and social commerce providers.

#### 6.4 Limitations and future study

This study, in keeping with other research projects, has a number of acknowledged limitations. The study focused on only one country, Iran, and given that cultural variation does play a role in social media and social commerce, future research should apply the model in different cultural settings, such as the USA, the UK, China and India. Moreover, this study adopts composite measurements for brand engagement variables, including cognitive, emotional and behavioral aspects, whereas future study should measure these activities separately by adopting (for instance) Hollebeek *et al.*'s (2014) dimensions. Finally, the study is based on a convenience cross-sectional sample. As motivations can vary across time, and between occasions and situations, it is further recommended that future work be based on longitudinal studies in order to gain a better understanding of how the motivational drivers vary in impact and significance in order to provide information that will allow managers to design a suitable strategy that acknowledges time, occasion and situation.

### 7. Conclusion

Co-creation intention has become a common feature within the social commerce context, and it is considered to be a highly promising channel for many companies. In order to exploit it, an important step is to engage consumers with social commerce sites or applications in order to motivate them to participate by raising their level of co-creation intention. In this study, our purpose is to improve understanding of how consumers can be an integral part of the brand in the social commerce context. We employ the social support theory, social commerce information sharing and social commerce value in contributing to explain the mechanism of engaging consumers with social commerce websites in order to increase the intention of brand co-creation. Our findings suggest that it is important for social commerce websites to consider engagement and its motivators as they attempt to boost levels of co-creation intention. As such, this research provides a useful foundation and empirical overview of how consumers can co-create brands in social commerce.

### References

- Achterberg, W., Pot, A.M., Kerkstra, A., Ooms, M., Muller, M. and Ribbe, M. (2003), "The effect of depression on social engagement in newly admitted Dutch nursing home residents", *The Gerontologist*, Vol. 43 No. 2, pp. 213-218.
- Ahmad, S.N. and Laroche, M. (2016), "Analyzing electronic word of mouth: a social commerce construct", *International Journal of Information Management*, Vol. 37 No. 3, pp. 202-213.
- Algesheimer, R., Dholakia, U.M. and Herrmann, A. (2005), "The social influence of brand community: evidence from European car clubs", *Journal of Marketing*, Vol. 69 No. 3, pp. 19-34.
- Alsajjan, B. and Dennis, C. (2010), "Internet banking acceptance model: cross-market examination", *Journal of Business Research*, Vol. 63 Nos 9-10, pp. 957-963, available at: <http://10.1016/j.jbusres.2008.12.014>
- Arnould, E.J. (2007), "Service-dominant logic and consumer culture theory: natural allies in an emerging paradigm", *Consumer Culture Theory*, Emerald Group Publishing Limited, pp. 57-76.

- Baghdadi, Y. (2016), "A framework for social commerce design", *Information Systems*, Vol. 60, pp. 95-113, available at: <http://dx.doi.org/10.1016/j.is.2016.03.007>
- Bagozzi, R.P. and Dholakia, U.M. (2002), "Intentional social action in virtual communities", *Journal of Interactive Marketing*, Vol. 16 No. 2, pp. 2-21.
- Bai, Y., Yao, Z. and Dou, Y.-F. (2015), "Effect of social commerce factors on user purchase behavior: an empirical investigation from renren.com", *International Journal of Information Management*, Vol. 35 No. 5, pp. 538-550.
- Baldus, B.J., Voorhees, C. and Calantone, R. (2015), "Online brand community engagement: scale development and validation", *Journal of Business Research*, Vol. 68 No. 5, pp. 978-985.
- Bendapudi, N. and Leone, R.P. (2003), "Psychological implications of customer participation in co-production", *Journal of Marketing*, Vol. 67 No. 1, pp. 14-28.
- Berkman, L.F., Glass, T., Brissette, I. and Seeman, T.E. (2000), "From social integration to health: Durkheim in the new millennium☆", *Social Science & Medicine*, Vol. 51 No. 6, pp. 843-857.
- Bernard, C., Daniele, D. and Detlev, Z. (2011), "Critical perspectives on consumers' role as 'producers': broadening the debate on value co-creation in marketing processes", *Marketing Theory*, Vol. 11 No. 3, pp. 231-241, available at: <http://doi:10.1177/1470593111408171>
- Beykikhoshk, A., Arandjelović, O., Phung, D., Venkatesh, S. and Caelli, T. (2015), "Using Twitter to learn about the autism community", *Social Network Analysis and Mining*, Vol. 5 No. 1, pp. 1-17.
- Bilgihan, A., Peng, C. and Kandampully, J. (2014), "Generation Y's dining information seeking and sharing behavior on social networking sites: an exploratory study", *International Journal of Contemporary Hospitality Management*, Vol. 26 No. 3, pp. 349-366.
- Black, I. and Veloutsou, C. (2017), "Working consumers: co-creation of brand identity, consumer identity and brand community identity", *Journal of Business Research*, Vol. 70, pp. 416-429.
- Bridges, E. and Florsheim, R. (2008), "Hedonic and utilitarian shopping goals: the online experience", *Journal of Business Research*, Vol. 61 No. 4, pp. 309-314.
- Brodie, R.J., Hollebeek, L.D., Jurić, B. and Ilić, A. (2011), "Customer engagement: conceptual domain, fundamental propositions, and implications for research", *Journal of Service Research*, Vol. 14 No. 3, pp. 252-271.
- Buhalis, D. and Foerste, M. (2015), "SoCoMo marketing for travel and tourism: empowering co-creation of value", *Journal of Destination Marketing & Management*, Vol. 4 No. 3, pp. 151-161, available at: <http://10.1016/j.jdmm.2015.04.001>
- Chae, B.K. (2015), "Insights from hashtag# supplychain and Twitter analytics: considering Twitter and Twitter data for supply chain practice and research", *International Journal of Production Economics*, Vol. 165, pp. 247-259.
- Chiu, C.-M., Huang, H.-Y., Cheng, H.-L. and Sun, P.-C. (2015), "Understanding online community citizenship behaviors through social support and social identity", *International Journal of Information Management*, Vol. 35 No. 4, pp. 504-519, available at: <http://dx.doi.org/10.1016/j.ijinfomgt.2015.04.009>
- Chiu, C.M., Wang, E.T., Fang, Y.H. and Huang, H.Y. (2014), "Understanding customers' repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk", *Information Systems Journal*, Vol. 24 No. 1, pp. 85-114.
- Crawford, E.R., LePine, J.A. and Rich, B.L. (2010), "Linking job demands and resources to employee engagement and burnout: a theoretical extension and meta-analytic test", *Journal of Applied Psychology*, Vol. 95 No. 5, pp. 834-848, available at: <http://dx.doi.org/10.1037/a0019364>
- Dholakia, U.M., Bagozzi, R.P. and Pearo, L.K. (2004), "A social influence model of consumer participation in network-and small-group-based virtual communities", *International Journal of Research in Marketing*, Vol. 21 No. 3, pp. 241-263.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.

- France, C., Merrilees, B. and Miller, D. (2015), "Customer brand co-creation: a conceptual model", *Marketing Intelligence & Planning*, Vol. 33 No. 6, pp. 848-864, available at: <https://doi.org/10.1108/MIP-06-2014-0105>
- Frank, F.D., Finnegan, R.P. and Taylor, C.R. (2004), "The race for talent: retaining and engaging workers in the 21st century", *People and Strategy*, Vol. 27 No. 3, pp. 12-25.
- Franke, N. and Schreier, M. (2010), "Why customers value self-designed products: the importance of process effort and enjoyment", *Journal of Product Innovation Management*, Vol. 27 No. 7, pp. 1020-1031.
- Fuchs, C. and Schreier, M. (2011), "Customer empowerment in new product development", *Journal of Product Innovation Management*, Vol. 28 No. 1, pp. 17-32.
- Füller, J. (2010), "Refining virtual co-creation from a consumer perspective", *California Management Review*, Vol. 52 No. 2, pp. 98-122, available at: <https://doi.org/10.1525/cmr.2010.52.2.98>
- Gambetti, R. and Graffigna, G. (2010), "The concept of engagement", *International Journal of Market Research*, Vol. 52 No. 6, pp. 801-826.
- Gensler, S., Völckner, F., Liu-Thompkins, Y. and Wiertz, C. (2013), "Managing brands in the social media environment", *Journal of Interactive Marketing*, Vol. 27 No. 4, pp. 242-256, available at: <http://dx.doi.org/10.1016/j.intmar.2013.09.004>
- Golbeck, J., Grimes, J.M. and Rogers, A. (2010), "Twitter use by the US congress", *Journal of the American Society for Information Science and Technology*, Vol. 61 No. 8, pp. 1612-1621.
- Gottlieb, B.H. and Bergen, A.E. (2010), "Social support concepts and measures", *Journal of Psychosomatic Research*, Vol. 69 No. 5, pp. 511-520, available at: <http://dx.doi.org/10.1016/j.jpsychores.2009.10.001>
- Grace, D., Ross, M. and Shao, W. (2015), "Examining the relationship between social media characteristics and psychological dispositions", *European Journal of Marketing*, Vol. 49 Nos 9/10, pp. 1366-1390.
- Grönroos, C. (2006), "Adopting a service logic for marketing", *Marketing Theory*, Vol. 6 No. 3, pp. 317-333.
- Grönroos, C. and Voima, P. (2013), "Critical service logic: making sense of value creation and co-creation", *Journal of the Academy of Marketing Science*, Vol. 41 No. 2, pp. 133-150.
- Habibi, M.R., Laroche, M. and Richard, M.-O. (2014), "Brand communities based in social media: how unique are they? Evidence from two exemplary brand communities", *International Journal of Information Management*, Vol. 34 No. 2, pp. 123-132.
- Hair, J.F., Ringle, C.M. and Sarstedt, M. (2011), "PLS-SEM: indeed a silver bullet", *Journal of Marketing Theory and Practice*, Vol. 19 No. 2, pp. 139-152, available at: <https://doi.org/10.2753/MTP1069-6679190202>
- Hair, J.F., Anderson, R.E., Tatham, R.L. and William, C. (1998), *Multivariate Data Analysis*, 5th ed., Prentice Hall, Upper Saddle River, NJ.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010), *Multivariate Data Analysis*, Prentice Hall, Englewood Cliffs, NJ.
- Hajli, N. (2014a), "The role of social support on relationship quality and social commerce", *Technological Forecasting and Social Change*, Vol. 87, pp. 17-27.
- Hajli, N. (2014b), "Social commerce for innovation", *International Journal of Innovation Management*, Vol. 18 No. 4, pp. 1-24, available at: <https://doi.org/10.1142/S1363919614500248>
- Hajli, N. (2015), "Social commerce constructs and consumer's intention to buy", *International Journal of Information Management*, Vol. 35 No. 2, pp. 183-191.
- Hajli, N. (2018), "Ethical environment in the online communities by information credibility: a social media perspective", *Journal of Business Ethics*, Vol. 149 No. 4, pp. 799-810.
- Hajli, N. and Lin, X. (2016), "Exploring the security of information sharing on social networking sites: the role of perceived control of information", *Journal of Business Ethics*, Vol. 133 No. 1, pp. 111-123, available at: <https://doi.org/10.1007/s10551-014-2346-x>

- Hajli, N., Lin, X.L., Featherman, M. and Wang, Y.C. (2014), "Social word of mouth how trust develops in the market", *International Journal of Market Research*, Vol. 56 No. 5, pp. 673-689, available at: <https://doi.org/10.2501/IJMR-2014-045>
- Hajli, N., Shanmugam, M., Papagiannidis, S., Zahay, D. and Richard, M.-O. (2017), "Branding co-creation with members of online brand communities", *Journal of Business Research*, Vol. 70, pp. 136-144, available at: <http://dx.doi.org/10.1016/j.jbusres.2016.08.026>
- Harmeling, C.M., Moffett, J.W., Arnold, M.J. and Carlson, B.D. (2017), "Toward a theory of customer engagement marketing", *Journal of the Academy of Marketing Science*, Vol. 45 No. 3, pp. 312-335.
- Hatch, M.J. and Schultz, M. (2009), "Of bricks and brands: from corporate to enterprise branding", *Organizational Dynamics*, Vol. 38 No. 2, pp. 117-130.
- Hatch, M.J. and Schultz, M. (2010), "Toward a theory of brand co-creation with implications for brand governance", *Journal of Brand Management*, Vol. 17 No. 8, pp. 590-604.
- Healy, J.C. and McDonagh, P. (2013), "Consumer roles in brand culture and value co-creation in virtual communities", *Journal of Business Research*, Vol. 66 No. 9, pp. 1528-1540, available at: <http://dx.doi.org/10.1016/j.jbusres.2012.09.014>
- Hennig-Thurau, T., Wiertz, C. and Feldhaus, F. (2015), "Does Twitter matter? The impact of microblogging word of mouth on consumers' adoption of new movies", *Journal of the Academy of Marketing Science*, Vol. 43 No. 3, pp. 375-394.
- Higgins, E.T. (2006), "Value from hedonic experience and engagement", *Psychological Review*, Vol. 113 No. 3, pp. 439-460.
- Hollebeek, L. (2011), "Demystifying customer brand engagement: exploring the loyalty nexus", *Journal of Marketing Management*, Vol. 27 Nos 7-8, pp. 785-807.
- Hollebeek, L.D., Glynn, M.S. and Brodie, R.J. (2014), "Consumer brand engagement in social media: conceptualization, scale development and validation", *Journal of Interactive Marketing*, Vol. 28 No. 2, pp. 149-165.
- Horton, R.L. (1980), "Book reviews: CAUSAL MODELS IN MARKETING by Richard P. Bagozzi (New York: Wiley, 1980. 303 pp., \$14.95)", *Journal of the Academy of Marketing Science*, Vol. 8 No. 3, pp. 304-305, available at: <https://doi.org/10.1177/009207038000800316>
- House, J.S. (1981), *Work Stress and Social Support*, Longman, London.
- Hsieh, J.-K., Hsieh, Y.-C. and Tang, Y.-C. (2012), "Exploring the disseminating behaviors of eWOM marketing: persuasion in online video", *Electronic Commerce Research*, Vol. 12 No. 2, pp. 201-224.
- Huang, Z. and Benyoucef, M. (2013), "From e-commerce to social commerce: a close look at design features", *Electronic Commerce Research and Applications*, Vol. 12 No. 4, pp. 246-259.
- Huo, Y.J., Binning, K.R. and Molina, L.E. (2010), "Testing an integrative model of respect: Implications for social engagement and well-being", *Personality and Social Psychology Bulletin*, Vol. 36 No. 2, pp. 200-212.
- Iglesias, O., Ind, N. and Alfaro, M. (2013), "The organic view of the brand: a brand value co-creation model", *Journal of Brand Management*, Vol. 20 No. 8, pp. 670-688.
- Ind, N. and Coates, N. (2013), "The meanings of co-creation", *European Business Review*, Vol. 25 No. 1, pp. 86-95.
- Ind, N., Iglesias, O. and Schultz, M. (2013), "Building brands together", *California Management Review*, Vol. 55 No. 3, pp. 5-26.
- Jennings, M.K. and Stoker, L. (2004), "Social trust and civic engagement across time and generations", *Acta Politica*, Vol. 39 No. 4, pp. 342-379.
- Jones, M.A., Reynolds, K.E. and Arnold, M.J. (2006), "Hedonic and utilitarian shopping value: investigating differential effects on retail outcomes", *Journal of Business Research*, Vol. 59 No. 9, pp. 974-981.
- Kim, A.J. and Johnson, K.K. (2016), "Power of consumers using social media: examining the influences of brand-related user-generated content on Facebook", *Computers in Human Behavior*, Vol. 58, pp. 98-108.

- Kim, H.-W., Gupta, S. and Koh, J. (2011), "Investigating the intention to purchase digital items in social networking communities: a customer value perspective", *Information & Management*, Vol. 48 No. 6, pp. 228-234, available at: <http://dx.doi.org/10.1016/j.im.2011.05.004>
- Kim, Y., Liu, Y. and Shan, Z. (2017), "Beyond touchdown: college students' sports participation, social media use, college attachment, and psychological well-being", *Telematics and Informatics*, Vol. 34 No. 7, pp. 895-903, available at: <https://doi.org/10.1016/j.tele.2017.03.006>
- Klink, R.R. and Athaide, G.A. (2010), "Consumer innovativeness and the use of new versus extended brand names for new products", *Journal of Product Innovation Management*, Vol. 27 No. 1, pp. 23-32.
- Koufaris, M. (2002), "Applying the technology acceptance model and flow theory to online consumer behavior", *Information Systems Research*, Vol. 13 No. 2, pp. 205-223.
- Kraut, R., Kiesler, S., Boneva, B., Cummings, J., Helgeson, V. and Crawford, A. (2002), "Internet paradox revisited", *Journal of Social Issues*, Vol. 58 No. 1, pp. 49-74.
- Kumar, V., Aksoy, L., Donkers, B., Venkatesan, R., Wiesel, T. and Tillmanns, S. (2010), "Undervalued or overvalued customers: capturing total customer engagement value", *Journal of Service Research*, Vol. 13 No. 3, pp. 297-310.
- Laroche, M., Habibi, M.R., Richard, M.-O. and Sankaranarayanan, R. (2012), "The effects of social media based brand communities on brand community markers, value creation practices, brand trust and brand loyalty", *Computers in Human Behavior*, Vol. 28 No. 5, pp. 1755-1767.
- Lee, D.H., Im, S. and Taylor, C.R. (2008), "Voluntary self-disclosure of information on the Internet: a multimethod study of the motivations and consequences of disclosing information on blogs", *Psychology & Marketing*, Vol. 25 No. 7, pp. 692-710.
- Li, Y., Wang, X., Lin, X. and Hajli, M. (2018), "Seeking and sharing health information on social media: a net valence model and cross-cultural comparison", *Technological Forecasting and Social Change*, Vol. 126, pp. 28-40, available at: <https://doi.org/10.1016/j.techfore.2016.07.021>
- 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*, Vol. 16 No. 2, pp. 5-14.
- 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*, Vol. 16 No. 2, pp. 69-90, available at: <https://doi.org/10.2753/JEC1086-4415160204>
- Lin, X., Li, Y. and Wang, X. (2017), "Social commerce research: definition, research themes and the trends", *International Journal of Information Management*, Vol. 37 No. 3, pp. 190-201, available at: <http://10.1016/j.ijinfomgt.2016.06.006>
- Lin, X., Zhang, D. and Li, Y. (2016), "Delineating the dimensions of social support on social networking sites and their effects: a comparative model", *Computers in Human Behavior*, Vol. 58, pp. 421-430.
- Liu, L., Cheung, C.M. and Lee, M.K. (2016), "An empirical investigation of information sharing behavior on social commerce sites", *International Journal of Information Management*, Vol. 36 No. 5, pp. 686-699.
- Lusch, R.F. and Vargo, S.L. (2006), "Service-dominant logic: reactions, reflections and refinements", *Marketing Theory*, Vol. 6 No. 3, pp. 281-288.
- McColl-Kennedy, J.R., Vargo, S.L., Dagger, T.S., Sweeney, J.C. and Kasteren, Y.v. (2012), "Health care customer value cocreation practice styles", *Journal of Service Research*, Vol. 15 No. 4, pp. 370-389.
- Marcoulides, G.A., Chin, W.W. and Saunders, C. (2009), "A critical look at partial least squares modeling", *MIS Quarterly*, Vol. 33 No. 1, pp. 171-175, available at: <https://doi.org/10.2307/20650283>
- Marketo (2016), "The definitive guide to social media marketing", San Mateo, CA, available at: <https://uk.marketo.com/definitive-guides/the-definitive-guide-to-social-media-marketing/> (accessed February 25, 2017).
- Merrilees, B. and Merrilees, B. (2016), "Interactive brand experience pathways to customer-brand engagement and value co-creation", *Journal of Product & Brand Management*, Vol. 25 No. 5, pp. 402-408.

- Merz, M.A., He, Y. and Vargo, S.L. (2009), "The evolving brand logic: a service-dominant logic perspective", *Journal of the Academy of Marketing Science*, Vol. 37 No. 3, pp. 328-344, available at: <https://doi.org/10.1007/s11747-009-0143-3>
- Mirkovski, K., Yin, C., Liu, L. and Yang, J. (2017), "Exploring the contingent effect of community equity on users' intention to share information", *Information Systems Frontiers*, pp. 1-16, available at: <https://doi.org/10.1007/s10796-017-9777-8>
- Okazaki, S., Díaz-Martín, A.M., Rozano, M. and Menéndez-Benito, H.D. (2015), "Using Twitter to engage with customers: a data mining approach", *Internet Research*, Vol. 25 No. 3, pp. 416-434.
- Osatuyi, B. (2013), "Information sharing on social media sites", *Computers in Human Behavior*, Vol. 29 No. 6, pp. 2622-2631.
- Palka, W., Pousttchi, K. and Wiedemann, D.G. (2009), "Mobile word-of-mouth—a grounded theory of mobile viral marketing", *Journal of Information Technology*, Vol. 24 No. 2, pp. 172-185.
- Payne, A., Storbacka, K., Frow, P. and Knox, S. (2009), "Co-creating brands: diagnosing and designing the relationship experience", *Journal of Business Research*, Vol. 62 No. 3, pp. 379-389, available at: <http://dx.doi.org/10.1016/j.jbusres.2008.05.013>
- Pfeil, U. (2009), "Online support communities", in Zaphiris, P. and Ang, C.S. (Eds), *Social Computing and Virtual Communities*, Chapman & Hall/CRC, New York, NY, pp. 122-150.
- Phang, C.W., Kankanhalli, A. and Sabherwal, R. (2009), "Usability and sociability in online communities: a comparative study of knowledge seeking and contribution", *Journal of the Association for Information Systems*, Vol. 10 No. 10, pp. 721-747.
- Poetz, M.K. and Schreier, M. (2012), "The value of crowdsourcing: can users really compete with professionals in generating new product ideas?", *Journal of Product Innovation Management*, Vol. 29 No. 2, pp. 245-256.
- Prahalad, C.K. and Ramaswamy, V. (2000), "Co-opting customer competence", *Harvard Business Review*, Vol. 78 No. 1, pp. 79-90.
- Prahalad, C.K. and Ramaswamy, V. (2004), "Co-creation experiences: the next practice in value creation", *Journal of Interactive Marketing*, Vol. 18 No. 3, pp. 5-14, available at: <http://dx.doi.org/10.1002/dir.20015>
- Ramaswamy, V. and Ozcan, K. (2016), "Brand value co-creation in a digitalized world: an integrative framework and research implications", *International Journal of Research in Marketing*, Vol. 33 No. 1, pp. 93-106.
- Ridings, C.M. and Gefen, D. (2004), "Virtual community attraction: why people hang out online", *Journal of Computer-Mediated Communication*, Vol. 10 No. 1, available at: <https://doi.org/10.1111/j.1083-6101.2004.tb00229.x>
- Sen, S., Raghu, T.S. and Vinze, A. (2010), "Demand information sharing in heterogeneous IT services environments", *Journal of Management Information Systems*, Vol. 26 No. 4, pp. 287-316, available at: <https://doi.org/10.2753/MIS0742-1222260410>
- Shaw, G., Bailey, A. and Williams, A. (2011), "Aspects of service-dominant logic and its implications for tourism management: examples from the hotel industry", *Tourism Management*, Vol. 32 No. 2, pp. 207-214.
- Sotiriadis, M.D. and Van Zyl, C. (2013), "Electronic word-of-mouth and online reviews in tourism services: the use of twitter by tourists", *Electronic Commerce Research*, Vol. 13 No. 1, pp. 103-124.
- Stephen, A. and Toubia, O. (2010), "Deriving value from social commerce networks", *Journal of Marketing Research*, Vol. 47 No. 2, pp. 215-228, available at: <https://doi.org/10.1509/jmkr.47.2.215>
- Stieglitz, S. and Dang-Xuan, L. (2013), "Emotions and information diffusion in social media – sentiment of microblogs and sharing behavior", *Journal of Management Information Systems*, Vol. 29 No. 4, pp. 217-248.
- Szmigin, I., Bengry-Howell, A., Morey, Y., Griffin, C. and Riley, S. (2017), "Socio-spatial authenticity at co-created music festivals", *Annals of Tourism Research*, Vol. 63, pp. 1-11, available at: <https://doi.org/10.1016/j.annals.2016.12.007>

- Vallaster, C. and von Wallpach, S. (2013), "An online discursive inquiry into the social dynamics of multi-stakeholder brand meaning co-creation", *Journal of Business Research*, Vol. 66 No. 9, pp. 1505-1515, available at: <http://dx.doi.org/10.1016/j.jbusres.2012.09.012>
- Van Doorn, J., Lemon, K.N., Mittal, V., Nass, S., Pick, D., Pirner, P. and Verhoef, P.C. (2010), "Customer engagement behavior: theoretical foundations and research directions", *Journal of Service Research*, Vol. 13 No. 3, pp. 253-266.
- Vargo, S.L. and Lusch, R.F. (2004), "Evolving to a new dominant logic for marketing", *Journal of Marketing*, Vol. 68 No. 1, pp. 1-17, available at: <https://doi.org/10.1509/jmkg.68.1.1.24036>
- Vargo, S.L. and Lusch, R.F. (2008), "Service-dominant logic: continuing the evolution", *Journal of the Academy of Marketing Science*, Vol. 36 No. 1, pp. 1-10, doi: 10.1007/s11747-007-0069-6.
- Verleye, K., Gemmel, P. and Rangarajan, D. (2014), "Managing engagement behaviors in a network of customers and stakeholders: evidence from the nursing home sector", *Journal of Service Research*, Vol. 17 No. 1, pp. 68-84, available at: <https://doi.org/10.1177/1094670513494015>
- Vivek, S.D., Beatty, S.E. and Morgan, R.M. (2012), "Customer engagement: exploring customer relationships beyond purchase", *Journal of Marketing Theory and Practice*, Vol. 20 No. 2, pp. 122-146.
- Wang, X., Lin, X. and Spencer, M.K. (2019), "Exploring the effects of extrinsic motivation on consumer behaviors in social commerce: revealing consumers' perceptions of social commerce benefits", *International Journal of Information Management*, Vol. 45, pp. 163-175, available at: <https://doi.org/10.1016/j.ijinfomgt.2018.11.010>
- Wang, Y., Hsiao, S.-H., Yang, Z. and Hajli, N. (2016), "The impact of sellers' social influence on the co-creation of innovation with customers and brand awareness in online communities", *Industrial Marketing Management*, Vol. 54, pp. 56-70, available at: <http://dx.doi.org/10.1016/j.indmarman.2015.12.008>
- Wang, Y.S. (2008), "Assessing e-commerce systems success: a respecification and validation of the DeLone and McLean model of IS success", *Information Systems Journal*, Vol. 18 No. 5, pp. 529-557.
- Wasko, M.M. and Faraj, S. (2005), "Why should I share? Examining social capital and knowledge contribution in electronic networks of practice", *MIS Quarterly*, Vol. 29 No. 1, pp. 35-57.
- We Are Social (2019), "Digital in 2019: global internet use accelerates", available at: <https://wearesocial.com/uk/blog/2019/01/digital-in-2019-global-internet-use-accelerates> (accessed April 23, 2019).
- Wellman, B. and Wortley, S. (1990), "Different strokes from different folks: community ties and social support", *American Journal of Sociology*, Vol. 96 No. 3, pp. 558-588.
- Wellman, B., Salaff, J., Dimitrova, D., Garton, L., Gulia, M. and Haythornthwaite, C. (1996), "Computer networks as social networks: collaborative work, telework, and virtual community", *Annual Review of Sociology*, Vol. 22 No. 1, pp. 213-238.
- Williams, S.A., Terras, M.M. and Warwick, C. (2013), "What do people study when they study Twitter? Classifying Twitter related academic papers", *Journal of Documentation*, Vol. 69 No. 3, pp. 384-410.
- Xie, C., Bagozzi, R.P. and Troye, S.V. (2008), "Trying to prosume: toward a theory of consumers as co-creators of value", *Journal of the Academy of Marketing Science*, Vol. 36 No. 1, pp. 109-122.
- Yan, J., Ye, K., Wang, H. and Hua, Z. (2010), "Ontology of collaborative manufacturing: alignment of service-oriented framework with service-dominant logic", *Expert Systems with Applications*, Vol. 37 No. 3, pp. 2222-2231.
- Yang, C.C., Tang, X., Dai, Q., Yang, H. and Jiang, L. (2013), "Identifying implicit and explicit relationships through user activities in social media", *International Journal of Electronic Commerce*, Vol. 18 No. 2, pp. 73-96.
- Ye, Y., Xu, P. and Zhang, M. (2017), "Social media, public discourse and civic engagement in modern China", *Telematics and Informatics*, Vol. 34 No. 3, pp. 705-714.
- Zeithaml, V.A. (1988), "Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence", *Journal of Marketing*, Vol. 52 No. 3, pp. 2-22, available at: <http://10.1177/002224298805200302>

Zhang, H., Lu, Y., Gupta, S. and Zhao, L. (2014), "What motivates customers to participate in social commerce? The impact of technological environments and virtual customer experiences", *Information & Management*, Vol. 51 No. 8, pp. 1017-1030, available at: <http://10.1016/j.im.2014.07.005>

Zhang, K.Z.K. and Benyoucef, M. (2016), "Consumer behavior in social commerce: a literature review", *Decision Support Systems*, Vol. 86, Supplement C, pp. 95-108, available at: <https://doi.org/10.1016/j.dss.2016.04.001>

Zheng, C., Yu, X. and Jin, Q. (2017), "How user relationships affect user perceived value propositions of enterprises on social commerce platforms", *Information Systems Frontiers*, Vol. 19 No. 6, pp. 1261-1271, available at: <http://10.1007/s10796-017-9766-y>

Zheng, X., Cheung, C.M., Lee, M.K. and Liang, L. (2015), "Building brand loyalty through user engagement in online brand communities in social networking sites", *Information Technology & People*, Vol. 28 No. 1, pp. 90-106.

Zhou, Z., Zhang, Q., Su, C. and Zhou, N. (2012), "How do brand communities generate brand relationships? Intermediate mechanisms", *Journal of Business Research*, Vol. 65 No. 7, pp. 890-895.

Code	Measurement item	Factor loading
BG3	I would be interested in products offered by my favorite social commerce website or application	0.695
BG4	I would be proud to have others know that I use my favorite social commerce website or application.	0.691
BG5	I like to visit my favorite social commerce website or application	0.728
BG6	Compared to other people, I would closely follow news about my favorite social commerce website or application	0.743
CB1	If my friends ask for advices about a problem related to my favorite social commerce website or application, I intent to share it with them	0.700
CB2	If my friends offer information about their experience in my favorite social commerce website or application, I would act with them	0.685
CB4	If a professional person offers advice based on his/her experience in my favorite social commerce website or application, I would act with him/her	0.760
RH1	I like participating in my favorite social commerce website or application because it is entertaining	0.775
RH2	Having fun is my main reason for participating in my favorite social commerce website or application	0.705
RH3	I participate in my favorite social commerce website or application because I think it is fun	0.795
RH4	I find participating in my favorite social commerce website or application to be very entertaining	0.797
SCI3	I am willing to share my own shopping experience of a brand with my friends on my favorite social commerce website or application through ratings and reviews	0.790
SCI4	I would like to use a member's online recommendations on my favorite social commerce website or application to buy a product	0.835
SI1	In my favorite social commerce website or application, some people would offer suggestions when I needed help	0.840
SI2	When I encountered a problem, some people in my favorite social commerce website or application would give me information to help me overcome the problem	0.658
SI3	When faced with difficulties, some people in my favorite social commerce website or application would help me discover the cause and provide me with suggestions	0.856

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**About the authors**

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