

**UNDERSTANDING THE IMPACT OF SOCIAL COMMERCE WEBSITE
TECHNICAL FEATURES ON REPURCHASE INTENTION:
A CHINESE GUANXI PERSPECTIVE**

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ABSTRACT

The emergence of social commerce has brought substantial changes to both businesses and consumers. Amid this backdrop, understanding consumer behavior in social commerce contexts is critical to sellers that endeavor to more effectively influence consumers and capitalize on the power of social ties. With the technical features of social commerce website and the stimulus-organism-response paradigm as bases, this study develops a model to investigate the effects of technical features (interactivity, recommendations, and feedback) on relationship quality (swift guanxi and trust) and subsequent repurchase intention. Collecting 506 valid respondents of agricultural product consumers in social commerce, we utilized SmartPLS to conduct statistical analysis for the model. The empirical results indicate that interactivity, recommendations, and feedback exert positive effects on swift guanxi and trust to different degrees. In turn, swift guanxi and trust enable and mediate the prediction of consumer repurchase intention in social commerce context. The theoretical and pragmatic implications for firms in social commerce market are also provided.

Keywords: Social commerce; Interactivity; Recommendations; Feedback; Swift guanxi; Trust

1. Introduction

In recent years, social media such as Facebook, Twitter, MicroBlog, and WeChat have progressively become an eminent strategic business distribution channel over the Internet. By June 2016, it is estimated that the number of Chinese online citizens has reached 710 million and that the users of MicroBlog and WeChat have reached 242 and 558 million, respectively [CNNIC 2016]. These figures mirror the ever-increasing prevalence of social media for organizations. With the distinct advantages presented by social networking sites, users have become more passionate about sharing commercial information and shopping online [Liang et al. 2011]. As such, online businesses can leverage these emerging technological platforms to establish and further solidify relationships with customers [Hajli

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2014]. Through interactions with virtual community members, firms can access information that is valuable to the improvement of existing offerings and the development of new products [Fuller et al. 2006].

Social commerce, a term introduced by Yahoo in 2005, originated from the Internet company's Shoposphere service which combines community-based communication with word-of-mouth transmission. Social commerce pertains to the carrying out of business activities through social media. It is an extension of e-commerce and is facilitated by consumers' social interactions, which are established over social media [Kim and Park 2013]. The scope of connections among users has expanded via social media, leading to increasing transparency of information that facilitates the realization of transactions in social commerce [Yadav et al. 2013; Hajli 2014]. Social commerce can also be regarded as encompassing relationship-based online commercial activities [Stephen and Toubia 2010]. Relationship is of paramount importance in social commerce because it is an essential foundation on which social commerce is built [Liang et al. 2011]. In social commerce contexts, a critical goal of firms is to motivate consumers to make decisions upon social relationship generated on social media; such decisions help firms find valuable business opportunities [Wang and Zhang 2012]. Social commerce leverages social media to support interpersonal interaction, and its unique characteristics provide opportunities for consumers to make better purchasing decisions [Kim and Park 2013; Liu et al. 2016]. Therefore, establishing strong and quality relationships with customers is crucial for firms to achieve the success in social commerce.

With the growing popularity amid a plethora of societal and organizational constituents, social commerce has piqued mounting interest in how trade can be merged with social connections for the purpose of establishing good buyer-seller relationships; these relationships eventually became one of the inextricable elements of social commerce [Zhou et al. 2013]. Extant research on the quality of relationship in social commerce has focused mainly on relational exchange (e.g., trust and commitment) in western cultural contexts [Chen and Shen 2015; Shanmugam et al. 2016; Zhang et al. 2016]. These studies reveal the values of relational exchange in social commerce [Liang et al. 2011; Hajli 2014]. Notwithstanding the relatively weak institutional and legal environments in eastern cultures, it is *guanxi* that is most salient in China [Lovett et al. 1999]. Nevertheless, *guanxi* has de facto received rather scarce attention in the emerging research context of social commerce. As such, there is a pressing need for further research to theoretically and empirically examine social commerce to expand our understanding of this new yet important paradigm. In addition, the concept of *guanxi* is a social-relational factor emphasizing a close and pervasive interpersonal relationship based on high quality social interactions and the reciprocal exchange of mutual benefits; it is a crucial element of buyer-seller transactions in China [Xin and Pearce 1996]. *Guanxi* helps facilitate commerce by lubricating business relationships with personal social connections [Lee and Dawes 2005], and *guanxi* has its own unique characteristics distinguishable from relational exchange in the West [Lee et al. 2001]. *Guanxi* is rooted on ascribed or prior personal bases and is developed by reciprocal exchange of personalized care or favors [Ambler et al. 1999], whereas relational exchange in Western societies tends to have economic and impersonal involvement which leads to calculative commitment and expectation of mutuality in the relationship [Wong and Chan 1999]. As social commerce is embarking on the Chinese arena which has the largest number of social commerce users in the world [CNNIC 2016], it is worth focusing on and further exploring unique relational features of the Chinese culture which may trigger the success of social commerce. In essence, there is a paucity of inimitable social commerce technological artifacts vis-à-vis the process of consumer decision-making involving relationship quality in Information Systems.

In an effort to extend this line of research in social commerce, this study is an early attempt drawing on the stimulus-organism-response paradigm to develop a research model for examining the influence of the technical features of social commerce websites on relationship quality and subsequent repurchase intention from a Chinese *guanxi* perspective. Diverging from prior e-commerce studies, the proposed model incorporates the technical features of social commerce websites represented by three distinctive constructs (i.e., interactivity, recommendations, and feedback) to investigate the key determinants of relationship quality. We also identify two dimensions of relationship quality including swift *guanxi* and trust. Swift *guanxi*, namely *guanxi* in online market, primarily captures the interpersonal value of a relationship between a buyer and a seller, while trust mainly reflects the transactional value of the relationship [Shaan et al. 2013]. Via the integrative theoretical lens, this study strives to pursue the following questions: (1) Which technical features of social commerce websites are essential in determining relationship quality in social commerce? (2) What is the effect of relationship quality on facilitating repurchase intention in social commerce? and (3) Does relationship quality mediate the relationships between repurchase intention and its determinants?

In essence, this study makes several important contributions to the extant literature. First, we identify three technical features which capture the key nature of social commerce websites. It is helpful to conceive and deepen the understanding and cognition of social commerce in Information Systems research. Second, from the perspective of Chinese *guanxi* culture, this study develops a research model that explains how the technical features of social commerce websites facilitate repurchase intention by building swift *guanxi* and trust. We extend the extant literature

on this topic that has focused merely on relational exchange except interpersonal factors. Third, our research provides empirical evidence to support and elucidate how an interpersonal relationship exists in social commerce, and further enriches the concept of swift guanxi and extends it from traditional e-commerce to the embryonic paradigm of social commerce.

The rest of the paper is organized as follows. Section 2 revisits the literature on social commerce, the stimulus-organism-response paradigm, technical features, relationship quality and repurchase intention. Section 3 presents the research model and hypotheses, and Section 4 discusses the scale development and data collection. Section 5 provides the data analysis and results, and Section 6 discusses the key findings and implications, as well as future research directions. Section 7 is the conclusions.

2. Literature Review

2.1. Social Commerce

Social media encompasses Internet applications that are based on Web 2.0 technology primarily by means of social networking sites, such as MicroBlog and WeChat [Kaplan and Haenlein 2010]. The rapid development of social media and Web 2.0 has facilitated the transformation of e-commerce from a product-oriented environment into a new platform that focuses on social ties and customers [Wigand et al. 2008]. In this new environment, customers obtain social knowledge support and experience, which enable them to understand the purposes that underlie online shopping and make accurate purchase decisions [Baethge et al. 2016]. Meanwhile, companies are able to concentrate on customer behaviors, use social commerce insights to augment their experiences and expectations of purchase, and develop related operational strategies [Constantinides and Fountain 2008]. As an increasing number of companies have become aware of the aforementioned reciprocal advantages of social commerce, e-commerce is undergoing evolution wherein diverse Web 2.0 features, functions, and capabilities are adopted to stimulate customer participation [Kim and Srivastava 2007], improve customer relationship [Liang et al. 2011], and achieve economic value [Parise and Guinan 2008]. This paradigmatic evolution galvanizes the birth of social commerce, which has been defined in various ways due to its multi-disciplinary underpinning in marketing, information systems, sociology, and psychology. In essence, Parise and Guinan (2008) comprehensively defined social commerce as a social, creative, and cooperative method that is implemented in online markets. In addition, Wigand et al. [2008] concentrated on the changes brought by social commerce and social media applications in business; they described the concept as a transformation from a product- or service-oriented market into one that underscores social ties. The distinctive interpretations of social commerce have enabled researchers and practitioners to gain an extensive understanding of this emerging context, as social commerce is now recognized as an extension of e-commerce given that social commerce utilizes social media and Web 2.0 technology to support social interactions and user-generated content and assist consumers in making decisions regarding products or services in online markets and communities.

2.2. The Stimulus-Organism-Response Paradigm

The stimulus-organism-response paradigm from the field of environmental psychology posits that the various aspects of the environment act as stimuli (S) that affect the internal states (O) of people, which in turn, drive their behavioral responses (R) [Woodworth 1929]. This is a viable theoretical framework to address consumers' behaviors in online environments. External stimuli involve various aspects of the environment, which can affect individuals' internal cognitions and emotions [Zhang et al. 2014]. In physical shops, stimuli refer to the cues that come from the appearance, decoration, music, scent, and staffing of the stores [Baker et al. 2002]. With the emergence of e-commerce, the customer's shopping environment has become a computer-mediated virtual space, in which the stimuli refer to the clues and signals from the elements of online stores [Chan et al. 2017]. Internal states point to emotional and cognitive states of consumers, including their perceptions and evaluations [Eroglu et al. 2003]. Responses represent consumer behavior, including purchase, search, communication, and so on [Sautter et al. 2004; Zhang and Benyoucef 2016].

The use of the SOR paradigm as a theoretical foundation for this research is appropriate for two reasons. First, the SOR paradigm has been extensively used in previous studies on online consumer behaviors [Animesh et al. 2011; Wang and Chang 2013; Zhang and Benyoucef 2016; Luqman et al. 2017]. For example, Zhang et al. [2014] examined the effects of three technological stimuli (perceived interactivity, personalization, and sociability) on consumers' virtual experiences and subsequent social commerce intention. Liu et al. [2016] applied the SOR paradigm to explore the impact of interpersonal interaction factors (perceived expertise, similarity, and familiarity) on the formation of flow experience and its subsequent effects on purchase intention in social commerce. In addition, Hu et al. [2016] reveal the effects of peer-member characteristics and technical features of a social shopping website on consumers' purchase intentions. Their findings congruently support the applicability of the model in explaining individuals' internal reactions and behavioral responses to environmental stimuli. Second, considering the critical roles of environmental characteristics and relational factors in affecting consumer behavior in social commerce, the SOR paradigm can provide a parsimonious and structured underpinning to investigate the effects of social commerce

features as environmental stimuli on consumers' relationship with sellers and their intention to repurchase from the sellers.

2.3. Technical Features as Environmental Stimuli (S)

Social commerce involves the application of social media to support social interaction, communication, and user-generated content for assisting consumers in online shopping behavior [Zhou et al. 2013]. Social commerce platforms, or social media, are the artifacts with unique technical features [Peters et al. 2013]. Online consumers interact with social commerce environment via the enabled technical features and generate their evaluations of these functions [Grange and Benbasat 2010; Animesh et al. 2011]. Therefore, the technical features of social commerce platforms reflect not only the objective properties independent of the customers, but also the subjective properties as perceived by the customers [Jiang et al. 2010]. When a customer uses social commerce platforms, he/she interacts with the technical system enabled by user-generated content. Meanwhile, the customer gradually alters the environment through the platforms by contributing to the website content, therefore exerting influence on retailers [Wang and Zhang 2012]. This reveals the interactive and interpenetrating nature of technical factors [Animesh et al. 2011]. Social commerce platforms have such unique characteristics that encourage consumers to take on active roles in value co-creation [Kim and Park 2013; Busalim and Hussin 2016]. Previous studies have investigated the distinctly technical features of social commerce website such as interactivity [Busalim and Hussin 2016; Zhang et al. 2016] and recommendations [Curty and Zhang 2013; Kim and Park 2013; Hajli 2015], and utilized a variety of construct combinations to indicate the technical features of social commerce. For example, Zhang et al. [2014] suggested that technical features of social commerce platforms include three crucial elements, namely, perceived interactivity, perceived personalization, and perceived sociability. Hu et al. [2016] confirmed that the two technical features of social commerce sites support social interactions and recommendations. Drawing on the extant literature, we therefore consider interactivity, recommendations, and feedback as three unique underlying technical features of social commerce websites.

Interactivity refers to a consumer's perception of the interactivity level of a seller's social commerce website [Zhang et al. 2016]. It captures whether the website is active and whether the seller frequently interacts with his/her followers. Interactive technologies have changed not only the structure of business but also how firms and customers interrelate in online marketplaces [Arcas et al. 2013]. Consumer social interaction via social media platforms has become an integral part of social commerce [Hajli 2014]. The interconnectivities via social media allow customers to have access to information provided through social interaction and lead to a better and informed decision [Liang et al. 2011; Huang and Benyoucef 2013].

Recommendations relate to that offer matching alternatives or product advices to customers based on one's social network's updates [Hu et al. 2016]. As information overload in online context hampers consumers' ability to locate relevant information and products, product recommendations can reduce customers' information screening cost and improve their confidence in purchasing products and/or services [Baier and Stuber 2010]. According to Gartner Inc., the majority of online customers already rely on social network platforms to guide them in purchasing decisions [Dubey 2016]. The recommendations from social commerce websites are becoming increasingly personalized and popular. As such, retailers can make individually tailored recommendations based on a particular consumer's social interactions or preferences or that of similar customers [Li et al. 2014]. This means that brands can access users' social activity to present them with the products or services that are tailored to their tastes. In the social network environment, recommendation and review sites allow consumers to receive and provide advice to specific friends, in contrast with traditional online product reviews that include advice provided by unknown consumers.

Social commerce emphasizes consumers' active roles in value co-creation [Baghdadi 2016]. Social commerce platforms are no longer the channels that simply convey information or sell products and services to consumers, since they have become the morphed platforms for the dialogue and value co-creation between firms and consumers [Zhang et al. 2017]. In essence, consumers feedback including solicited and unsolicited information to the seller is one feature of social commerce reflecting the active role of consumers [Hajli 2015]. Consumers can offer suggestions on products/services to the seller to help improve the quality, which is a kind of value co-creation [Curty and Zhang 2013]. Customers are in a unique position to offer guidance and suggestions to sellers, because customers have a variety of experiences dealing with products and services. Consumer feedback in social commerce is different from traditional consumer reviews in e-commerce in that it focuses on spreading information with friends on social networking sites, whereas traditional consumer reviews are shown to unknown online shoppers [Liang et al. 2011].

2.4. Relationship Quality as Customer Internal States (O)

Relationship quality, an essential concept stemmed from relationship marketing, refers to the closeness or intensity of a given relationship. Relationship quality enables an evaluation of the strength of relationship between a buyer and a seller, as it determines the probability of interchange between these parties in future encounters [Crosby et al. 1990]. Relationship quality is a critical indicator of a healthy relationship between a buyer and a seller, and has

been used to measure interpersonal relationships [Huang et al. 2014]. Prior studies have shown that relationship quality between consumers and companies can produce positive outcomes such as market performance, repurchase behavior, customer retention, and consumer loyalty [Palmatier et al. 2006; Zhang and Bloemer 2008; Athanasopoulou 2009]. Information Systems research has also proven that relationship quality is important in online shopping. For example, Zhang et al. [2011] examined relationship quality between consumers and online sellers in B2C e-commerce context and found that it positively affected consumers' online repurchase intention. In addition, Hajli [2015] found when a consumer feels that he/she has built a good relationship with a seller in social commerce, the consumer is willing to buy products or share shopping experiences. Relationship quality is usually defined as a multidimensional construct, as prior research has investigated a number of distinct relationship quality constructs such as trust, commitment, and satisfaction [Athanasopoulou 2009; Jiang et al. 2016]. Different studies have also utilized a variety of construct combinations to indicate relationship quality. For example, Lages et al. [2005] defined relationship quality as the amount of information sharing, communication quality, long term orientation, and satisfaction with a relationship, whereas Su et al. [2016] conceptualized two distinct dimensions of relationship quality as customer satisfaction and customer-company identification. Drawing on the prevalent study of Ou et al. [2014], we use swift guanxi and trust as two key elements of relationship quality in the context of Chinese social commerce. Trust is a buyer's psychological expectation that a seller will not engage in opportunistic behavior based on a set of specific beliefs including the seller's ability, benevolence, and integrity [Gefen et al. 2003]. Swift guanxi refers to a buyer's perception of a swiftly-formed interpersonal relationship with a seller in online marketplace [Ou et al. 2014]. Swift guanxi primarily captures the interpersonal value of a relationship between a buyer and a seller, while trust mainly reflects the transactional value of the relationship [Shaan et al. 2013].

2.5. Repurchase Intention as Response (R)

Serving as a relatively novel IT service artifact in online marketplaces, social commerce platforms are used to support social interactions and user contributions to promote activities in the process of selling and buying products [Wang and Zhang 2012]. In the literature, customer post-purchase behavior is widely recognized as the outcome of relationship quality [Crosby et al. 1990; Morgan and Hunt 1994; Vatanasombut et al. 2008]. Considering that actual behavior is difficult to measure, gauging behavioral intention as a surrogate to the actual behavior is relatively common given that intention has been proven to be a valid predictor of actual behavior [Gefen and Straub 2004; Chen and Shen 2015; Hajli 2015]. Repurchase intention refers to a buyer's perceived likelihood of a re-transaction with a focal social commerce seller [Ou et al. 2014]. As this study strives to extend the extant social commerce studies that treat purchase intention as the response in the SOR paradigm [Zhang et al. 2014; Hu et al. 2016; Liu et al. 2016], we employ repurchase intention as the response in the proposed model.

3. Research Model and Hypotheses

3.1. Relationship Quality (O) and Repurchase Intention (R)

As an extension of traditional guanxi in online markets, swift guanxi is an informal buyer-seller relationship of a non-contractual mode; it consists of mutual understanding, reciprocal favor, and relationship harmony between buyers and sellers [Ou et al. 2014]. The first dimension of swift guanxi, mutual understanding, refers to buyers' and sellers' appreciation of each other's needs. The second dimension of swift guanxi, reciprocal favor, relates to positive benefits from buyers' and sellers' interactions. The third dimension of swift guanxi is relationship harmony indicating mutual respect and conflict avoidance between buyers and sellers. A transaction is the ultimate goal of building swift guanxi in online markets, and mutual understanding is its precondition [Luk et al. 1999]. If buyers and sellers provide or accept favors through transactions, reciprocal favors are opportunities that advance effective transactions [Wong 2007]. For example, offering discounts or presenting minor gifts and providing positive ratings or reviews through a feedback system are beneficial to establishing swift guanxi and consequently ensuring transactions. A harmonious relationship is helpful in reducing contractual costs in China, where Confucianism regards harmony as precious, is a primary attitudinal orientation [Lee et al. 2001; Su et al. 2003; Leung et al. 2005]. In this region, a relationship cannot survive without harmony [Kwon and Suh 2005]. In social commerce contexts, sellers can show concern for buyers by building swift guanxi and consequently realize transactions. This study extends the concept of swift guanxi from e-commerce to social commerce. Accordingly, the following hypothesis is proposed:

H1: *A consumer's swift guanxi with a social commerce seller is positively related to repurchase intention.*

Trust is an important and decisive element in reducing risk and promoting transactional motivation; it has therefore elicited extensive attention from various fields [Shankar et al. 2002]. Trust can be defined in distinctive ways. For instance, Schurr and Ozanne [1985] defined it as one party's confidence in another party's ability, promise, and willingness to establish and maintain a commercial relationship. Moorman et al. [1992] regarded trust as one's dependence on another, with the expectation that the latter's words and decisions are reliable. Some other scholars emphasized the emotional aspects of trust, believing it to be the outcome of a consumer's emotion-based beliefs toward

a seller; such beliefs are stimulated by the concern and attention exhibited by enterprises [Rempel et al. 1985]. Unpredictability and the absence of face-to-face communication between buyers and sellers in online environments produce uncertainty that drives consumers to carefully assess social commerce sellers. Thus, the credibility of online vendors is especially important in motivating purchase intention. Kim et al. [2012] empirically verified the effects of trust on consumers' purchase intention in online shopping contexts. Consumer trust is therefore considered a predictor of repurchase intention in social commerce. So the following hypothesis is put forward:

H2: *A consumer's trust in a social commerce seller is positively related to repurchase intention.*

3.2. Trust and Swift Guanxi

To establish a relationship, related parties need to interact, exchange some favors, and build trust [Dunfee and Warren 2001]. Trust is beneficial to cultivating swift guanxi because it creates an environment where buyers and sellers can quickly rely to build mutual understanding and reciprocal favors and realize a harmonious relationship [Shou et al. 2011; Ou et al. 2014]. In social commerce, when a buyer thinks that a seller is trustworthy based on the perceptions of the seller's benevolence, integrity, and ability, there is a higher chance that swift guanxi can be developed. Therefore, the following hypothesis is put forward:

H3: *Trust is positively related to swift guanxi.*

3.3. Technical Features (S) and Relationship Quality (O)

Social commerce sellers usually offer fundamental information about products, payment modes, and delivery modes, but addressing the other specific and personal requirements of certain buyers entails direct buyer-seller communication. Information such as product features and service improvements can be specified during the communication process. As such, high-quality interaction is critical to establishing relationships [Hsiao 2003]. Research on online markets has probed into the mechanism that underlies the manner by which interactivity transforms visitors into buyers and advances relationships between sellers and buyers [Teo et al. 2003]. In essence, consumers' trust is related to the characteristics of vendors and can be cultivated through interaction tools [Gefen and Straub 2004; Lee 2005]. Through dynamic and interactive exchange, buyers and sellers can listen to each other, solve some divisions of opinion, negotiate details, and ultimately reach an outcome that is satisfactory to both parties [Lowry et al. 2009]. This is an interactive process that helps to develop mutual understanding between the buyer and the seller. Relationship harmony can be achieved through smooth interaction, such as allowing the transaction parties to communicate and respond to each other. Mutual favors can also be reached with sellers offering discounts or gifts to buyers and buyers doing favors to sellers. Therefore, building swift guanxi depends on support for interactivity. Prior research shows that interactivity is important to improve relationship quality in social commerce [Zhang et al. 2016]. Also, Ou et al. [2014] contended that interactivity enables consumers to build swift guanxi with sellers in online marketplace. Based on these findings, we propose two hypotheses:

H4: *Interactivity is positively related to swift guanxi.*

H5: *Interactivity is positively related to trust.*

Recommendations from sellers in social commerce involve not only registrant's personalized information such as gender, age and address, but also update from social media. The behavior of friends who share similar interests can be integrated into recommendations when pushing products [Huang and Benyoucef 2013]. Therefore, these recommendations are personalized, accurate, and useful for customers to reach desired or even rare products in contrast with traditional online advertising [Hu et al. 2016]. Also, this piece of information would serve as social proof to build and reinforce receivers' attitude toward sellers [Huang and Benyoucef 2013]. According to the social exchange theory, when one party does something valuable for the other party, the receiving party tries to "reciprocate" with something valuable [Cropanzano and Mitchell 2005]. Applying this notion to the social commerce context, we conjecture that when consumers believe product recommendations from sellers are valuable, they will feel obliged to reciprocate positive outcomes such as interpersonal favor and trust in the sellers. Abosag and Naude [2014] found that doing favors significantly increases the level of interpersonal relationships in e-commerce. Hajli [2015] pointed out that specific social commerce features such as recommendations strongly influences customer trust. Based on those findings, we posit that recommendations from sellers may increase swift guanxi and trust in social commerce. Hence, this paper proposes the following hypotheses:

H6: *Recommendations are positively related to swift guanxi.*

H7: *Recommendations are positively related to trust.*

Learning from customers is a major goal of insight into the market [Liu et al. 2016]. Companies need to collect information about customers and store it in customer databases. They can use the information to develop marketing communication strategies and help designers improve product design and customer service [Torres et al. 2014]. The emergence of Web 2.0 has provided new opportunities to improve this process by providing both methods and tools [Peters et al. 2013]. Social commerce, with the aid of social media, facilitates such consumer-generated feedback as ratings and reviews to sellers [Lu et al. 2016]. Using Social media as a platform enables companies to test new

products/services by obtaining feedback from customers. This insight may foster closer customer-vendor relationships and give companies a competitive edge [Lee and Phang 2015]. Pavlou and Gefen [2004] suggested that feedback mechanisms can engender trust in online community of sellers. In addition, Ou et al. [2014] pointed out that effective use of feedback system can build swift guanxi and trust through interactivity and presence with sellers in online marketplace. Listening to the voice of customers and quickly responding to customers reveals the support for ties with customers as well as the care for customers. Therefore, when sellers support customers to generate feedback, swift guanxi and trust between them will promote in social commerce. We hypothesize that:

H8: Feedback is positively related to swift guanxi.

H9: Feedback is positively related to trust.

On the basis of the discussions above, a conceptual model (Figure 1) was developed.

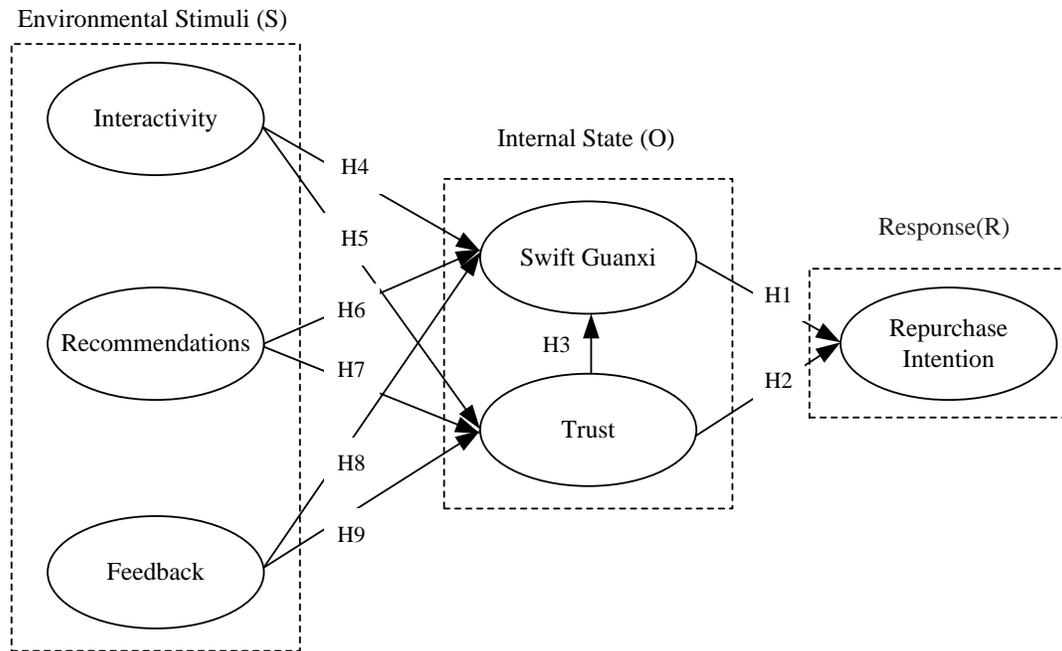


Figure 1: Theoretical Model

4. Research Design and Method

4.1. Scale Development

This study administered self-reported questionnaires to collect data for empirical examination with the use of the theoretical model. The items were measured on a five-point Likert scale that ranges from 1 (strongly disagree) to 5 (strongly agree). The questionnaire is composed of two parts: the first is designed to investigate the demographic features of the participants, and the second is intended to measure variables. The measurement scales were developed with reference to existing literature to ensure content validity. The items used to measure interactivity were adapted from Zhang et al. [2016]. The items designed to measure recommendations were adapted from Hu et al. [2016]. The items intended to measure feedback were adapted from Yi and Gong [2013], and those intended to measure trust were adapted from Kim and Park [2013]. The measurement of swift guanxi were adapted from Ou et al. [2014], which uses three first-order constructs (mutual understanding, reciprocal favor and relationship harmony) to form a formative second-order construct of swift guanxi. The items used to measure repurchase intention were adapted from Ou et al. [2014]. To ensure translation accuracy of the scales, several steps were conducted as follows. First, all the items were translated into Chinese by one of the researchers in our group. Second, another researcher back translated the Chinese version into English. Third, we compared the two English versions and examined potential translation discrepancy; then we made subtle modifications to guarantee that the Chinese scales accurately convey the intended meanings of all the items. Then the questionnaire was piloted in a study involving 20 college students. In accordance with their feedback, we refined the scales to improve certain ambiguous expressions. The entire set of items used in the analysis is shown in Appendix A.

4.2. Data Collection

This study chose Gzfruitexpress (<http://weibo.com/gzfruitexpress>) as the sample research context. Gzfruitexpress is an online fruit seller that uses SinaWeibo as its primary shopping website. Gzfruitexpress is a well-known and leading social commerce based fruit seller in China. The SinaWeibo website of Gzfruitexpress was established in 2012 and now has more than eighty four thousand fans. Another key reason for using Gzfruitexpress as our empirical research context is that its technical design well fits our research need. For example, this website often recommends fruits based on user history and social networking relevance. Users can interact with the seller or other members via the platform. Considering the attribute of swift guanxi, our target samples were the buyers who have first-time transaction experience with the seller, namely the first-time buyers. First, we identified the first-time buyers from their customer database. Second, in order to ensure the accuracy of the measurement, we excluded the first-time buyers who just recently joined the site and made a purchase without interacting with the seller by checking the seller’s chatting records. Then, we selected these buyers randomly and sent our online survey invitations to them via the seller’s SinaWeibo website. We offered a petty coupon of 15 RMB (approximately U.S. \$2.2) as an incentive for participation. The respondents were asked to recall their recent first-time transaction experience with the seller and to respond to the questionnaire. From the 1859 invitations, 506 valid responses were received for further analysis.

The demographic statistics are shown in Table 1. Among the respondents, 48.2% were male and 51.8% were female. The majority of the respondents were between 18 and 33 years old (79.3%). As to educational level, 78.7% obtained a bachelor’s degree or higher. The majority had an online shopping experience that spans one to five years (75.8%). To examine representativeness, we compared the respondent demographics with those provided in the 2015 Weibo user development report [SinaWeibo Data Center 2016]. The report indicated that the gender ratio of Weibo users is relatively balanced (50% female) and that people who had a bachelor’s degree or higher constitute the primary population of Weibo users (76%). Our demographic data are consistent with those from the SinaWeibo Data Center, with the data exhibiting less than 3 percent deviation in percentage count. This mirrors the representativeness of the sample chosen for the study.

Table 1: Sample Demographics (N=506)

Variable	Category	Number	Ratio (%)
Gender	Male	244	48.2
	Female	262	51.8
Age	<17	43	8.5
	18–23	203	40.2
	24–33	198	39.1
	34–45	53	10.5
	>46	9	1.7
Education	Below college	16	3.2
	Associate degree	92	18.1
	Bachelor’s degree	330	65.2
	Master’s degree or higher	68	13.5
Length of online shopping experience (year)	<1	9	1.8
	1–3	165	32.6
	3–5	219	43.2
	5–7	80	15.9
	>7	33	6.5

5. Data Analysis and Results

SmartPLS, a type of partial least squares (PLS) technique for component-based structural equation modeling (SEM), was employed to test the theoretical model. The PLS technique was chosen because PLS is well suited for exploratory theory building [Lowry et al. 2008]. This study utilizes an emerging research model to explore the effects of the technical features of social commerce on relationship quality and repurchase intention. Another reason is that both reflective construct and formative construct were contained in our study. PLS requires the sample size to be at least 10 times the largest number of paths leading to an endogenous construct (Chin, 1998). In our research model, the maximum number of paths that enter an endogenous variable is four. Therefore, our sample size of 506 was sufficient for the use of the PLS technique.

5.1. Measurement Model

We examined the reliability, convergent validity, and discriminant validity of the measurement model before testing the hypotheses. The approximate model fit criterion implemented for PLS path modeling is the standardized root mean square residual (SRMR) which refers to the square root of the sum of the squared differences between the

model-implied and the empirical correlation matrix [Henseler et al. 2016]. The bootstrap-based inference statistics showed that SRMR was 0.045 and was less than the threshold of 0.08, indicating an acceptable fit for the measurement model. This study employed Cronbach's α and composite reliability (CR) to reflect reliability. An instrument is suggested to have sound reliability if its CR is 0.7 or higher, its average variance extracted (AVE) is 0.5 or higher, and a Cronbach's α exceeds 0.70. Swift guanxi does not reflect reliability or validity because it is a formative construct. As shown in Table 2, the CR, AVE, and Cronbach's α of all other instruments far exceeded the cutoff criteria required for reliability. In addition, convergent and discriminant validity were measured. To establish convergent validity, the indicators should load significantly on their corresponding latent construct, and the loadings should be equal to 0.60 or higher. The standard loading of each item ranges from 0.744 to 0.904 and is significant at the 0.001 level. The AVE of each construct ranges from 0.617 to 0.775, demonstrating that the factor-related items exhibit relatively good convergent validity. Also, the discriminant validity is relatively good because the diagonally arranged values are greater than the rest of the values on the column of each diagonally organized value (Table 3). In order to further assess validity of our measurement items, a cross-loadings table was constructed (Appendix B). It can be seen that each item loading in the table is much higher on its assigned construct than on the other constructs, supporting adequate convergent and discriminant validity.

Table 2: Results on Reliability and Convergent Validity of Measurement Instruments

Factor	Item	Standard loading ^a	AVE	CR	Cronbach's α
INT	INT1	0.782	0.694	0.871	0.879
	INT2	0.861			
	INT3	0.862			
REC	REC1	0.784	0.617	0.810	0.872
	REC2	0.746			
	REC3	0.788			
FB	FB1	0.848	0.638	0.841	0.828
	FB2	0.775			
	FB3	0.771			
SMU	SMU1	0.823	0.643	0.900	0.861
	SMU2	0.830			
	SMU3	0.763			
	SMU4	0.810			
	SMU5	0.782			
SRF	SRF1	0.744	0.671	0.890	0.833
	SRF2	0.801			
	SRF3	0.852			
	SRF4	0.839			
SRH	SRH1	0.884	0.756	0.902	0.840
	SRH2	0.836			
	SRH3	0.887			
TRU	TRU1	0.876	0.715	0.926	0.912
	TRU2	0.798			
	TRU3	0.827			
	TRU4	0.867			
	TRU5	0.855			
RPI	PI1	0.874	0.775	0.912	0.854
	PI2	0.904			
	PI3	0.860			

Note: INT, Interactivity; REC, Recommendations; FB, Feedback; SG, Swift guanxi; SMU, Mutual understanding; SRF, Reciprocal favor; SRH, Relationship harmony; TRU, Trust; RPI, Repurchase intention. ^a All standard loadings are significant at $p < 0.001$.

Table 3: Correlation Matrix and Constructs' AVE Square Roots

Factor	INT	REC	FB	SG	SMU	SRF	SRH	TRU	RPI
INT	0.833								
REC	0.316	0.785							
FB	0.392	0.358	0.799						
SG	0.408	0.373	0.412	—					
SMU	0.338	0.366	0.358	0.791	0.802				
SRF	0.362	0.308	0.324	0.738	0.367	0.819			
SRH	0.351	0.406	0.342	0.705	0.376	0.399	0.869		
TRU	0.450	0.398	0.433	0.562	0.429	0.426	0.407	0.846	
RPI	0.434	0.401	0.420	0.479	0.389	0.379	0.375	0.441	0.880

Note: Correlations among formative constructs are shown in gray highlight. All other constructs are reflectively measured first-order constructs. Diagonally arranged values are the square roots of AVEs.

This study also examined multicollinearity in the formative constructs. Following Chin et al. [2003] and Edwards [2001], we used the scores of the first-order constructs as the formative measure for the second-order construct and then modeled the paths from the first-order to the second-order constructs. Table 4 presents the formative indicator weights and variance inflation factors (VIFs). Different weights of first-order constructs towards their second-order construct were obtained, indicating that these exert distinct effects. Of tremendous importance is the fact that all the VIFs are less than the threshold of 10 [Petter et al. 2007], suggesting that multicollinearity is not a problem in our study. We confirmed that Swift guanxi can be conceptualized as a second-order factor composed of mutual understanding, reciprocal favor, and relationship harmony in social commerce. Mutual understanding is the strongest contributing factor for measuring swift guanxi.

Because the data collection method was of a self-reported cross-sectional design, we first used Harman's single-factor test to examine potential common method bias (CMB) in accordance with the recommendation of Podsakoff et al. [2003]. We ran an exploratory unrotated factor analysis on all the first-order constructs with the 28 items. The factor analysis showed that 8 factors were extracted from the data, which together explain 72.41% of the total variance. The first factor explains 22.68% of the variance, which does not account for the majority of covariance of the variables. The Harman's test suggests that CMB is not a problem in this study. Second, following Huigang et al. [2007], we further included a common method factor in the SmartPLS model. As shown in Appendix C, the results demonstrated that the method factor loadings (R22) were insignificant and the indicators' substantive variances (R12) were substantially greater than their method variances (R22). We therefore concluded that CMB is not a substantial issue in our data set.

Table 4: Formative Indicator Weights and VIFs

Second-order construct	First-order construct	VIF	Weight ^β
Swift guanxi (SG)	SMU	3.34	0.468
	SRF	2.57	0.398
	SRH	2.67	0.245

^β All weights are significant at p<0.001.

5.2. Hypotheses Testing

The hypotheses of the proposed research model were tested by checking both the significance level of each path coefficient and the sign. The path coefficients and their corresponding significance levels are shown in Figure 2. Swift guanxi ($\beta=0.382$, $p<0.001$) and trust ($\beta=0.316$, $p<0.001$) exerts positive effects on consumers' repurchase intention. Thus, H1 and H2 are supported. Trust has a positive effect on swift guanxi ($\beta=0.453$, $p<0.001$), indicating that H3 is supported. Interactivity positively affects swift guanxi ($\beta=0.317$, $p<0.001$) and trust ($\beta=0.421$, $p<0.001$), indicating that H4 and H5 are supported. Recommendations positively influence swift guanxi ($\beta=0.198$, $p<0.001$) and trust ($\beta=0.226$, $p<0.001$), meaning that H6 and H7 are supported. Feedback positively affects swift guanxi ($\beta=0.233$, $p<0.001$) and trust ($\beta=0.354$, $p<0.001$), thus supporting H8 and H9. The R2 values of swift guanxi, trust, and repurchase intention are 43.4%, 55.7% and 41.3%, respectively. These values demonstrate that the technical features of social commerce can sufficiently explain the formation of relationship quality which in turn substantially contributes to repurchase intention.

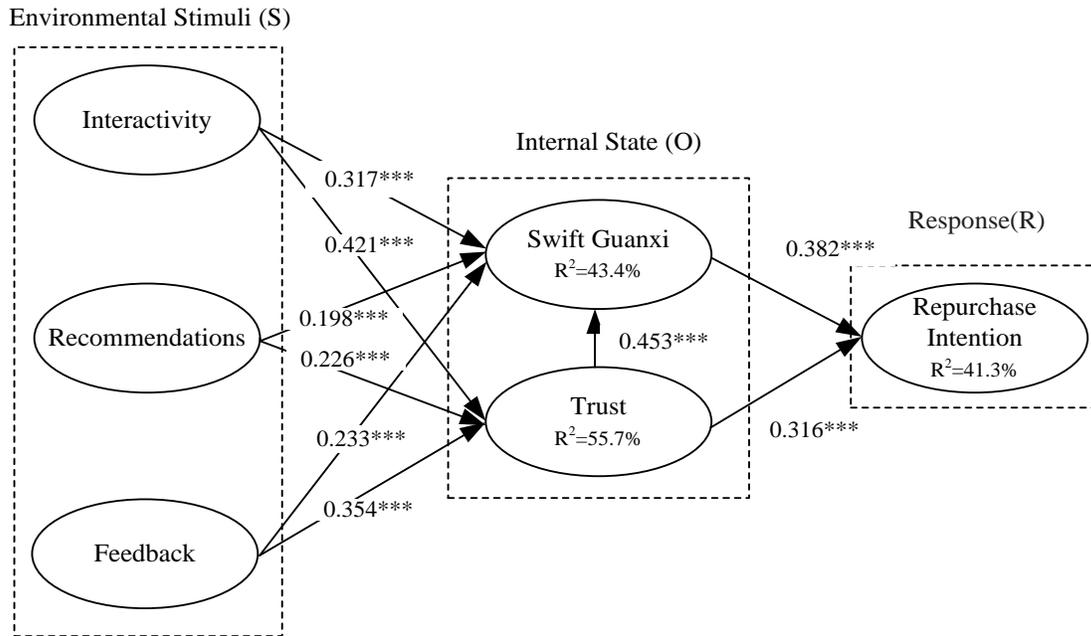


Figure 2: Path Diagram (**p<0.001)

5.3. Testing of Mediating Effects

Swift guanxi and trust are the mediators of the relationship between technical features (interactivity, recommendations, and feedback) and repurchase intention. Following Baron and Kenney [1986], we used SmartPLS to examine the mediating effects of swift guanxi and trust. The results showed that the coefficient of direct path between the independent variable and the dependent variable decreases when the indirect path via the mediator is introduced into the model (0.289<0.463, 0.237<0.389, 0.209<0.328, and so on). This result indicates that both swift guanxi and trust exert partially mediating effects, thus providing evidence that interactivity, recommendations, and feedback pose not only indirect effects on repurchase intention through swift guanxi and trust but also direct effects. Next, we conducted the Sobel’s [1982] standard errors test to further examine the mediating effects. The results showed that each indirect effect of the independent variable on the dependent variable through the mediator variable is significant (See t -value in the Table 5), ascertaining the partially mediating relationships.

Table 5: Results of Test on Mediating Effects

IV	M	DV	IV → DV	IV → M	IV+M → DV		Sobel test
					IV	M	Mediating effects (t)
INTER	SG	RPI	0.463***	0.588***	0.289***	0.496***	6.981
FB	SG	RPI	0.389***	0.439***	0.237**	0.537***	6.183
REC	SG	RPI	0.328***	0.347***	0.209**	0.565***	5.256
INT	TRUST	RPI	0.463***	0.628***	0.227**	0.426***	8.607
FB	TRUST	RPI	0.389***	0.490***	0.193**	0.472***	7.064
REC	TRUST	RPI	0.328***	0.394***	0.153**	0.485***	6.852

Note: IV=independent variable; M=mediator; DV=dependent variable; ***p<0.001; **p<0.01

6. Discussion and Implications

6.1. Discussion of Findings

This study investigated the issue of consumers’ repurchase decisions in social commerce and revealed that the technical features of social commerce websites significantly affect the quality of consumers’ relationship with sellers.

Such a relationship, in turn, affects their intention to buy products again. The major findings derived are presented as follows.

First, social commerce is usually associated with relational exchange, which means that people may rely on the “lubricant” (a special type of relationship that is capable of reducing friction and making transactions smooth) in fulfilling transactions. This study empirically confirmed that an interpersonal relationship exists in social commerce, and further extended the concept of swift guanxi from traditional electronic commerce to social commerce. In the social commerce context, the most strongly weighted dimensions of swift guanxi, arranged from the most important to the least, are mutual understanding, reciprocal favor, and relationship harmony. This result supplements the study proposed by Ou et al. [2014], who conceptualized the nature of swift guanxi in traditional electronic commerce. This study considerably enriches and contributes to the understanding of swift guanxi in social commerce and its impact on repurchase intention.

Second, the three technical features of social commerce websites exert positive effects on swift guanxi and trust. Among them, interactivity is the strongest determinant factors, followed by feedback and recommendations. This provides valid support on how the specific technical feature subtypes (interactivity, recommendations and feedback) influence the two kinds of relationships (swift guanxi and trust) in social commerce, and reveals that technical features can build not only relational exchange (e.g., trust and commitment) but also interpersonal relationship in social commerce. Sellers that can actively interact with their followers are useful to produce rich information enhancing consumers’ understanding of the stores, products, and services of sellers and to improve the quality of relationships between buyers and sellers in social commerce. Active customer feedback can help sellers improve their products or services and develop friendly relationships with customers.

Finally, Swift guanxi and trust positively influence customer’ repurchase intentions. Furthermore, swift guanxi has a stronger effect on repurchase intention than does trust. We extend the social commerce literature by revealing that interpersonal factor plays an important role in promoting customers’ repurchase intention in social commerce. In addition, swift guanxi and trust are significant mediators of the relationships between the technical features of social commerce websites and repurchase intention. The partially mediating effects of swift guanxi and trust reveal the intrinsic mechanism of the impact of technical features on repurchase intention. Our study also finds that trust has positive impact on swift guanxi in social commerce, indicating that trust plays a prominent role in a harmonious interpersonal relationship between a seller and a buyer. This is consistent with the literature Ou et al. [2014] that suggests the foundational role of trust in relationship establishment in e-commerce.

6.2. Theoretical Implications

This study contributes to existing literature in three ways. First, the findings of previous studies highlight technical tools or technical features as facilitative of relational exchange (e.g., trust and commitment) that leads to purchase intention in social commerce [Liang et al. 2011; Hajli 2014; Zhang et al. 2014; Zhang et al. 2016]. However, limited effort has been devoted to exploring how to build interpersonal relationships between buyers and sellers based on insights into technical features and whether these relationships foster repurchase intention in the social commerce context. In a bid to advance this line of research, the current work illustrates how the technical features of social commerce websites affect repurchase intention through swift guanxi and trust. In so doing, we create a new theoretical paradigm for understanding customer behavior in social commerce.

Second, we develop the research model from a Chinese guanxi culture perspective. This is important in social commerce research because the success of social commerce relies largely on a sustainable and healthy relationship among social media participants. To certain degree, relationship is regarded as the core connection and foundation for social commerce. With a cultural predilection spanning several thousand years, people in China value guanxi highly in business [Xin and Pearce 1996]. Regardless of personal contacts or commercial activities, interpersonal relationships are crucial and thus factor into every aspect of society. Moreover, the interpersonal relationships in China are distinct from relational exchange in the West functions through legality, rules, and mutuality because of cultural differences. An imperative, therefore, is to assess the connotation of swift guanxi, as well as its effects on repurchase intention in social commerce. The result reveals that swift guanxi exerts a stronger effect on repurchase intention than does trust, indicating its crucial role in facilitating social commerce activities. Furthermore, we identify the weights of the three dimensions (mutual understanding, reciprocal favor and relationship harmony) on swift guanxi. These finding advance our understanding of the operationalization of swift guanxi in social commerce. In this regard, this study offers a unique contribution to social commerce research and relationship marketing literature.

Third, we examine the role of technical features in building relationship quality in social commerce. Although previous studies have discussed the technical features of social commerce websites, there has been a rather inconsistent understanding in the literature [Zhang et al. 2014; Hu et al. 2016]. We enrich the existing research by identifying three key technical features of social commerce websites, namely interactivity, recommendation and feedback, and revealing their important yet different impact on swift guanxi and trust. Specifically, interactivity and feedback have

the stronger effects than that does recommendation, indicating that co-participation between sellers and buyers plays a more important role in building relationships than one-way push from sellers. This insight further revamps our understanding of social commerce.

6.3. Practical implications

The empirical results present a number of practical implications. First, given the importance of relationship quality in the success of social commerce sites, practitioners should take necessary steps to build and maintain long-term and stable relationships with users. Swift guanxi and trust are regarded as the foundation of such relationships. A trustworthy and friendly relational environment should be encouraged in social commerce to improve trust and swift guanxi. Some consumers are unwilling to purchase products or services from social commerce sellers because the vendors are viewed as less trustworthy and friendly than other social commerce retailers. Social commerce practitioners should therefore be aware of the importance of customer relationship-building and strive to promote the quality of their relationships with consumers.

Second, the technical features of social commerce websites are significant predictors of buyers' repurchase intention. We suggest that social commerce practitioners manage different subtypes of technical features and test their effects on relationship quality. Specifically, practitioners should pay close attention to the interactivity levels of their social commerce websites. For example, practitioners could consider embedding a variety of interactive tools to support communication before, during and after purchase, such as instant chatting tools and message board. Practitioners should be aware of the power of customer feedback on the performance of social commerce. They could encourage their followers to provide comments or suggestions by offering rewards and lucky draws. Further, it could be helpful to develop a strategy to compile, monitor, and take action based on different types of customer feedback. As such, practitioners could improve their recommendation algorithms using big data analytic techniques to make individually tailored product recommendations based on a specific consumer's social interactions or preferences, or based on that of similar customers.

6.4. Limitations and Future Research

Although meaningful findings were obtained in this study, its limitations are worth noting. First, the respondents are SinaWeibo users and the results may not be directly applicable to other social commerce sites, such as Facebook or WeChat. Future research should widen the sample sources. Second, our research model is based on the Chinese context, where guanxi is a long-standing and popular cultural orientation. The results may not be generalizable because of cultural differences. Additional studies should be conducted to explore the applicability of our research model in other cultural contexts. Third, although the overall model explains 41.3% of the variance in repurchase intention, other related factors were not fully considered. Future studies can examine the potential factors that drive, moderate, or mediate influence on repurchase intention in social commerce. Fourth, to address the limitations of our chosen survey method where data were subjective self-reported responses, future research can carry out additional techniques such as social network analysis to elucidate user behavior in social commerce.

7. Conclusions

This study draws on the stimulus-organism-response paradigm and a Chinese guanxi culture perspective to develop an integrated research model for explaining how the technical features of social commerce websites facilitate repurchase intention by building swift guanxi and trust. Departing from prior studies in this domain, we have extended the theoretical lens by introducing swift guanxi which is a unique element in Chinese online market into our empirical investigation to reveal its role in predicting repurchase intention in social commerce. Furthermore, we shed new light on how to build good relationships between buyers and sellers from the technical features, and find that they exert positive impacts on the quality of relationship to different degrees in social commerce. This study contributes to the emerging paradigm of social commerce research and enriches the relationship marketing literature. The scientific findings provide managers with insights into effective methods for improving the relationships with customers and encouraging the healthy and rapid progress of social commerce.

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Appendix A

Measurement Scales

Variable	Item	Content	Source
Interactivity (INT)	INT1	Gzfruitexpress actively exchanges information with followers on its social commerce website.	Zhang et al. [2016]
	INT2	Gzfruitexpress frequently interacts with followers on its social commerce website.	
	INT3	Gzfruitexpress often responds in a timely manner to inquiries or comments from followers on its social commerce website.	
Recommendations (REC)	REC1	When I visit a product page, Gzfruitexpress recommends products that potentially interest me.	Hu et al. [2016]
	REC2	When I visit a product page, Gzfruitexpress shows me other similar items.	
	REC3	Gzfruitexpress recommends products that potentially interest me	
Feedback (FB)	FB1	If I have a useful idea on how to improve products or services, I let Gzfruitexpress know.	Yi and Gong [2013]
	FB2	When I receive good products or services from Gzfruitexpress, I comment about it.	
	FB3	When I experience a problem, I let Gzfruitexpress know about it.	
Swift guanxi (SG): Mutual understanding (SMU)	SMU1	Gzfruitexpress and I can understand each other's needs.	Ou et al. [2014]
	SMU2	Gzfruitexpress and I can understand the point of view of each other.	
	SMU3	Gzfruitexpress and I can make ourselves heard.	
	SMU4	Gzfruitexpress and I can follow the flow of conversations.	
	SMU5	Gzfruitexpress and I show interest in each other's opinions.	
Swift guanxi (SG): Reciprocal favor (SRF)	SRF1	If I buy from Gzfruitexpress, it would provide a discount to me.	Ou et al. [2014]
	SRF2	Gzfruitexpress and I provide a positive rating or comment to each other.	
	SRF3	Gzfruitexpress and I help each other.	
	SRF4	Gzfruitexpress and I proved to be friends by doing a favor for each other.	
Swift guanxi (SG): Relationship harmony (SRH)	SRH1	Gzfruitexpress and I maintain harmony.	
	SRH2	Gzfruitexpress and I avoid conflict.	
	SRH3	Gzfruitexpress and I respect each other.	
Trust (TRU)	TRU1	Gzfruitexpress is trustworthy.	Kim and Park [2013]
	TRU2	I trust that Gzfruitexpress keeps my best interests in mind.	
	TRU3	Gzfruitexpress will keep its promises.	
	TRU4	I believe in the information that Gzfruitexpress provides.	
	TRU5	Gzfruitexpress wants to be known as a seller that keeps its promises and commitments.	
Repurchase intention (RPI)	RPI1	Given the chance, I predict that I would consider buying products from Gzfruitexpress in the near future.	Ou et al. [2014]
	RPI2	Given the opportunity, I intend to place an order from Gzfruitexpress again	
	RPI3	I will buy similar products from Gzfruitexpress again.	

Appendix B

Item Loadings and Cross Loadings

	INT	REC	FB	SMU	SRF	SRH	TRU	RPI
INT1	0.752	0.238	0.130	0.057	0.101	0.216	-0.086	0.058
INT2	0.835	0.032	-0.001	0.195	0.066	0.123	0.153	0.061
INT2	0.778	0.088	0.100	0.000	0.057	0.127	0.280	0.168
REC1	0.141	0.790	0.230	0.043	0.004	0.161	0.199	0.185
REC2	0.196	0.758	0.083	0.130	0.094	-0.011	0.203	0.099
REC3	0.151	0.825	0.206	0.109	0.093	0.212	0.062	0.117
FB1	0.044	0.176	0.820	-0.076	0.262	0.112	0.094	0.089
FB3	0.085	0.297	0.747	0.257	-0.011	0.156	-0.030	0.110
FB2	0.162	0.038	0.724	0.170	-0.141	0.128	0.293	0.162
SMU1	0.148	0.093	0.116	0.762	0.162	0.140	0.168	0.163
SMU2	0.085	0.104	0.125	0.772	0.139	0.101	0.188	0.127
SMU3	0.247	0.198	0.078	0.704	0.193	0.203	0.159	0.180
SMU4	0.141	0.079	0.085	0.738	0.159	0.150	0.179	0.222
SMU5	0.134	0.142	0.110	0.718	0.103	0.261	0.250	0.153
SRF1	0.214	0.024	0.124	0.150	0.740	0.190	0.252	0.156
SRF2	0.135	0.123	0.103	0.149	0.752	0.100	0.101	0.148
SRF3	0.086	0.056	0.067	0.158	0.763	0.138	0.175	0.196
SRF4	0.098	-0.066	0.107	0.178	0.758	0.160	0.190	0.239
SRH1	0.130	0.060	0.039	0.159	0.078	0.848	0.137	0.105
SRH2	0.139	0.117	0.065	0.123	0.088	0.800	0.104	0.139
SRH3	0.105	0.105	0.047	0.086	0.109	0.871	0.105	0.115
TRU1	0.032	0.073	0.041	0.144	0.126	0.178	0.834	0.117
TRU2	0.075	-0.025	0.013	0.210	0.123	0.191	0.708	0.160
TRU3	0.125	0.097	0.124	0.011	0.196	0.236	0.746	0.201
TRU4	0.077	0.109	0.056	0.173	0.157	0.155	0.826	0.118
TRU5	0.116	0.075	0.127	0.119	0.112	0.104	0.819	0.104
RPI1	0.108	0.132	0.079	0.206	0.075	0.283	0.195	0.788
RPI2	0.139	0.098	0.173	0.040	0.129	0.195	0.184	0.792
RPI3	0.070	0.137	0.058	0.143	0.166	0.183	0.277	0.755

Note: INT, Interactivity; REC, Recommendations; FB, Feedback; SMU, Mutual understanding; SRF, Reciprocal favor; SRH, Relationship harmony; TRU, Trust; RPI, Repurchase intention.

Appendix C

Common Method Bias Analysis

Construct	Indicator	Substantive Factor loadings (R1)	R1 ²	Method Factor Loading (R2)	R2 ²
INT	INT1	0.855***	0.731	0.010	0.001
	INT2	0.912***	0.804	-0.101	0.021
	INT3	0.889***	0.750	0.039	0.000
REC	REC1	0.823***	0.752	0.030	0.000
	REC2	0.798***	0.738	0.025	0.002
	REC3	0.816***	0.782	0.010	0.001
FB	FB1	0.841***	0.691	-0.003	0.000
	FB2	0.930***	0.724	0.012	0.000
	FB3	0.836***	0.748	0.019	0.002
SMU	SMU1	0.846***	0.701	0.012	0.001
	SMU2	0.833***	0.699	-0.007	0.000
	SMU3	0.912***	0.800	0.108	0.012
	SMU4	0.829***	0.776	0.016	0.001
	SMU5	0.794***	0.707	0.006	0.000
SRF	SRF1	0.823***	0.714	0.045	0.002
	SRF2	0.857***	0.725	-0.023	0.001
	SRF3	0.890***	0.802	0.078	0.004
	SRF4	0.887***	0.779	0.011	0.000
SRH	SRH1	0.903***	0.786	-0.056	0.001
	SRH2	0.886***	0.748	0.072	0.002
	SRH3	0.928***	0.812	0.002	0.000
TRU	TRU1	0.838***	0.712	-0.069	0.001
	TRU2	0.850***	0.741	0.150	0.032
	TRU3	0.736***	0.661	0.119	0.014
	TRU4	0.820***	0.764	-0.060	0.003
	TRU5	0.845***	0.735	0.108	0.009
RPI	RPI1	0.874***	0.776	0.001	0.000
	RPI2	0.921***	0.796	-0.002	0.000
	RPI3	0.852***	0.734	0.012	0.005

Note: INT, Interactivity; REC, Recommendations; FB, Feedback; SMU, Mutual understanding; SRF, Reciprocal favor; SRH, Relationship harmony; TRU, Trust; RPI, Repurchase intention. ***P<0.001