



# The effects of trust on consumers' continuous purchase intentions in C2C social commerce: A trust transfer perspective



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## ABSTRACT

This study develops a trust mechanism based on trust transfer theory in the context of customer-to-customer (C2C) social commerce. Based on combined data from 206 sellers and consumers, this study finds that consumers have continuous purchase intentions when they trust sellers and brands at the same time and that consumers generate brand trust due to trust in sellers. In addition, with informational and emotional support, consumers can generate trust in individual sellers. Finally, promotion, which is a common strategy used by C2C sellers, will damage the trust transfer from sellers to the brand.

## 1. Introduction

C2C social commerce refers to customers selling products to other customers through social media (Chen et al., 2016). The widespread application and development of social networking sites, such as WeChat, promoted the emergence of this type of social commerce (Liang and Turban, 2011). At present, C2C social commerce has achieved rapid development, and its business scale has been expanding. China is a country with a very large scale of C2C social commerce. By 2017, China's WeChat C2C social commerce industry practitioners exceeded 20 million, and the industry's overall market size is approximately 76 billion USD (ZhiYan Consulting, 2018). Chinese consumers spend approximately 78 min per day on social commerce (Liu et al., 2016). Engaging in C2C social commerce anywhere, anytime, via social networks is becoming more common.

Previous research on C2C social commerce mainly focuses on online impulse buying (Chen et al., 2016), C2C service quality (Leeraphong et al., 2017) and other aspects. However, many unknown aspects remain regarding the sales mechanism of C2C social commerce. For example, how can a consumer believe an individual who sells a product with an unknown brand? Obviously, trust is critical in this process. The purpose of the current paper is to analyze the mechanisms of trust in the context of C2C social commerce.

Trust is a key factor affecting C2C social commerce because transactions happen between consumers and consumers, and the consumer needs to believe the product with an unknown brand sold by individual sellers is reliable (Gefen and Straub, 2004). If the consumer does not

trust the seller, he or she will perceive social complexity, vulnerability, and risk in C2C social commerce (Lu et al., 2016). As a result, his or her willingness to buy will be reduced. On the other side, unlike B2B or B2C social commerce, consumers need to judge sellers and brands at the same time to make purchasing decisions in C2C social commerce, so consumers need to build trust at the level of individual sellers and brands simultaneously. Therefore, the mechanism of consumers' trust in individual C2C social commerce is complicated. However, previous research did not address this issue (Bao and Volkovynska, 2016; Chen et al., 2016), so the trust mechanism in C2C social commerce remains unknown.

The remainder of this paper is organized as follows. In the next section, we review the theoretical background for the study and propose the research model and assumptions. Research methodology and data analysis results are reported in Sections 3 and 4, respectively. In the last section, we discuss the key findings, limitations of this study, and the implications for both research and practice.

## 2. Literature review and hypothesis development

C2C social commerce is a kind of commerce in which a customer sells products to other customers by using social media (Chen et al., 2016). In recent years, the development of C2C social commerce has attracted the attention of the academic community. The current research focuses on the following aspects. The first aspect is the concept of C2C social commerce and its development, such as the studies of Dan and Dan (2014) and Sukrat et al. (2017). The second research aspect is

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focused on the factors affecting C2C business activities. Bao and Volkovynska (2016) found social support and social exchange (social aspects), convenience, and security (economic and technical aspects) can greatly promote business activities in the context of C2C. Chen et al. (2016) explored impulse purchases in C2C social commerce and found the quality of advertising messages and the number of “likes” are the most important factors affecting impulse buying.

Trust has also received significant attention in previous C2C social commerce research. For example, Leonard (2012) found the buyer's trust and risk perceptions of the seller will influence the buyer's attitude toward C2C electronic purchases. Zhou et al. (2012) discovered three main sources of C2C e-commerce trust, namely, information reliability, the credit standing of sellers and the safety of the trade. However, although previous studies have discussed the issue of trust in C2C social commerce, research on the trust mechanism of C2C social commerce remains insufficient.

2.1. Research model

Trust is an important factor affecting C2C transactions. C2C social commerce is unique in that consumers need to consider not only their trust in the individual seller but also their trust in the brand at the same time. According to trust transfer theory (Lim et al., 2006), we hypothesize that trust in the individual seller would exert direct effects on brand trust. At the same time, since trust affects consumers' willingness to buy (e.g., Brynjolfsson and Smith, 2000; Hong and Cho, 2011), we posit that trust in the individual seller and brand trust affect purchase intention directly. In addition, according to social support theory, the factors affecting trust in the individual seller include emotional and informational support (Liang, and Turban, 2011), so we hypothesize that emotional and informational support will directly affect trust in the individual seller. Furthermore, promotion in the C2C sales process is a very common phenomenon. Previous studies have shown promotions have a significant impact on consumer purchases (Hammond and Goodhardt, 1994), but the impact of promotions on trust may be negative. Increasing promotions may damage the consumer's perception of trust, so promotions may regulate the formation of trust. Based on related theories, we constructed a conceptual framework as shown in Fig. 1.

2.2. Trust transfer theory

Trust transfer theory states if one person or entity is associated with another person or entity, people's trust in the first person or entity will be transferred to trust in the other person or entity (Lim et al., 2006). For example, suppose we trust someone. When we learn another person is his or her friend, we will trust this other person according to the trust

transfer theory. Trust transfer theory has been widely used in the research of e-commerce trust establishment (Lim et al., 2006; Pavlou and Gefen, 2004; Sia et al., 2009). In general, the trust transfer process involves three different, but related, people or entities: principals, trustees and trusted third parties (Stewart, 2003). If the principal strongly endorses the trustworthiness of the third party (Burt and Knez, 1995), and a close relationship exists between the trustee and the third party, then trust can be transferred to the trustee.

Trust transfer can be achieved through two processes: cognitive and communication (Stewart, 2003). The cognitive process of trust transfer is based on an understanding of the relationship between the trustee and the trusted third party, which can transfer trust from an entity to an unknown target (Robert et al., 2009). First, when the trustee target and a trusted third party interact, the trust may be transferred (Stewart, 2003). For example, a trusted organization's website links to another organization's website; because people can perceive the possible business relationships and similarities between the two organizations, people tend to trust the organization to which the link points (Stewart, 2003). Second, trust transfer can occur when the trustee target and the trusted third party are contextually related. For example, Bai et al. (2015) found third-party information brokers can transfer consumer trust from third parties to sellers by providing certificates and payment guarantees.

The communication process of trust transfer shows that, when the principal is influenced by others through communication and interaction, he or she will generate trust in the target (Kuan and Bock, 2007). For instance, Na et al. (2014) have confirmed that, when consumers are influenced by recommendations, comments, etc. in the brand community, their trust can be transferred to become brand trust. In the context of C2C social commerce, consumers, sellers and brands have a relationship. Consumers and sellers are users of the same social platform (such as WeChat), and they may be friends, relatives, etc. in real life. Therefore, the consumer builds trust in the seller because of their interpersonal relationships. The consumer's trust in the brand is later established, so we can use the trust transfer theory to construct the consumer trust mechanism.

2.3. Trust in sellers

2.3.1. Influencing factors of trust in sellers

In C2C social commerce, trust in sellers is defined as an individual's willingness to rely on the words, actions, and decisions of sellers in the social commerce community (Chen and Shen, 2015). The establishment of trust in sellers can be explained by social support theory. Cobb (1976) defined social support as “information leading the subject to believe he is cared for and loved, esteemed, and a member of a network of mutual obligation”. With strong social support, members of social

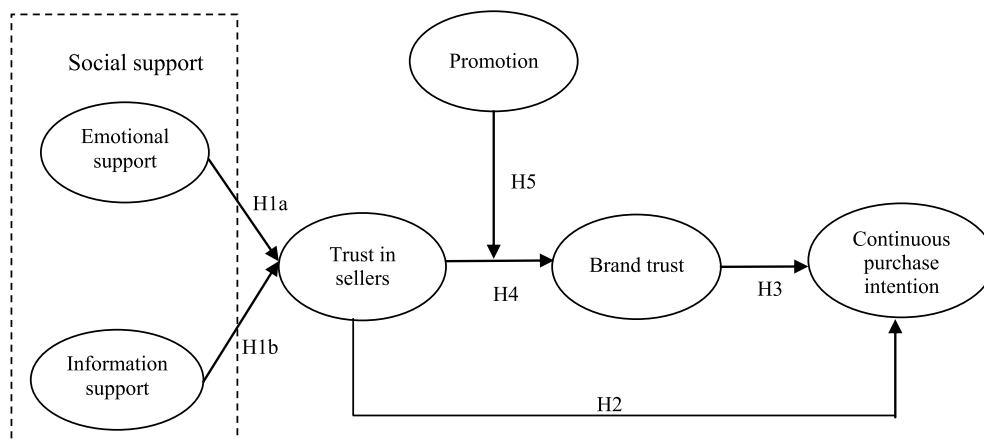


Fig. 1. Research model.

networks will feel the care and help of others (Liang and Turban, 2011). Social support is often considered multidimensional, including informational, emotional, and tangible support (Schaefer et al., 1981). In recent years, as social networking sites have rapidly developed, people are increasingly communicating in online environments. Offline social support is gradually shifting to online, and related research shows social support theory is applicable online (Hajli, 2014). Therefore, we believe that, in C2C social commerce, social support theory can still be used to explain the formation of trust and to analyze the impact of emotional and informational support on individual trust.

First, emotional support has a direct impact on trust in sellers. Emotional support usually refers to the providing of compassion, care, love, understanding or encouragement to others, thereby allowing others to feel emotional care and support (Ommen et al., 2008). Taylor et al. (2004) found the emotional support provided by others in a group enables supporters to reduce pressure and indirectly to help them solve problems (Pfeil and Zaphiris, 2009). This kind of action helping others solve problems can win the trust of others. In addition, according to Bolger et al. (2000), when people encounter stress and problems, actively asking for help from social network friends can bother them, because it consumes the time and attention of those from whom help is sought. However, sellers, as members of the social network, can actively provide emotional support, thereby reducing this concern and helping people build trust in the seller while solving problems. The above studies indicate that, in C2C social commerce, sellers can give consumers understanding, care and help, thereby helping to build trust with consumers. Therefore, emotional support will directly affect consumers' trust in sellers.

Second, informational support has a direct impact on trust in sellers. Informational support refers to the providing of advice, guidance, or information to others to help the others solve problems or make decisions (Liang and Turban, 2011). Coulson (2005) found providing information to community members helps members solve problems and builds trust among community members. Therefore, if the user who is the buyer sees the information as relevant and helpful, then they will think the provider of the information (the seller) is kind, honest and capable, building their friendship and trust with the seller (Porter and Donthu, 2008).

In the consumer's shopping decision process, sellers provide high-quality information to help consumers avoid information asymmetry and uncertainty, which also helps to enhance trust. Amblee and Bui (2011) conducted a follow-up study of the reading community in Amazon Shorts, and found information sharing and commenting in social networks can serve not only as a signal of product quality and reputation but also as the merchant's reputation signal helping them to earn consumer trust. In addition, trust in sellers is the relationship generated through the process of information interaction, which is a process-based trust showing that the seller's provision to the consumer of information will bring trust (Zucker, 1986). The results of previous research indicate that, in C2C social commerce, individual sellers can give consumers informational support, thereby expressing the sellers' concern for consumers, helping them, and ultimately winning their trust.

Based on the above discussion, we propose the following hypothesis:

**Hypothesis 1a.** Emotional support has a direct and positive impact on trust in individual sellers.

**Hypothesis 1b.** Informational support has a direct and positive impact on trust in individual sellers.

### 2.3.2. Impact of trust in sellers on continuous purchase intentions

Trust is critical in Internet-based consumer behavior because in virtual networks understanding cannot be increased through face-to-face communication. Trust can enhance consumers' willingness to shop on the Internet and promote more shopping behavior (Brynjolfsson and

Smith, 2000; Hong and Cho, 2011; Jarvenpaa et al., 1999). The same is true of trust in sellers. Previous studies have shown seller trust has an important impact on consumers' online buying behaviors. Grayson et al. (2008) proposed a "narrow scope trust", referring to consumers' trust in the company and its salespeople, and empirically proved this trust has a significant impact on purchases. In addition, Jarvenpaa et al. (1999) found consumers' trust in online merchants directly affects consumers' willingness to buy. Therefore, consumers' trust in sellers has a significant impact on consumers' purchase intentions.

In C2C social commerce, trust in sellers has a significant impact on the willingness to continue buying (Leonard, 2012). This relationship obtains because C2C social commerce is lacks rules and regulations more than traditional e-commerce consumption, and reliable protection is difficult to provide (Gefen and Straub, 2004). This situation requires the consumer to evaluate the seller before deciding whether to purchase, and an important factor in the evaluation process is the trust in the seller. In addition, participating in online transactions requires the buyer to handle the social complexity associated with the opportunistic behaviors of sellers. Trust can convince buyers sellers will not behave badly, thereby reducing the social complexity, vulnerability, and risk buyers perceive in C2C social commerce (Lu et al., 2016). Buyers are willing to carry out "trust-related behaviors" with e-vendors, including purchases (McKnight et al., 2002), only when buyers have trust in sellers. Therefore, we arrive at the following postulate:

**Hypothesis 2.** Trust in individual sellers has a positive impact on continuous purchase intentions.

### 2.4. Brand trust

Brand trust was first proposed by Howard and Sheth (1969), who believe brand trust can have a positive impact on consumer willingness. Delgado-Ballester (2004) believed brand trust is the trustworthiness and responsibility of the brand perceived by consumers and is the sense of security consumers obtain from brands and the belief brands can meet their expectations. Chaudhuri and Holbrook (2001) defined brand trust as "the willingness of the average consumer to rely on the ability of the brand to perform its stated function".

Brand trust is seen as a central construct of strong and long-term brand relationships (Delgado-Ballester and Munuera-Alemán, 2001), which have a positive effect on increasing the willingness to purchase and contribute to consumption (Laroche et al., 1996). Existing literature on brand trust demonstrates consumer trust in the brand enhances the willingness to patronize, co-create and enhance loyalty to the brand (Chaudhuri and Holbrook, 2001; See-To and Ho, 2014). Blackston and DCI/Research International (2000) described brand trust as a special connection within interpersonal relationships, believed this connection would enhance each party's emotional identity, and argued this sense of identity would positively influence consumers' decision-making behaviors. In C2C social commerce, consumers need to consider not only whether the seller can be trusted but also whether the brand is trustworthy, because brand trust will directly affect consumers' attitudes toward the brand and affect consumer's continuous purchase intentions. Therefore, we make the following presumption:

**Hypothesis 3.** Brand trust has a significantly positive impact on the continuous purchase intention.

### 2.5. The relationship between trust in sellers and brand trust

The direct impact of trust in sellers on brand trust can be explained by the theory of trust transfer. According to the trust transfer theory, in C2C social commerce, when consumers trust the seller, this trust can be transferred and promoted to the brand recommended by the seller, thus generating brand trust. Currently, we believe trust in the seller has a direct impact on brand trust. Some previous studies have obtained

relevant trust transfer research conclusions. For instance, consumer brand community trust can be transferred to brand trust, meaning brand community trust has a direct and significant impact on brand trust (Na et al., 2014). In social media brand communities, the trust of consumers who are associated with the brand can be transferred to trust in the brand, thus creating a direct impact of individual consumer trust on brand trust (Liu et al., 2018). In the context of C2C social commerce, the seller and the brand have a relationship. Sellers may be brand product agents, users, brand admirers, or even brand creators. When consumers realize the connection between the sellers they trust and the brand, their trust in the sellers can be transferred to brand trust. Therefore, we propose the following supposition:

**Hypothesis 4.** Trust in individual sellers has a significantly positive impact on brand trust.

### 2.6. The moderating effect of promotion

Promotions, both monetary and nonmonetary, can provide consumers with utilitarian and hedonic benefits affecting all aspects of consumer decision-making, such as brand selection (Hammond and Goodhardt, 1994). Monetary promotions allow consumers to obtain price concessions when shopping; nonmonetary promotion offer consumers free gifts when they shop, which provides more hedonic benefits but weaker utilitarian benefits (Chaudhuri and Holbrook, 2001). Studies have shown that, when consumers buy high-end brands, monetary promotions can create greater benefits (compared to ordinary brands), because high-end brands often represent high reliability and low risk, and consumers will not suffer a loss of product quality due to price promotions (Blattberg and Wisniewski, 1989). However, for the average brand, price promotions are likely to have a negative impact on brand trust (Luk and Yip, 2008).

In addition, some scholars have studied the impact of price promotions on different time horizons. In a short period of time, scholars believe temporary promotions may promote the sale of goods (Walters and Rinne, 1986), but for the long-term effects of promotions, scholars have the opposite opinion. Gupta (1988) and Yadav and Seiders (1998) showed frequent long-term price promotions increase consumer price sensitivity, degrade brand equity, and undermine the long-term health of the brand. Furthermore, price promotions have a negative impact on brand evaluation and undermine brand loyalty (Cruikshank and Schultz, 1963).

In C2C social commerce, the brands sold by sellers are generally ordinary brands, even self-owned brands, and product protection is relatively weak. In most cases, sales may rely on the interpersonal relationship between buyers and sellers to facilitate transactions. In this situation, sellers conduct a promotion may cause consumers to have questions about the quality of the product and the reliability of the brand. Promotions have a negative impact on brand trust, as has been confirmed in previous studies (Gupta, 1988; Luk and Yip, 2008).

On the other hand, trust represents beliefs about competence, goodwill and integrity (Schlosser et al., 2006), which is an emotional response. This perception of kindness and integrity cannot be purchased by money and interests. Giving money and other benefits may damage people's evaluation of the loyalty, goodwill, and integrity of sellers, thereby affecting the brand trust recommended by individual sellers. Therefore, we presumed the following:

**Hypothesis 5.** Promotions exert negative moderate effects on the relationship between seller trust and brand trust.

## 3. Research methods

We collect data from consumers and individual sellers through a two-stage questionnaire, form the final analysis data by data pairing, and analyze the data after measuring the reliability and validity.

### 3.1. Procedure and data collection

This research is aimed at WeChat sellers who mainly use the WeChat platform to conduct business activities. WeChat reached an average of 900 million monthly users in 2017, and the monthly active account number reached 3.5 million. It is the largest social platform in China as of 2017. The number of WeChat sellers reached 20.18 million in 2017. To be friends on the WeChat platform, both parties must consent. Therefore, the sale of products on WeChat requires one-to-one communication, and advertisements cannot be sent to strangers as they can on open social media. Therefore, if sales are successfully completed in WeChat, interpersonal trust must play an important role.

The C2C social commerce product of this study is a foreign baby diaper brand, which has developed more than 150 individual consumers in the Chinese market as general agents. They sell products to other individual consumers through WeChat and develop these individual consumers into the next-level sellers of products, thereby further selling products to more consumers. All sellers are also users of the brand. The brand company does not conduct brand promotion, so consumers are not familiar with this brand. Because the company relies only on individual consumers to sell products on social media, trust is derived from sellers rather than corporate branding. When purchasing, all consumers must log in to the brand's APP so agents can obtain all of the buyer's information, which creates convenience for the survey.

The survey is divided into two phases. In the first stage, 227 consumers were randomly selected for the questionnaire survey. In the second stage, the general agent issued questionnaires to WeChat sellers based on the IDs provided by consumers in the first stage. The two-stage questionnaire data was spliced into the final analysis data, and the final number of valid questionnaires is 206, including data surveyed from 206 consumers and 206 individual sellers. The survey of consumers mainly involves trust in sellers, brand trust, and continuous purchase intentions. The corresponding WeChat sellers' survey mainly focuses on the strategy of establishing trust and the promotion methods.

Among the consumers we surveyed, the number of females is 137 (66.5%) and the number of males is 69 (33.50%). Consumers are mostly between the ages of 18 and 45. The number of consumers aged 18–25 is 49 (23.79%), the number of consumers aged 26–35 is 94 (45.63%), and the number of consumers aged 36–45 is 45 (21.84%). The education level of consumers is relatively high. The number of consumers with bachelor's degrees is 92 (40.7%), and the number of graduate students and above is 37 (17.79%).

Among the effective samples of WeChat business sellers, the number of sellers aged 18–25 is 39 (18.93%), the number of sellers who are 26–30 years old is 100 (48.54%, close to half), and the number of sellers aged 31 to 35-year-old sellers is 52 (25.24%). The degrees obtained by sellers are mainly undergraduate and graduate, including 71 undergraduate (34.47%) and 96 graduate (46.60%). In addition, 109 sellers engaged in this work for fewer than 6 months (52.91%) and 97 sellers had been active for more than 6 months (47.09%). One hundred forty-nine sellers (72.33%) are part-time, and 57 (26.67%) are full-time.

### 3.2. Measures

We used scales from previous studies to measure related concepts (see Table 3). Emotional and informational support was derived from the scale of Liang and Turban (2011). The items of emotional support include care, interaction, comfort and encouragement, and listening. Informational support includes providing adequate and professional information, giving information, giving personalized advice, responding to messages quickly, etc. Trust in the seller was derived from Chen and Shen (2015) and includes trusting sellers, communication, close relationship, sincerely getting along and interaction. Brand trust was from Na et al. (2014). It includes trusting the brand, the quality of the goods and the trustworthiness of the brand. Three dimensions of continuous purchase intention were measured by scales from Gefen and

**Table 1**  
Reliability and convergent validity analysis(N = 206).

Construct	Items	Factor loading	AVE	Composite Reliability	Cronbach's Alpha
Emotional support ( ES )	For the customer's things, I show interest and care about them.	0.88	0.76	0.93	0.89
	In the face of customers, I interact with them emotionally.	0.91			
	I am willing to comfort and encourage customers when they encounter difficulties.	0.90			
Information support ( IS0 )	I am willing to listen to customers expressing feelings.	0.79	0.74	0.92	0.88
	I give customers full and professional information.	0.86			
	I give customers information when they are facing problems.	0.83			
	I give them personalized advice based on the needs of customers.	0.90			
Promotion ( P )	I give customers quick information response and service.	0.85	0.56	0.83	0.73
	I give customers price concessions and discounts.	0.78			
	I give customers a shopping voucher.	0.81			
	I give customers promotional items.	0.68			
Trust in sellers ( TS )	I give customers a gift when they are buying something from me.	0.71	0.70	0.90	0.86
	I trust the WeChat business sellers very much.	0.86			
	I am willing to talk to and communicate with the seller when I encounter problems.	0.86			
	My relationship with the seller is very close.	0.80			
Brand trust ( BT )	I am very sincere and friendly with seller.	0.82	0.77	0.94	0.92
	I trust the brand that sellers sells.	0.88			
	I recognize the quality and reliability of the products sold by sellers.	0.92			
	I think sellers provides reliable quality products.	0.90			
Continuous purchase intention ( CPI )	I think the brand sold by sellers is very good and trustworthy.	0.92	0.78	0.91	0.86
	I am very likely to continuous buy the product from seller.	0.87			
	I would consider buying the product from the seller in the future.	0.89			
	I intend to buy the product when I need.	0.89			

**Table 2**  
Discriminant validity analysis (N = 206).

	Information support	Promotion	Seller trust	Brand trust	Emotional trust	Continuous purchase intention
Information support	<b>0.86</b>					
Promotion	0.53	<b>0.75</b>				
Trust in sellers	0.43	0.53	<b>0.84</b>			
Brand trust	0.43	0.52	0.67	<b>0.88</b>		
Emotional trust	0.56	0.55	0.54	0.56	<b>0.87</b>	
Continuous purchase intention	0.44	0.49	0.67	0.69	0.49	<b>0.88</b>

Notes: Diagonal elements (in bold) are the square root of AVEs of constructs.

Straub (2004), including purchase intention, purchase intention in the future, and continuous purchase intention. Promotion was adapted from Grewal et al. (1998). It includes price discounts and discounts, shopping vouchers, promotional items, purchase gifts, etc. All these measures followed a seven-point Likert response format (1 = “not agree at all” to 7 = “absolutely agree”) (Table 1 shows the measurement items).

Since the survey was conducted in China, we used the back-translation method proposed by Bhalla and Lin (1987). In addition, to ensure the effectiveness of the content, we invited several people working as WeChat sellers to check the wording, legibility and applicability of the questionnaire and adopted their suggestions.

#### 4. Data analysis and results

We adopted the partial least squares (PLS) method to evaluate the measurement and structural models and used SmartPLS software (version 3.0) (Ringle et al., 2015). The reason for these selections is that, compared to the covariance-based approach that could be analyzed by AMOS or LISREL, the PLS method is very beneficial for estimating large complex models, it works well in the case of small samples, and strict assumptions need not be made about variable distribution at the same time (Ringle et al., 2012; Hair et al., 2011). Based on a two-step data analysis program, we first measure the reliability and validity of the measurement model, then test the structural model to estimate the hypothesis (Henseler et al., 2009).

##### 4.1. Reliability and validity

We evaluate reliability and validity based on three criteria: (1) composite reliability (CR) and Cronbach's Alpha ( $\alpha$ ) should be greater than 0.7 in reliability testing; (2) all factor loadings should exceed 0.4, and the average variance extraction (AVE) of the convergence validity test should exceed 0.5; (3) the square root of each AVE should be greater than the inter-structure correlation for discriminant validity testing (Bagozzi et al., 1981). Table 1 shows the reliability and convergence validity results. The Cronbach's Alpha for all variables ranged from 0.73 to 0.92, and the composite reliability was between 0.83 and 0.94, indicating satisfactory reliability. In addition, all factor loadings were above 0.6 and the AVE was above 0.5, indicating a favorable convergence validity. Finally, according to Table 2, the square root of the AVEs (the number on the diagonal of the matrix) was greater than the correlation between the constructs in all cases, indicating sufficient discriminant validity.

##### 4.2. Results

Fig. 2 shows the results of estimating the structural model with a complete sample, including path coefficients and the variance explained ( $R^2$ ) by dependent variables. The calculations demonstrate the model explains the consumer's willingness to purchase in 56% of variances. Thirty-two percent and 49% of variances are explained by trust in sellers and brand trust.

According to the social support theory, the model supposes the

**Table 3**  
Data analysis result.

Paths	Path coefficient	t value	Significant level	support
H1a : Emotional support → Seller trust	0.18*	2.51	$P < 0.05$	yes
H1b : Information support → Seller trust	0.45***	5.52	$p < 0.001$	yes
H2 : Trust in sellers → Continuous purchase	0.38***	2.09	$p < 0.001$	yes
H3 : Brand trust → Continuous purchase	0.43***	5.25	$p < 0.001$	yes
H4 : Trust in sellers → Brand trust	0.48***	4.60	$p < 0.001$	yes
H5 : Moderate effect of promotion	-0.08*	2.58	$p < 0.05$	yes

Note. \*\*\* significant at  $p < 0.001$ ; \*\* significant at  $p < 0.01$ ; \*significant at  $p < 0.05$ .

source of trust in sellers is informational support (H1a) and emotional support (H1b). The calculation results show emotional ( $\beta = 0.18$ ,  $t = 2.51$ ) and informational support ( $\beta = 0.45$ ,  $t = 5.52$ ) both have a significantly positive impact on seller trust, so H1a and H1b are supported. Both H2 and H3 proposed that trust in sellers and brand trust have a significantly positive impact on continued purchases in the context of C2C social commerce. Research findings show the path from trust in sellers ( $\beta = 0.38$ ,  $t = 2.09$ ) and brand trust ( $\beta = 0.43$ ,  $t = 5.25$ ) to continuous purchase intentions is significant, and these results support H2 and H3. H4 proposed that consumers' trust in sellers can be transferred to trust in the brand, and the results confirmed this hypothesis. Trust in sellers has a significantly positive impact on brand trust ( $\beta = 0.48$ ,  $t = 4.60$ ). In addition, the analysis results show promotions exert a negative moderating effect on the relationship between trust in sellers and brand trust ( $\beta = -0.08$ ,  $t = 2.59$ ), which supports H5.

Table 3 and Fig. 2 summarize the hypotheses tested in this research and indicate all hypotheses are supported.

## 5. Discussion

### 5.1. Theoretical implications

Although previous research on consumer trust found trust has a significant impact on consumers' willingness to buy (e.g., Lim et al., 2006; Pavlou and Gefen, 2004), in the context of B2C or B2B social commerce, consumers are mainly concerned with brand trust (e.g., Chaudhuri and Holbrook, 2001) or sales platform trust (Chen and Shen, 2015) rather than trust in individual sellers. However, our research finds C2C social commerce is different from B2C or B2B social commerce, and consumer trust needs to be divided into trust in sellers and brand trust. We distinguish between individual and brand trust because products sold under C2C social commerce are often derived from

unknown brands and consumers have difficulty judging the quality of the brand. Consumers need to be sure the seller is trustworthy and the brand is worthwhile; only then are they likely to make purchasing decisions. In this study, we found trust in sellers and brand trust have a significantly positive impact on the willingness to continue buying, confirming the rationality of dividing these two types of trust in C2C social commerce. However, in past C2C social commerce research, the consumer's trust was not divided into two parts for the seller and the brand, so the unique trust mechanism in this scenario was not explored.

Based on trust transfer theory, we propose a relationship between trust in sellers and brand trust. Trust transfer theory has been applied to the social commerce field in the past. For example, trust in social platforms will shift to trust of members (Chen and Shen, 2015), and the trust of brand communities will shift to trust in brands (Na et al., 2014). However, previous research did not explore the transfer process from individual sellers to brand trust in the context of C2C commerce. The basic mechanism of trust transfer in the C2C social commerce environment is that, when consumers are confronted with an unknown brand sold to them by individual sellers, consumers first need to have a sense of trust in the individual sellers. Then, on this basis, they may trust the brand the individual sellers recommend to them, thus generating a purchase intention. In this study, we investigated consumers and their corresponding WeChat business sellers. The results of the combined two-part data show the effects of trust in sellers on brand trust are significant in the context of C2C social commerce, which verifies the path to the transfer of trust from individual sellers to brands exists. The trust transfer from individuals to brands is a unique phenomenon in C2C social commerce, which shows consumer trust comes first from the individual sellers and, on this basis, consumers will trust the brand.

In this study, we also verified the moderating effect of promotions on the relationship between trust in sellers and brand trust, which means when a promotion, such as a price discount, is conducted, trust

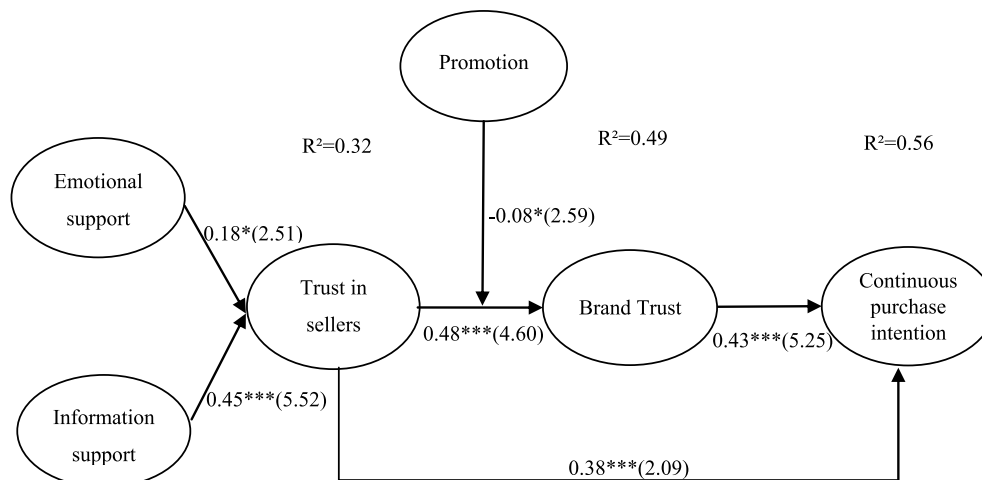


Fig. 2. Structural model analysis result for C2C social commerce. Note. \*\*\* significant at  $p < 0.001$ ; \*\* significant at  $p < 0.01$ ; \*significant at  $p < 0.05$ .

in sellers will be compromised in the trust transfer to brand trust. Previous studies have found (Gupta, 1988; Yadav and Seiders, 1998) promotions can have a negative impact on brand equity because people do not believe the lower priced products can be of good quality. In C2C social commerce, brand awareness is low and consumers' trust in products is limited. Consumers rely mainly on the information about products provided by sellers to make judgments and decisions. In this case, using price promotions to sell will damage the original brand trust, which was not too high originally, thus preventing consumers from moving from trust in the seller to trust in the products. The findings suggest C2C social commerce is a trust transaction representing the trading patterns of competence, goodwill and integrity (Schlosser et al., 2006). This discovery further perfects the trading mechanism of social commerce.

Regarding the trust in individual sellers, this study uses information support theory to construct two antecedents of trust: informational and emotional support (Hajli, 2014). The analysis shows informational and emotional support have a significant impact on trust in sellers, which means that, in C2C social commerce, the formation of trust in sellers requires individual sellers to provide consumers with care, understanding and love so the consumer's emotional support perception can be improved. At the same time, advice, guidance or information must be provided to the consumer, thereby enhancing the consumer's informational support perception.

Overall, this research has developed a trust mechanism of C2C social commerce. This article found consumers need to trust sellers and brands to generate purchase intentions. Furthermore, people can generate brand trust because of trust in sellers, and informational and emotional support can help consumers generate trust in individual sellers. In addition, promotions will damage the trust transfer process from trust in sellers to brand trust.

## 5.2. Practical implications

This study has practical significance mainly reflected in the following points. First, for C2C social commerce sellers, because the brand does not have a strong reputation, how to gain customers' trust has become a key factor. The research in this paper solves the C2C social commerce trust mechanism problem and can serve as a guide in the operation of this business type. Second, the research in this paper finds that, to gain the trust of consumers, C2C social commerce sellers need to make customers trust not only sellers but also the brand. Both of these types of trust have a significantly positive impact on consumers' willingness to buy. Therefore, how to gain consumers' trust in both sellers and brands in the business process becomes the key to success in C2C social commerce. Third, the trust in sellers will directly affect not only the continuous willingness to purchase but also the transfer of trust to brands, which indirectly affects the willingness to continue buying. Therefore, C2C social commerce merchants need to focus on the establishment of the trust relationship between sellers and consumers, and the establishment of interpersonal trust will increase subsequent consumers' trust in the brand. This practice is different from previous B2C and B2B social commerce, which focus on building brand trust. Fourth, in the business process, if sellers want to establish a trust relationship between consumers and sellers, they need to do two things. First, they must provide emotional support. Sellers should try to make consumers feel that sellers give emotional comfort and care for them like a friend would. Second, they must provide informational support. Sellers must try to make consumers feel sellers can continuously provide valuable product information, so consumers can more fully understand the product. When sellers do a good job of providing emotional and informational support, consumers' trust in sellers will be effectively improved. Finally, C2C social commerce sellers should be cautious when using promotional methods in their business operations. Since most of the brands sold are unknown, sellers use complex and frequent promotions to stimulate consumers' purchases. However, this

study finds that, if sellers use promotions, they may prevent trust transfer and negatively impact customers' brand trust. Therefore, C2C social commerce merchants should focus more on providing emotional and informational support to consumers and reduce price promotions. Overall, the trust mechanism proposed in this study can guide the sellers to establish trust relationships with consumers in practice, thereby improving sales performance.

## 6. Limitations and future research

Several limitations exist in this study. First, the choice of research background and the data collection process may limit the generality of the results. Social media are available in many types. In open social media, you can browse information even though you are not friends. However, some social media are closed. You must be friends with other users to be able to see each other's information. This article studies the latter type of social media, which requires the friends relationship before communication can happen. In the future, research must be conducted on different platforms and different consumers to obtain further research results. Second, we conducted research only on a mother-infant C2C social commerce company, and the results obtained do not necessarily represent the entirety of C2C social commerce. In the future, research in many other industries is needed to obtain more reliable research conclusions. Third, this article focuses on the establishment of a trust mechanism, but many other factors possibly influence consumers' willingness to purchase C2C social commerce products. Therefore, although this study explains 56% of the variance in continuous purchase intentions, future research should examine other potential mechanisms and explore more antecedents, control variables, etc., to gain a more complete understanding of C2C social commerce. Finally, our method of obtaining data is a questionnaire. Although we use data from different sources to obtain more reliable results, we still need to try other methods of study. In the future, we will use experiments and other methods to further explore the construction of the trust mechanism.

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## References

- Amblee, N., T., Bui, 2011. Harnessing the influence of social proof in online shopping: the effect of electronic word of mouth on sales of digital microproducts. *Int. J. Electron. Commer.* 16 (2), 91–114.
- Bagozzi, R.P., Fornell, C., Larcker, D.F., 1981. Canonical correlation analysis as a special case of a structural relations model. *Multivariate Behav. Res.* 16 (4), 437.
- Bai, Y., Yao, Z., Dou, Y.F., 2015. Effect of social commerce factors on user purchase behavior: an empirical investigation from renren.com. *Int. J. Inf. Manag.* 35 (5), 538–550.
- Bao, N., Volkovynska, A., 2016. Social Commerce: Factors that Stimulate Sellers to Engage in C2C Commercial Activity on Social Networking Platforms. Master thesis of Lund University.
- Bhalla, G., Lin, L., 1987. Cross-cultural marketing research: a discussion of equivalence issues and measurement strategies. *Psychol. Market.* 4 (4), 275–285.
- Blackston, M., DCI/Research International, 2000. Observations: building brand equity by managing the brand&s relationships. *J. Advert. Res.* 40 (06), 101–105.
- Blattberg, R.C., Wisniewski, K.J., 1989. Price-induced patterns of competition. *Mar. Sci.* 8 (4), 291–309.
- Bolger, N., Zuckerman, A., Kessler, R.C., 2000. Invisible support and adjustment to stress. *J. Personal. Soc. Psychol.* 79 (6), 953–961.
- Brynjolfsson, E., Smith, M.D., 2000. Frictionless commerce? A comparison of Internet and conventional retailers. *Manag. Sci.* 46 (4), 563.
- Burt, R.S., Knez, M., 1995. Kinds of third-party effects on trust. *Ration. Soc.* 7 (3), 255–292.
- Chaudhuri, A., Holbrook, M.B., 2001. The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *J. Mark.* 65 (2), 81–93.
- Chen, J., Shen, X.L., 2015. Consumers' decisions in social commerce context. *Decis. Support Syst.* 79 (C), 55–64.
- Chen, J.V., Su, B., Widjaja, A.E., 2016. Facebook C2C social commerce: a study of online

- impulse buying. *Decis. Support Syst.* 83, 57–69.
- Cobb, S., 1976. Social support as a moderator of life stress. *Psychosom. Med.* 38 (5), 300–314.
- Coulson, N.S., 2005. Receiving social support online: an analysis of a computer-mediated support group for individuals living with irritable bowel syndrome. *Cyberpsychol., Behav. Soc. Netw.* 6 (8), 580–586.
- Cruikshank, J.L., Schultz, A.W., 1963. *Confessions of an Advertising Man*. Dell Publishing.
- Dan, C., Dan, C., 2014. Consumer-to-consumer (c2c) electronic commerce: the recent picture. *Int. J. Netw. Commun.* 4 (2), 29–32.
- Delgado-Ballester, E., 2004. Applicability of a brand trust scale across product categories. *Eur. J. Market.* 38 (5/6), 573–592.
- Delgado-Ballester, E., Munuera-Alemán, J.L., 2001. Brand trust in the context of consumer loyalty. *Eur. J. Market.* 35 (11/12), 1238–1258.
- Gefen, D., Straub, D.W., 2004. Consumer trust in b2c e-commerce and the importance of social presence: experiments in e-products and e-services. *Omega-Int. J. Manag. Sci.* 32 (6), 407–424.
- Grayson, K., Johnson, D., Chen, D.R., 2008. Is firm trust essential in a trusted environment? How trust in the business context influences customers. *J. Mark. Res.* 45 (2), 241–256.
- Grewal, D., Krishnan, R., Baker, J., Borin, N., 1998. The effect of store name, brand name and price discounts on consumers' evaluations and purchase intentions. *J. Retail.* 74 (3), 331–352.
- Gupta, S., 1988. Impact of sales promotions on when, what, and how much to buy. *J. Mark.* 25 (4), 342–355.
- Hair, J.F., Ringle, C.M., Sarstedt, M., 2011. PLS-SEM: indeed a silver bullet. *J. Mark. Theory Pract.* 19 (2), 139–151.
- Hajli, M.N., 2014. A study of the impact of social media on consumers. *Int. J. Mark. Res.* 56 (56), 388–404.
- Hammond, K., Goodhardt, G.J., 1994. The after-effects of price-related consumer promotions. *J. Advert. Res.* 34 (4), 11–21.
- Henseler, J., Ringle, C.M., Sinkovics, R.R., 2009. The use of partial least squares path modeling in international marketing. *Adv. Int. Market.* 2, 277–319.
- Hong, I.B., Cho, H., 2011. The impact of consumer trust on attitudinal loyalty and purchase intentions in B2C e-marketplaces: intermediary trust vs. seller trust. *Int. J. Inf. Manag.* 31 (5), 469–479.
- Howard, J.A., Sheth, J.N., 1969. *The Theory of Buyer Behavior*. John Wiley & Sons, New York.
- Jarvenpaa, S.L., Tractinsky, N., Saarinen, L., 1999. Consumer trust in an Internet store: a cross-cultural validation. *J. Comput.-Mediat. Commun.* 5 (2), 45–71.
- Kuan, H.H., Bock, G.W., 2007. Trust transference in brick and click retailers: an investigation of the before-online-visit phase. *Inf. Manag.* 44 (2), 175–187.
- Laroche, M., Kim, C., Zhou, L., 1996. Brand familiarity and confidence as determinants of purchase intention: an empirical test in a multiple brand context. *J. Bus. Res.* 37 (2), 115–120.
- Leeraphong, A., Mahatanakoon, P., Papasratorn, B., 2017. Evaluating electronic service quality for C2C social commerce in Thailand: a pilot study. In: *Eleventh International Conference on Digital Information Management*, pp. 191–196.
- Leonard, L.N.K., 2012. Attitude influencers in c2c e-commerce: buying and selling. *Data Process. Better Bus. Educ.* 52 (3), 11–17.
- Liang, T.P., Turban, E., 2011. Introduction to the special issue social commerce: a research framework for social commerce. *Int. J. Electron. Commer.* 16 (2), 5–14.
- Lim, K.H., Sia, C.L., Lee, M., Benbasat, I., 2006. Do I trust you online, and if so, will I buy? An empirical study of two trust-building strategies. *J. Manag. Inf. Syst.* 23 (2), 233–266.
- Liu, H., Chu, H., Huang, Q., Chen, X., 2016. Enhancing the flow experience of consumers in China through interpersonal interaction in social commerce. *Comput. Hum. Behav.* 58, 306–314.
- Liu, L., Lee, M.K.O., Liu, R., Chen, J., 2018. Trust transfer in social media brand communities: the role of consumer engagement. *Int. J. Inf. Manag.* 41, 1–13.
- Lu, B., Fan, W., Zhou, M., 2016. Social presence, trust, and social commerce purchase intention: an empirical research. *Comput. Hum. Behav.* 56, 225–237.
- Luk, S.T.K., Yip, L.S., 2008. The moderator effect of monetary sales promotion on the relationship between brand trust and purchase behaviour. *J. Brand Manag.* 15 (6), 452–464.
- McKnight, D.H., Choudhury, V., Kacmar, C., 2002. Developing and validating trust measures for e-commerce: an integrative typology. *Inf. Syst. Res.* 13 (3), 334–359.
- Na, Y.J., Kim, S., Kim, S., 2014. Influence of consumer attitude toward online brand community on revisit intention and brand trust. *J. Retail. Consum. Serv.* 21 (4), 581–589.
- Ommen, O., Janssen, C., Neugebauer, E., Bouillon, B., Rehm, K., Rangger, C., et al., 2008. Trust, social support and patient type—associations between patients perceived trust, supportive communication and patients preferences in regard to paternalism, clarification and participation of severely injured patients. *Patient Educ. Counsel.* 73 (2), 196–204.
- Pavlou, P.A., Gefen, D., 2004. Building effective online marketplaces with institution-based trust. *Inf. Syst. Res.* 15 (1), 37–59.
- Pfeil, U., Zaphiris, P., 2009. Investigating social network patterns within an empathic online community for older people. *Comput. Hum. Behav.* 25 (5), 1139–1155.
- Porter, C.E., Donthu, N., 2008. Cultivating trust and harvesting value in virtual communities. *Manag. Sci.* 54 (1), 113–128.
- Ringle, C.M., Sarstedt, M., Straub, D.W., 2012. A critical look at the use of PLS-SEM in MIS Quarterly. *MIS Q.* 36 (1), iii–xiv.
- Ringle, C.M., Wende, S., Becker, J.-M., 2015. *SmartPLS 3*. SmartPLS GmbH. Boenningstedt (available at): <http://www.smartpls.com>, Accessed date: 13 July 2018.
- Robert, L.P., Denis, A.R., Hung, Y.T.C., 2009. Individual swift trust and knowledge-Based trust in face-to-Face and virtual team members. *J. Manag. Inf. Syst.* 26 (2), 241–279.
- Schaefer, C., Coyne, J.C., Lazarus, R.S., 1981. The health-related functions of social support. *J. Behav. Med.* 4 (4), 381–406.
- Schlosser, A.E., White, T.B., Lloyd, S.M., 2006. Converting web site visitors into buyers: how web site investment increases consumer trusting beliefs and online purchase intentions. *J. Mark.* 70 (2), 133–148 2006.
- See-To, E.W.K., Ho, K.K.W., 2014. Value co-creation and purchase intention in social network sites: the role of electronic word-of-mouth and trust - a theoretical analysis. *Comput. Hum. Behav.* 31 (1), 182–189.
- Sia, C.L., Lim, K.H., Leung, K., Lee, M.K.O., Huang, W.W., Benbasat, I., 2009. Web strategies to promote internet shopping: is cultural-customization needed? *MIS Q.* 33 (3), 491–512.
- Stewart, K.J., 2003. Trust transfer on the world wide web. *Organ. Sci.* 14 (1), 5–17.
- Sukrat, S., Mahatanakoon, P., Papasratorn, B., 2017. The evolution of C2C social commerce models. In: *Eleventh International Conference on Digital Information Management*. IEEE, pp. 15–20.
- Taylor, S.E., Sherman, D.K., Kim, H.S., Jarcho, J., Takagi, K., Dunagan, M.S., 2004. Culture and social support: who seeks it and why? *J. Personal. Soc. Psychol.* 87 (3), 354.
- Walters, R.G., Rinne, H.J., 1986. An empirical investigation into the impact of price promotions on retail store performance. *J. Retail.* 62 (3), 237–266.
- Yadav, M.S., Seiders, K., 1998. Is the price right? understanding contingent processing in reference price formation. *J. Retail.* 74 (3), 311–329.
- ZhiYan Consulting, 2018. *Analysis of the Explosive Growth of China's WeChat Business Market in 2018*.
- Zhou, S., Feng, D., Xu, Y., Zhou, Y., 2012. Influencing factors of credibility in c2c e-commerce web sites. *Procedia Engineering* 29, 509–513.
- Zucker, L.G., 1986. Production of trust: institutional sources of economic structure, 1840–1920. *Res. Organ. Behav.* 8, 53–111.