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Media or Message, Which is the King in Social Commerce?:

An Empirical Study of Participants' Intention to Repost Marketing Messages on Social Media

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Abstract

Grounded on the stimulus-organism-response (S-O-R) framework, we develop a research model by proposing participants' perceived utilitarian and hedonic value as the two key mediating mechanisms to transmit the effects of marketing stimuli and social media stimuli on participants' intention to repost a marketing message on social media. The survey data of 402 participants largely support the proposed research model. Interestingly, our data also suggest that marketing stimuli has more salient effects in predicting participants' reposting intention when compared to social media stimuli. We discuss the implications of these results in the context of social commerce.

Keywords: Social Commerce, Social Media Marketing, Perceived Utilitarian Value, Perceived Hedonic Value, Reposting Intention and Behavior

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Abstract

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INTRODUCTION

At 11:00 on November 25, 2013, the CEO of an e-commerce company in Suzhou, China, posted a marketing message titled “Get Your Free Hairy Crab by Collecting ‘Like’” on his WeChat¹ moment²:

“If you repost this message on your WeChat moment and receive 64 ‘Likes’ from your friends, you will receive a box of hairy crab valued 888 RMB for free.”

The post quickly attracted attention and was forwarded afterwards, and within half an hour, followers of this company’s official WeChat account increased from 76 to 670. By 3pm, November 27, around 4000 people reposted this message and the reading volume of message on WeChat was 50,000. People who have received the free gift kept on posting pictures of the crab on WeChat, which in turn facilitated the mania of reposting. By the end of this campaign on November 28, more than ten million people were involved.

This event shows the advantage of social media for online marketing over traditional marketing tools in terms of speed, flexibility and reading, especially “in tracking events as they unfold in real time” (Shi et al. 2014). More importantly, it demonstrates that a closed-circle social media (i.e., WeChat), is distinct from public social media tools (i.e., Twitter and Weibo) (Liu et al. 2018). User-generated content on public social media is accessible by the public and thus could be broadcasted immediately, just like content from traditional mass media. On closed-circle social media tools, user relationships are normally built through real-world interactions. Only when two users become friends with each other on the media, they are able to see each other’s posts. Comments of posts are private between the publisher and the commenter unless the audience is a common friend of both interlocutors. Information is disseminated and broadcasted through closed and cohesive social networks, which may enhance the accurate target of information dissemination but meanwhile constrain the propagation prevalence. As exemplified by the above hairy crab case, without reposting, the marketing campaign might only approach hundreds of audience (i.e., friends of the CEO on WeChat). However, if a closed-friend-circle message is well designed, the message can be further disseminated by friends in their own social circles and then have the potential to reach millions of people

¹ WeChat is a free, cross-platform and instant messaging application developed by Tencent. According to Wikipedia, as of Oct 7 2018, WeChat is one of the largest standalone mobile apps with over 1 billion monthly active users (902 million daily active users): <https://en.wikipedia.org/wiki/WeChat>.

² <http://suzhou.bendibao.com/news/20131128/40167.shtm>

because of the snowball effect. Participants³ of the marketing campaign on social media usually repost information that they find particularly valuable. Therefore, on closed-circle social media, *reposting*, a voluntary content sharing behavior, plays a significant role in the success of social commerce.

Social commerce, a new sub-set of e-commerce, is characterized as the combination of both online commercial activities and social interactions mediated by social media platforms (Farivar et al., 2018; Lin et al., 2017; Chen & Shen, 2015). Different from traditional electronic commerce where individual participants interact with sellers separately, social commerce facilitates information sharing and interactions among participants (Zhang & Benyoucef, 2016). On social media, participants are able to “obtain guidance and recommendations from others, share experiences, locate goods and services, and make purchases” (Williams, 2018, p.1). Due to the big advantage of facilitating content generation and participant participation, social media has gained the increasing popularity among firms. According to a latest report from Tencent in 2018⁴, there were more than 20 million official WeChat business accounts, with millions of companies actively engaging in social commerce through WeChat. The company of hairy crab illustrated above is one of the millions of cases who have involved in the surge of social commerce on WeChat. However, even though social media has been touted as a magic bullet, plenty of companies have experienced the failure rather than success in social commerce. According to a recent industrial report⁵, the conversion rates of online selling in major social media platforms, such as Twitter and Snapchat, were surprisingly low, with only less than 1%.

Given the popularity of involvement in social commerce versus the failure of companies to achieve expected performance, more and more academic attention has been put in this research area. *Social media marketing*, as the key part of social commerce to attract, engage, and converse participants, has been investigated in both disciplines of Marketing (e.g., Hajli et al. 2017; Zhou et al. 2013; de Vries et al., 2012) and Information Systems (IS) (e.g., Yu, et al. 2018; Liu et al., 2016; Lu et al. 2016), though with the anchor of different focuses. Marketing studies pay more attention to the design of marketing message (Yadav & Pavlou, 2014) and largely ignore the carrier of these messages, viz., the media or the technology, (e.g., Andzulis et al., 2012). In contrast, existing IS research explores the impact of technological features (e.g., Ngai et al., 2015), with less focus on the content of information (e.g., Tan et al., 2014). Therefore, it is important to take account of both characteristics of marketing messages and social media when predicting the success of social

³ Hereafter we use a general term “participants” to stand for “users”, “consumers” and “customers” in different contexts so as to eliminate confusion that may exist.

⁴ <http://www.199it.com/archives/725398.html>

⁵ <https://www.forbes.com/sites/priceconomics/2018/03/09/the-advertising-conversion-rates-for-every-major-tech-platform/>

media marketing. As a result, in this paper we thus aim to theorize *what marketing and social media characteristics might stimulate participants' reposting behavior in social media*.

To provide the structure and foundation for our research model, we employ the theoretical lens of *stimulus-organism-response* (S-O-R) framework (Davis & Luthans, 1980) in our study. Specifically, we propose informational and visual features of a marketing message (i.e., informativeness and image appeal) as marketing stimuli in our proposed S-O-R framework. We use interactivity and social presence to capture the technology features of social media. In an integrated vein, we propose that these marketing and social media stimuli can influence participants' cognitive and affective experience (i.e., perceived utilitarian value and perceived hedonic value), and subsequently affect response (intention to repost). Our findings reveal that in the context of social media marketing, (1) both marketing and media features are important in facilitating participants' perceived value and the subsequent intention to repost a marketing message, and (2) compared to media features, the design of marketing messages has more salient effects in the success of marketing campaign.

This study expects to contribute to the literature in three ways. Firstly, we point out that both marketing and media features are important in facilitating the prosperity of social commerce. Secondly, different from previous IS studies, this research highlights the underestimated role of marketing features. It argues that the success of social commerce requires a more nuanced understanding of the impact of non-technical factors, i.e., the informative and visual aspects of marketing message, on participants' reposting intention and behavior. Thirdly, this study demonstrates the role of utilitarian value (cognitive experience) and hedonic value (affective experience) in the process of forming participant's reposting intention and behavior.

The rest of this paper is structured as follows. After this introduction, the second section presents the literature in the related research domains and theoretical background of the paper. Then hypotheses are developed in the third section. The fourth section describes the details of methodology and the results of this study are presented in the fifth section. We conclude the paper with key findings, implications and future research.

LITERATURE REVIEW

Social Commerce

Social commerce refers to a set of commercial processes that occur in, or are influenced by an individual's social network via social media platforms (Yadav et al., 2013). Nowadays social commerce is an increasingly important part of e-commerce as it leverages social media to assist in e-commerce transactions and business activities (Dong & Wang, 2018; Han et al., 2018; Chen & Shen, 2015; Zhang & Wang, 2012).

It is an integration of both commercial and social interactions mediated by social media platforms. Two essential elements of social commerce have been identified, including social media technologies and commercial activities (Yadav et al., 2013; Liang & Turban, 2012).

Specifically, social media technologies are the infrastructure where social interactions among participants and the commercial activities occur. In the general e-commerce context, participants might be independent of each other and they usually engage in e-business individually (Han et al., 2018; Kim & Srivastava, 2007). However, social media provides a platform where participants can be connected and thus conversations and interactions among them can be enabled. The technological features of social media, covering such as instant chatting box, like/share/follow buttons, review and comment box, social recommendation systems, can functionally support social commerce (Curty & Zhang 2013). At the same time, commercial activities are the other key aspect of social commerce. Some social media platforms may not be commercial at the beginning when they were launched, such as Facebook. However, the diversified social activities on these media (such as experience sharing of online shopping, communications and interactions among participants) increase commercial benefits including leads and sales. These social activities further facilitate the prosperity of social commerce unexpectedly. Therefore, different from the general e-commerce context where participants are separate, social commerce has the big potential in enhancing the connections among individual participants in a single platform.

Social media marketing, as a key part in the process of social commerce, focuses on the need recognition, pre-purchase, and post-purchase stages (Zhang & Benyoucef, 2016). In other words, we argue that social commerce is a broad concept, including a process of commercial activities facilitated by social media (Chaffey & Ellis-Chadwick, 2012). Relatively speaking, social media marketing is a narrow concept, which only focuses on the marketing process in social commerce. Social media marketing incorporates reviews, ratings and comments from community interactions on a social medium so as to understand participants' needs and increase conversion to sale.

Prior research on social media marketing could be largely classified into two streams, based on their different research focuses, viz., the marketing-oriented stream and the technology-oriented stream. Scholars in the former stream mainly focus on the content and design of a marketing message, without differentiating social media marketing from other types of online and offline marketing. Factors related to both the informational content, such as information availability (Mikalef et al., 2013), information valence (Bronner & Hoog, 2014), content format (de Vries et al., 2012), and emotional content of marketing messages, such as emotional sentiment (Swani et al., 2013), are researched. However, this stream of research tends to take social media as a research context and thus largely overlooks the uniqueness of social media marketing. On

the other hand, research in the latter stream pays more attention to technical factors over the specific characteristics of marketing. Most researchers examine the factors associated with media characteristics, such as social relationships among participants (Mortazavi et al., 2014) and perceived ease of use (Barger et al., 2016). This research stream digs much deeper into technological reasons, but meanwhile less interested in exploring the questions such as whether and how marketing efforts can be paid back on social media.

As a part of social commerce, social media marketing also naturally includes two essential elements, viz., social media technologies and marketing activities. Therefore, we argue that a complete and thorough understanding of social media requires research on both sides by examining marketing factors and technological factors simultaneously. Hence in this study, we will investigate how the social media and marketing stimuli, taken together, play a role in the success of social commerce. Below, we apply the Stimulus-Organism-Response (S-O-R) framework as a theoretical foundation of this study.

S-O-R Framework

The Stimulus-Organism-Response (S-O-R) framework provides this study with a structured view of factors that influence the intention to repost a marketing message on social media. This framework predicts that various aspects of the environment (acting as stimulus), cause changes to individuals' cognitive process (acts as organism), which further influences patterns of individual behavior (acting as responses) to the stimulus (Davis & Luthans, 1980; Stanko & Beckman, 2014). According to this framework, *stimulus* is the external factors leading to the change of internal states of individuals. *Organism* refers to the internal cognitive and affective states intervening between stimuli and an individual's final response. Particularly, the cognitive state is the process of thought based on information-processing (Shaver, 1998), whereas the affective state reflects the experience of feeling or emotion (Benlian, 2015). *Response* represents the final decision of individuals on a specific stimulus, including both behavioral intention and actual behavior (Davis & Luthans, 1980). The S-O-R framework highlights the important role of individual cognitive and affective processes in responding to external environmental changes. That is, individuals cognitively and affectively appraise stimulus and respond to it. Studies in IS discipline have drawn on S-O-R framework to explain how features of information technology may affect participants' internal states and their consequent behavior (e.g., Benlian, 2015; Xu et al., 2014; Animesh et al., 2011), thus supporting the general applicability of this theory in IS context. Following the S-O-R framework, we focus on two broad categories of environmental stimuli (i.e., social media and marketing features) that may influence the cognitive and affective states of organism, including the perceptions of utilitarian value (cognitive state) and hedonic value (affective state), which in turn lead to individuals' positive response, e.g., intention to repost social media messages in our research

context. Below we further explain our theoretical approach to establish the proposed research model based grounded on the S-O-R framework.

THEORETICAL DEVELOPMENT

Following the S-O-R framework, we develop several hypotheses that elaborate the specific associations among environmental stimuli in the marketing campaign on social media, participants' cognitive and affective experiences during the campaign, and their responses towards the campaign. Specifically, we pay attention to the informativeness and image appeal as two aspects of marketing stimuli. The level of *informativeness* represents the informational element of a marketing message, while *image appeal* reflects the hedonic value eliciting visual appeal to message receivers. A marketing message including these two aspects of values is more likely to attract receivers' attention and induce their further internal responses (Rahimnia & Hassanzadeh, 2013). The social media stimuli are primarily concerned with the quality of interactions among participants mediated by a social media tool, such as the degree of two-way communication and the degree of control. In this study, we pay particular attention to the social presence and interactivity features. *Social presence* features allow participants to experience communication partners as being psychologically present. *Interactivity* features make a social media tool more effective to mediate communication in a virtual environment.

Further, since the S-O-R model suggests that the effects of stimuli on individual's response would be mediated through organismic experiences, we include both cognitive and affective experiences as the mediators in our research model. Cognitive reactions reflect participants' cognitive evaluation process when they interact with a stimulus. In the social media context, cognitive evaluations relate to whether a marketing message is useful and valuable. Therefore, to represent receivers' cognitive response to a marketing message on social media, perceived *utilitarian value* is included, referring to a participant's subjective assessment of the overall usefulness of engaging in a marketing campaign on social media (Sirdeshmukh et al., 1988).

Compared to cognitive response, affective response refers to an individual's affective appraisal of a stimulus during interaction (Zhou et al., 2012). In the IS literature, one of the most frequently studied affective responses is perceived hedonic value (Ping, 2013; Zhou et al., 2012). Numerous studies have demonstrated the importance of hedonic value on technology adoption (Ali-Hassan et al., 2015; Lowry et al., 2013) and online shopping intention (Benlian, 2015). In this study, we define *perceived hedonic value* as the extent of playfulness and pleasure perceived when a participant receives a marketing message via social media. In summary, consistent with past IS literature, utilitarian value and hedonic value are included to present participations' cognitive and affective evaluation in this online marketing context.

According to the S-O-R model, cognitive and affective factors can elicit a response, which can be either behavioral intention or actual behavior (Benlian, 2015). In the social media context, we regard *intention to repost* as the willingness of participants to take actions to share the message with their friends and to provide feedback on the message content on social media. To summarize, we capture the proposed research model in Figure 1 and the definitions of principal constructs in Table 1. We elaborate on each hypothesis below.

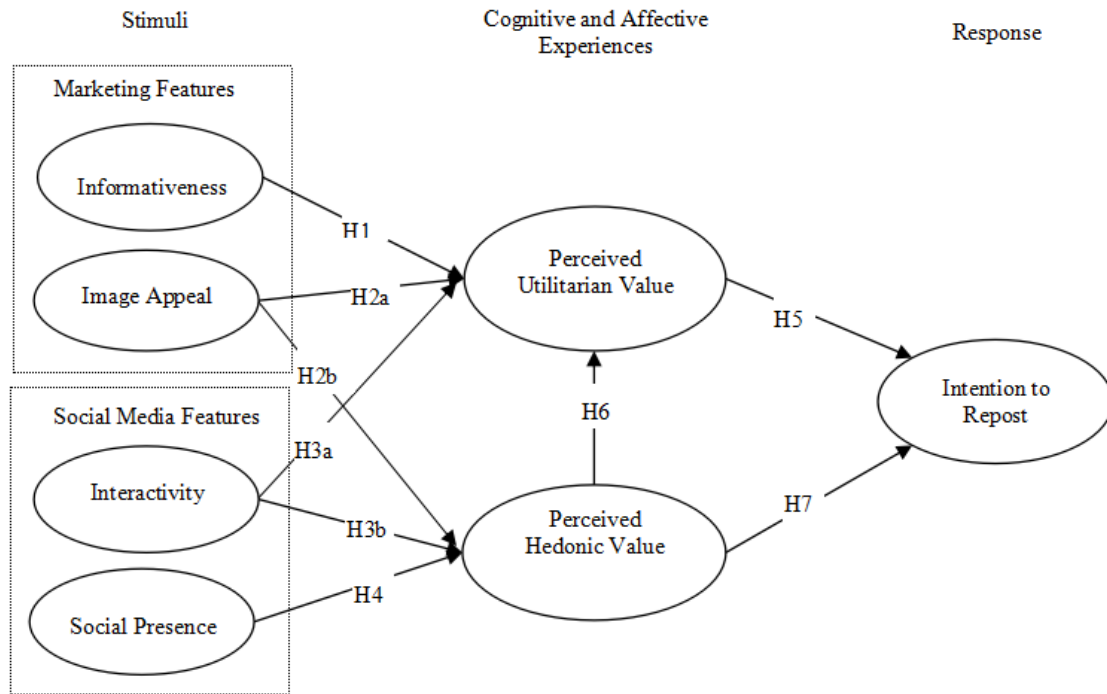


Figure 1. The Proposed Research Model

Constructs	Definitions	References
Informativeness	The relevance and effectiveness of information in a marketing message on social media to meet participants' individual preferences	Ducoffe (1996); Tsang et al. (2004)
Image Appeal	The extent to which images in a message are perceived as appropriate and are aligned to participants' expectations, satisfaction, and interests	Cyr et al. (2009)
Social Presence	The extent to which a media platform enables a participant to perceive communication partners as being psychologically present	Williams (1977); Gefen (2003)
Interactivity	The extent to which a participant believes that the media tool enables interlocutors to actively control interactions and	Ou et al. (2014); Ou & Davison (2011)

Constructs	Definitions	References
Perceived Utilitarian Value	message exchange as they interact with each other, and the degree to which the communication is synchronized The participant's cognitive assessment of the overall utility of engaging in a marketing message on social media in terms of purpose fulfillment and problem solving	Babin et al. (1994); Sirdeshmukh et al. (2002)
Perceived Hedonic Value	The extent of playfulness and pleasure perceived in using social media to repost marketing messages	Babin et al. (1994); Zhou et al. (2012)
Intention to repost	The willingness of participants to take actions as suggested by the marketing campaign, such as sharing the message with their friends and providing feedback on the message content	Wirtz et al (2013)

Table 1. Definitions of Principal Constructs

Marketing Characteristics and Participants' Experience

Informativeness

In social commerce, the marketing features of a marketing message can influence participants' experiences. It is primarily concerned of informational and visual aspects of messages. Informativeness captures the relevance and effectiveness of marketing information on social media to meet participants' individual preferences (Ducoffe, 1996). In other words, the informational goal of social media marketing is to deliver relevant and effective content to participants at the right time to induce a favorable personal experience.

Literature has highlighted the importance of informativeness in both online (web-based) (e.g. Wan et al., 2016; Kim & Han, 2014) and offline marketing (e.g., Tsang et al., 2004; Ducoffe, 1996). That is, the utilitarian value of a marketing message relies on its ability to provide participants with sufficient information so as to facilitate a purchase decision. In this regard, large volume and mixed forms of information, e.g., text, audio, image, and animation, are required for clear explanations about products or service. Different from other online (web-based) and offline marketing, social media marketing is largely mobile-based, and thus provides: 1) sufficient but concise information due to the size of mobile screen; 2) interactive and timely information as it enhances interactions among participants on a medium; 3) personalized information, e.g., location-sensitive information if possible, as participants' access to it by logging in their personal social media accounts.

Previous research has indicated that informativeness of advertisements is associated with participants' positive evaluation towards the quality of advertisements (Martins et al., 2018; Kim & Han, 2014; Zhang et

al., 2014). In social commerce context, perceived utilitarian value is a participant's subjective assessment of the overall utility of a marketing message in terms of purpose fulfillment and problem solving (Zhou et al., 2012). The augmentation of sufficient and concise, interactive and timely, and personalized marketing messages are more effective in attracting participants' attention, and helping them to better understand the marketing campaign. Provided with relevant and effective information, participants are able to evaluate the usefulness of the marketing messages in terms of satisfying their needs, such as understanding the products function, purchasing products, or looking for after-sales service. Therefore, informative marketing messages would facilitate perceptions of the utilitarian value. Based on the above statements, we propose:

H1: Informativeness of a marketing message on social media contributes to a participant's perceived utilitarian value of the message.

Image Appeal

Generally, image appeal refers to "the extent to which images on the website are perceived as appropriate and aligned to participants' expectations, satisfying, or interesting" (Cyr et al. 2009, p.540). In the environment of social commerce, image appeal is associated with not only images of a product, but also images of a human's experience of using the product (Cyr et al., 2009).

Similarly, Ducoffe (1996) points out that prior studies mainly consider informativeness as the only appropriate characteristic of web advertising, while they pay little attention to incorporate other factors like visual elements that may increase the overall value of marketing campaigns. When compared to informational elements, visual elements have found to exert the stronger impact on participants' positive attitude towards technology (Lee et al., 2005). Visual elements have been considered easier to attract participants' attention (Kim et al., 2007), to elicit emotional appeal to participants (Lowry et al., 2012) and enhance participants' positive experience of the technology (Choi, 2013).

Under social commerce context, image design of a marketing message may include graphical, emotional and aesthetic elements. Various types of photographs, colours, shapes and fonts may be encompassed. Appealing images are powerful in terms of facilitating participants' understandings and positive perceptions toward a marketing campaign (Mitchell & Olson, 1981). Firstly, compared to text messages, information with appealing image design requires less cognitive effort to decode, and thus can be easily understood and precisely digested. For instance, a visual image showing the internal structure of an energy-saving microwave is straightforward and thus is more effective to persuade participants than attempting to express those meanings in written words. Secondly, some visual elements could be fast to encode by the message senders due to its naturalness (Dennis et al., 2008). For example, it may be more efficient to express "like"

with visual elements such as a heart or a smiling face than by sending a whole sentence. In addition, a heading highlighted with yellow indicates the importance and attention required. Thus, there is no need to add illustrative words, such as “please note”. The more vivid of the visual rhetoric (e.g., colours, shapes, pictures) of a marketing message on social media is, the more likely participants will perceive the marketing message as valuable and useful. Therefore, we expect a positive relationship between image appeal of a marketing message on social media and a participant’s perceived utilitarian value.

H2a: Image appeal of a marketing message on social media contributes to a participant’s perceived utilitarian value of the message.

In addition to perceived utilitarian value, appealing image in a marketing message on social media can also contribute to a participant’s perceived hedonic value, which has been widely investigated in previous studies (Seckler et al., 2015; Yoo & Kim, 2014; Cyr & Head, 2009). Compared to a social media message with full texts, a message with high-quality pictures is useful to evoke participants’ positive emotions, such as enjoyment (Mathwick et al., 2001), trust (Robins & Holmes, 2008) and loyalty (e.g., Pallud & Straub, 2014). It can also reduce anxiety during information processing (Yoo & Kim, 2014). Therefore, we propose:

H2b: Image appeal of a marketing message on social media contributes to a participant’s perceived hedonic value of the message.

Social Media Characteristics and Participants’ Experience

Interactivity

The technological features of social media can enhance or inhibit interactions among participants and thus influence their experiences with marketing activities on social media. The extent to which participants can perceive highly synchronized interaction with each other is defined as interactivity (Ou et al., 2014). It characterizes the extent to which active control parties have over the communication process and the extent to which their communication is synchronized (Ou & Davison, 2011).

Social media participants are not merely passive recipients of information. In fact, they play an increasingly active role in generating marketing messages with online vendors and other communication participants (Hanna et al., 2011). Specifically, in addition to searching products or service on social media, they can also actively contribute to marketing campaigns on social media by engaging in two-way communications with vendors as well as other participants who offer valuable reviews. In this regard, social media allow participants to involve in communication processes where the subject, timing and sequence of conversations are more under control (Lowry et al., 2009). For example, during the dyadic and interactive communication,

participants can ask for detailed information about the product, negotiate on deals, and resolve conflicts, which helps achieve deep understanding of a marketing campaign (c.f., Ou et al., 2014). Therefore, the interactive characteristics of social media enable participants to receive and contribute useful information, which can enhance their perceived utilitarian value of the message obtained from social media. Thus, we propose:

H3a: Interactivity of a social media contributes to a participant's perceived utilitarian value of marketing messages received from the media.

In addition, a high level of interactivity on social media among participants creates a sense of control and autonomy, which instills hedonic emotion of enjoyment (Animesh et al., 2011). Interactivity features, such as the comments box, buttons for "like", and buttons for tagging people, enable participants synchronously to interact with others and control communication processes. Participants are able to post and repost a marketing message, and interact with others below a post, such as clicking "like" and providing comments. As a result, participants are more likely to perceive positive experiences, such as enjoyment when involving in a marketing campaign. Thus, we propose:

H3b: Interactivity of a marketing message on social media contributes to a participant's perceived hedonic value of marketing messages received from the media.

Social Presence

Social presence refers to the extent to which participants perceive the psychological presence of communication partners (Williams, 1977) and is characterized with personal and sensitive human contact in a social context (Short et al., 1976). A communication medium is perceived as "high social presence" if information conveying a feeling of human contact and sociability can be transmitted (Hassanein et al., 2007). High social presence is typically found in face-to-face communication (interpersonal and synchronous), while low social presence is often found in printed letters (mediated and asynchronous). The aim of social media is to facilitate social presence and build rich interpersonal relationships among participants, especially those far away from each other. Tools embedded in social media, such as message box, icon box, audio or video chat, facial expressions, postures, and other non-verbal cues enable participants to bridge distance through instant communications and interactions, which thereby evoke perceptions of social presence in social media. Since communication enjoyment is generally built through ongoing interactions among communication parties, a high level of social presence could be a prerequisite of individuals' perceived hedonic value. As also confirmed by past research (Hassanein & Head, 2007), enjoyment is a prominent psychological consequence of social presence.

In a marketing campaign on social media, the higher level of personal and intimate interactions among participants contributes to participants' more favorable affect towards the campaign, such as perceived hedonic value. Participants are more likely to find the campaign enjoyable when they are able to chat, make fun, and play with friends during the campaign. As illustrated in the "hairy crab" case, WeChat enables participants to perceive psychological presence by "liking" and commenting to others' posts. Thus, collecting "like" for a marketing message from friends makes the information dissemination process both social-oriented and business-oriented. More enjoyment and fun would be received by engaging in the marketing campaign on social media. We thus propose:

H4: Social presence of a marketing message on social media contributes to a participant's perceived hedonic value of the message received from the media.

Perceived Utilitarian Value and Perceived Hedonic Value as Organism

Intention to repost indicates the willingness of participants to share marketing messages with their friends and to provide feedbacks to the content of messages. Since participants have been examined as a predictor of behavioral intention by IS researchers (e.g., Ou et al., 2014; Lowry et al., 2012), we suggest that participants' perceptions, including perceived utilitarian value and perceived hedonic value, could explain online participants' intentions to repost marketing messages on social media.

In marketing literature, perceived utilitarian value is characterized as the general evaluation of whether a particular need stimulating a shopping behavior could be accomplished (Babin et al., 1994). In the context of social media marketing, participants are motivated to repost a marketing message for accomplishing various needs, e.g., showing support to the product or service, engaging in discussions, or receiving incentives. Therefore, a useful marketing message would be more favorable among participants, and thus be reposted. Since intention to repost the marketing message on social media is a cognitive decision, it would be suggested that greater perceived utilitarian value of the message encourages participants' intention to share it with their friends. Thus, we propose:

H5: A participant's perceived utilitarian value of a marketing message on social media contributes to his/her intention to repost the message.

According to Babin et al. (1994), perceived hedonic value is described as the extent of playfulness and pleasure perceived in using a communication medium. Previous studies have examined the impact of one's perceived enjoyment on perceived usefulness in the IS adoption field (Xu et al., 2014; Li et al., 2005; Venkatesh, 2000), especially under voluntary technology adoption contexts. In context of social media marketing, individual participants who are pleased with a marketing campaign would find more hedonic

value and are expected to engage in it. Such pleased participants may pay more attention to the received marketing messages because they enjoy the campaign and thus do not hesitate to spend time compared to those who are less pleased. Satisfied participants may better understand the purpose and content of marketing messages and thus find that engaging in the marketing campaign would fulfill their needs and provide them with utilitarian value. Therefore, enjoyment, pleasure or fun derived from engaging in the marketing campaign on a social media platform contributes to perceived utilitarian value. Hence, we propose:

H6: A participant's perceived hedonic value of a marketing message on social media contributes to his/her perceived utilitarian value of the message.

In IS literature, perceived enjoyment has been tested as the intrinsic motivation to technology acceptance and the positive effect of perceived enjoyment on usage intention has been demonstrated in a large number of studies (McLean, 2018; Ledbetter et al., 2016; Zhou et al., 2012; Van der Heijden, 2003). Since social media are normally used as communication channels, perceived hedonic value, a specific aspect of perceived enjoyment, is examined as an alternative to perceived enjoyment in this study. Following Teo et al. (1999), individuals may be more likely to engage in a particular behavior if it is enjoyable and funny. Thus, we can suggest a positive relationship between perceived hedonic value and online participants' intention to participate in a marketing campaign of social media.

H7: A participant's perceived hedonic value of a marketing message on social media contributes to his/her intention to repost the message.

METHODOLOGY

Measures

To test the above hypotheses empirically, we collected cross-sectional survey data from the participants of WeChat platform. WeChat, which is the most popular closed-circle social media now in Chinese-speaking areas, including China, Singapore, Malaysia and Taiwan, currently has more than 1 billion active monthly participants (Wikipedia, Oct 7 2018). It connects people in an exclusive circle of real friends, rather than strangers from a virtual world, which leads to high levels of sharing, reading and interaction (Wang & Feng, 2017). The participants under this study are those who use WeChat moments (a content-sharing function embedded in WeChat) to post information and social with friends (Appendix A).

For all constructs in the proposed research model, we adapted measures used in prior literature with minor modifications to fit the social media context. Specifically, informativeness was measured based on the items from Tsang et al. (2004). Items for image appeal were adapted from Cyr et al. (2009). Social presence was

measured by the items developed by Gefen et al. (2003). Items for interactivity were adapted from the study of Ou and Davison (2011). Similarly, items for perceived hedonic value were developed based on the studies of Babin et al. (1994) and Zhou et al. (2012). For perceived utilitarian value, we adapted the measures from Sirdeshmukh et al. (2002). For intention to repost, items from Wirtz, et al. (2013) were adapted into our research context. All the construct items were measured using 7-point-Likert scales, ranging from 1 (strongly disagree) to 7 (strongly agree). The final items and the source for each construct are listed in Appendix B.

Data Collection

A scenario-based survey was adopted as the method for data collection in this study. We chose the survey method because it is considered more advantageous in terms of external validity and generalization when compared to experiment (Pinsonneault and Kraemer 1993). The survey method suits our research objective to enhance the application of our research findings into a broader scope. Since the construct items were originally established in English while this study was conducted in the Chinese context, we carried out a forward-backward translation process by two researchers and one master student majored in English. In order to ensure the construct validity and reliability of the instrument, we distributed the questionnaire to 30 WeChat moments users and made further revisions based on their comments prior to the formal survey.

Items	Category	%	Items	Category	%
Education	College or lower	25.4	Activities on WeChat	Post messages	15.4
	Bachelor	62.4		Repost or share messages	12.9
	Master or above	12.2		Chat	69.9
Age	Under 18	0.7		Others	1.7
	18~24	86.3	Frequency of Using WeChat	Once or less month	0.7
	25-34	10.7		Several times a month	2.7
	Above 18	2.2		Several times a week	6.0
Gender	Male	27.4		Once a day	10.7
	Female	72.6		Many times a day	79.9

Table 2. Demographics of Survey Respondents (n=402)

In the main study, invitations to participate in an online survey was sent through WeChat to students (including undergraduate, graduate and MBA students) in a major university located in Guangzhou, China, which ensures all participants are active WeChat users. 416 responses were collected in total. In the survey, participants were required to read a scenario (see in Appendix C) where they were asked to imagine they

receive a marketing message in their WeChat moments. After reading the scenario, participants were asked to answer questions based on the scenario. As designed by the online survey website, all questions were compulsory before finishing the survey. Following the recommendations from recent studies (e.g., O’Leary et al., 2014; Huang et al., 2012), two “captcha” questions were included, with one at the middle and another one at end of the questionnaire, to deter and detect careless or haphazard responses. These two questions were “ ‘up’ is to down as ‘in’ is to__” and “999 minus 12 equals to ___”. Based on the answers of these questions, 14 responses were removed from the sample out of all the 416 surveyed students due to careless or haphazard answers. So in total 402 valid responses were used for statistical analysis⁶. We found no significant differences in the demographic variables between the 402 valid responses and those 14 removed responses. Table 2 presents the demographic characteristics of the survey respondents for statistics.

There are more females and more participants aged from 18 to 24 years old in our sample. The profiles correspond closely to the demographic characteristics of WeChat moments users reported in the recent industrial report (China Statistical Report on Internet Development 2017), which indicates that the majority of WeChat moments users are female and with education levels of a bachelor degree or lower.

DATA ANALYSIS AND RESULTS

Structural equation modeling (SEM), specifically AMOS 17.0, was used for the data analysis. It is a multivariate technique that combines aspects of multiple regression and factor analysis to estimate a series of interrelated dependence relationships simultaneously (Hair et al., 1998). That is, two-step data analyses were done to first assess the measurement model and then test the hypotheses by fitting the structural model.

Measurement Model

The measurement model was evaluated prior to the structural model, in terms of construct reliability, unidimensionality, convergent validity, and discriminant validity. The model includes eight constructs with 35 items. Table 3 shows the descriptive statistics, correlations, reliabilities, and the square root of average variance extracted (AVE) for all constructs. As expected, all item loadings were greater than the criterion 0.70 and the loadings within the constructs were higher than the loadings across constructs (Appendix D). For internal consistency, the values of Cronbach’s alpha and composite reliabilities were all greater than 0.707 (Nunnally & Bernstein, 1994). In addition, the AVE for each construct was higher than 0.50,

⁶ We analyzed Mahalanobis Distance (MD) in SPSS to eliminate the outliers. The values of MD for all responses were compared to χ^2 distribution. The results indicated that five responses have large MD value greater than the critical χ^2 value (Walczuch et al., 2007). However, the regression analysis indicated that there were no significant differences between the results with and without these five responses. Therefore, these responses were kept in the data set.

suggesting that observed items explain more variance than the error terms (Fornell & Larcker, 1981). Unidimensionality was also supported by AVE higher than 0.50 and composite reliabilities higher than 0.70 (Segers, 1997). Finally, the square root of AVE of a construct was higher than its correlations with other constructs, suggesting good discriminant validity of the measurement model in this study (Fornell & Larcker, 1981).

In order to address the potential common method bias problem in this cross-sectional survey, we added two “captcha” questions as an “instructional manipulation check” and to filter haphazard responses (O’Leary et al. 2014). In addition, we took several steps to proactively reduce the extent of potential common method bias, following Podsakoff, Mackenzie, and Podsakoff (2003). First, the principal component factor analysis indicates that each principal factor explains the roughly equal variance. Second, the correlation matrix (Table 3) shows that all correlations are below 0.76, while common method bias is often evidenced by extremely high correlations ($r > 0.90$) (Bagozzi et al. 1991). These results show that common method bias does not threaten the validity of the study.

Construct	Mean	S.D.	Cronbach's α	Composite Reliability	IF	IA	SP	INT	PUV	PHV	IR
IF	4.33	1.07	0.8	0.88	0.86						
IA	4.27	1.05	0.92	0.94	0.63	0.83					
SP	5.04	1.04	0.9	0.92	0.45	0.50	0.85				
INT	5.17	1.06	0.81	0.89	0.38	0.46	0.64	0.88			
PUV	3.82	1.17	0.9	0.93	0.51	0.59	0.44	0.36	0.88		
PHV	3.91	1.30	0.96	0.97	0.47	0.61	0.48	0.40	0.63	0.96	
IR	3.70	1.30	0.94	0.95	0.47	0.51	0.33	0.28	0.62	0.67	0.89

Note. IF=Informativeness; IA=Image Appeal; SP=Social Presence; INT=Interactivity; PUV=Perceived Utilitarian Value; PHV=Perceived Hedonic Value; IR=Intention to Repost. Diagonals represent the square root of value of average variance extracted (AVE). Off diagonal elements are the correlations among constructs.

Table 3. Descriptive, Internal Consistency, Convergent and Discriminant Validity

Structural Models

After verifying the measurement model, we then proceeded to examine the structural model fit. As explained in the hypothesis development section, the effect of image appeal on perceived hedonic value (H2b) and the effect of interactivity on perceived utilitarian value (H3a) have been comprehensively investigated in previous studies. Consequently, H2b and H3a were not the focal hypotheses of this study and thus they were only included in the statistical model for the controlling purpose. In order to test and compare the different

effects of marketing and social media stimuli on participants' perceived value, we employ two structural models in the statistics. Table 4 summarizes of model fit indices and results of the two statistical models.

Specifically we first tested a parsimonious model by excluding the proposed H2b and H3a in the statistics. By doing so, we could observe the net effect of marketing stimuli on utilitarian value, as well as the net effect of social media stimuli on hedonic value, respectively. As shown in Table 4, the overall goodness-of-fit was examined using the following six common model fit measures, viz., chi-square/degree of freedom, CFI, TLI, RMSEA, AGFI, NFI, and IFI. The ratio of χ^2 to the degree of freedom (1.93) is within the acceptable limit. RMSEA (0.06) was between than the recommended interval (0.05-0.08) (Browne & Cudeck, 1993). Even though GFI (0.88) is a little bit lower than the required threshold of 0.90, AGFI (0.86) is larger than 0.80. All other indices are within accepted thresholds, including CFI at 0.96, TLI at 0.95, and IFI at 0.96. These results indicate the overall research model was supported. The model successfully explained 52% of the variance in participants' intention to repost. Perceived utilitarian value was directly impacted by informativeness (H1: $\beta=0.23$, $p<0.001$) and image appeal (H2: $\beta=0.24$, $p<0.001$). Perceived hedonic value was predicted by both social presence (H3: $\beta=0.32$, $p<0.001$) and interactivity (H4: $\beta=0.20$, $0.001<p<0.01$), yielding an explained variance of 23%. The data showed that perceived utilitarian value was also predicted by perceived hedonic value (H6: $\beta=0.43$, $p<0.001$). Participants' intention to repost was predicted by both perceived utilitarian value (H5: $\beta=0.35$, $p<0.001$) and perceived hedonic value (H7: $\beta=0.45$, $p<0.001$). Among all the demographic characteristics in the model, the frequency of using WeChat was the only significant control variable contributing to reposting intention ($\beta=0.21$, $0.001<p<0.01$).

	The parsimonious model	The hypothesized model
H1: informativeness \rightarrow perceived utilitarian value	0.23***	0.23***
H2a: image appeal \rightarrow perceived utilitarian value	0.24***	0.27***
H2b: image appeal \rightarrow perceived hedonic value	Not included	0.51***
H3a: interactivity \rightarrow perceived utilitarian value	Not included	0.020 ns
H3b: interactivity \rightarrow perceived hedonic value	0.20**	0.002 ns
H4: social presence \rightarrow perceived hedonic value	0.32***	0.23***
H5: perceived utilitarian value \rightarrow intention to repost	0.35***	0.32***
H6: perceived hedonic value \rightarrow perceived utilitarian value	0.43***	0.32***
H7: perceived hedonic value \rightarrow intention to repost	0.45***	0.46***
χ^2/df (recommended threshold: <3.0)	1.93	1.82
CFI (recommended threshold: >0.90)	0.96	0.92
TLI (recommended threshold: >0.90)	0.95	0.94
RMSEA (recommended threshold: 0.05-0.08)	0.06	0.07
Standardized RMR (recommended threshold: <0.08)	0.73	0.61
GFI (recommended threshold: >0.90)	0.88	0.89

AGFI (recommended threshold: >0.80)	0.86	0.88
NFI (recommended threshold: >0.90)	0.93	0.86
IFI (recommended threshold: >0.90)	0.96	0.93
R ² : Perceived utilitarian value	57%	49%
R ² : Perceived hedonic value	23%	42%
R ² : Intention to repost	52%	50%

Table 4. Parameter Estimates, Model Fit Statistics and Variance Explained

(***Significant at $p < 0.001$ level; ** Significant at $0.001 < p < 0.01$; ns indicates insignificance)

After confirming the significant net effects of marketing stimuli on utilitarian value and also social media stimuli on hedonic value respectively, we then tested the hypothesized model by including H2b and H3a in the statistics. The results in Table 4 demonstrated acceptable fit [$\chi^2/df=1.82$; CFI=0.92; TLI=0.94; RMSEA=0.07; SRMR=0.61; GFI=0.89; AGFI=0.88; IFI=0.93], except GFI(0.89) and NFI (0.86) were slightly smaller than the threshold of 0.90. Except H3a and H3b, all hypothesized relationships were supported by the data. Specifically, perceived utilitarian value was significantly influenced by marketing stimuli, including informativeness (H1: $\beta=0.23$, $p < 0.001$) and image appeal (H2: $\beta=0.27$, $p < 0.001$). Perceived hedonic value was significantly influenced by image appeal (H2b: $\beta=0.51$, $p < 0.001$) and social presence (H4: $\beta=0.23$, $p < 0.001$). Both perceived utilitarian (H5: $\beta=0.32$, $p < 0.001$) and hedonic value (H7: $\beta=0.46$, $p < 0.001$) contributed significantly to reposting intention. Perceived utilitarian value also predicted perceived hedonic value (H6: $\beta=0.32$, $p < 0.001$). Among all control variables, the frequency of using WeChat was significantly related to reposting intention ($\beta=0.20$, $0.001 < p < 0.01$). The variance explained to reposting intention is 50% in the hypothesized model.

The combination of the parsimonious model (shown in Figure E1 in Appendix E) and the hypothesized model (shown in Figure E2 in Appendix E) provide interesting results. Based on the parsimonious model, we found that marketing and social media stimuli can yield significant impacts on perceived utilitarian and perceived hedonic value respectively. However the inclusion of the path between image appeal and hedonic value (H2b) made the impact of social media's interactivity on hedonic value (H3b) insignificant. Meanwhile, the statistics also indicated insignificance of interactivity on utilitarian value (H3a). We explain these findings in the discussions section below.

We also conducted a post-doc analysis on mediating effects of perceived utilitarian and hedonic value (Appendix F), following the three-step method suggested by Baron and Kenny (1986). The results indicate that perceived hedonic value was the full mediator between marketing stimuli and participants' intention to repost, while perceived utilitarian value was the partial mediator between social media stimuli and intention to repost. In addition, perceived hedonic value also fully mediated the relationship between interactivity and

intention to repost. The post-doc analysis highlights the critical role of perceived hedonic value as a full mediator between marketing stimuli and participants' repost intention towards a marketing message on social media.

DISCUSSIONS

Key findings

This research aims to understand what marketing and social media characteristics might stimulate participants' reposting behavior in social media. In order to do so, we formulated seven hypotheses and conducted a survey to understand the effects of marketing-related and social media-related factors on participants' intention to repost marketing messages on social media. The research results indicate that our hypothesized research model was supported. Specifically, in line with our expectations, perceived utilitarian value and perceived hedonic value collectively explained 50% of the variance in participants' intention to repost. Perceived utilitarian value, in turn, was predicted by perceived hedonic value. The importance of perceived utilitarian and hedonic value suggests that a participant's perceived value of a marketing message on social media would significantly influence his/her intention to repost and share it with friends.

The positive relationship between marketing stimuli (informativeness and image appeal) and perceived utilitarian value implies the critical roles of information content and visual elements of marketing messages in facilitating perceived utilitarian value. Participants are more likely to understand a marketing message better if it is informative and image appealing. In addition, social media stimuli, including social presence and interactivity, would facilitate the formation of perceived hedonic value, since hedonic value can be lubricated with intimate and interactive communications. Our results strongly support the view that the immediacy and intimacy created by social media can facilitate participants' enjoyment and emulate the communication processes that occur in a physical context. Participants with higher perception of social presence may better enjoy the communication process through social media. In addition, our post-doc analysis indicates the importance of perceived hedonic value on facilitating participants' intention to repost a marketing message on social media.

Interestingly, the analyses of two competing structural models revealed the different impacts of marketing and social media stimuli on the two aspects of perceived value. While social media features had direct impacts on participants' perceived hedonic value, these impacts became insignificant when image appeal were included into the model. In addition, only marketing features contributed to participants' perceived utilitarian value. This suggests that regardless of the technology features, participants do care about the content of messages, viz., informative and visual aspects, when involving in a marketing campaign on social

media. They calculate the utility and evaluate the enjoyment of the campaign based on the marketing messages they receive from social media, rather than focusing the media per se. This suggests the strong competing effects of marketing stimuli, highlighting the importance of message content. That means even though participants may perceive low levels of interactivity and social presence of a communication medium, they still value the utility and pleasure when receiving an informative marketing message with appealing images from the platform.

Limitations and Future Research

In addition to the above key findings, this paper also has several limitations to be mentioned. First, this study recruited undergraduate, graduate and MBA students in a major university in China as the survey sample. Although there is no evidence denying college students as the major participants of social media marketing, we cannot generalize our research findings to other studies employing broader social media participants. Moreover, the views of participants of social media marketing in China may be somewhat different from the views of participants abroad. Consequently, it would be appealing to see if the study results vary cross other samples. In addition, this study collected data through a scenario-based survey. Future research may continue to explore the impact of both marketing and social media stimuli on participants' reposting behavior by using other research methods, such as a lab experiment. Both marketing and social media stimuli can be manipulated on a social media platform in the experiment so as to provide more empirical support to the current research model.

Moreover, WeChat was examined as the target social media tool in our study. Since various kinds of social media distinguish themselves with different core features and functions, it is not clear whether the results of this study can be applied to other social media contexts. To address this concern, researchers should consider the generalization of online participants' behavioral patterns through multiple social media platforms.

Finally, it must be noted that our study examined participants' intention to repost marketing messages instead of actual reposting behavior on social media. Due to the data privacy concern on WeChat, we were not able to collect objective data on actual reposting behavior. Although intention is a strong predictor for behavior (Benlian 2015; Animesh et al. 2011), online participants appear to have a variety of options in a social and interactive environment before they make the final decision. Therefore, researchers are suggested to employ a longitudinal design in future studies in order to examine online participants' actual behavioral pattern.

Implications for Research and Practice

To conclude, this study contributes to theory from three different ways. Firstly, this research highlights the important role of participants' reposting behavior in the success of social commerce. Understanding information dissemination behavior, especially participants' reposting intention and behavior, is critical in the marketing campaign of social commerce. While many online behaviors have been investigated in previous studies, most of them focus on posting intentions (e.g., Farivar et al. 2018) and purchase intentions (e.g., Lin et al., 2017). Intention to repost, a voluntary content sharing intention, has been largely ignored. Based on the definition, the success of social commerce requires both commercial activities and interactions among participants (Yadav et al., 2013; Liang & Turban, 2012). On social media platforms, reposting behavior speeds up the dissemination of information by facilitating participants' interactions, which provides opportunities for future commercial activities, such as online and cross-selling. As indicated in the hairy crab case at the beginning of this study, it hardly reached a large population of potential participants without individuals' voluntarily reposting behavior in social media marketing. Therefore, this study contributes to the literature by incorporating reposting intentions as the outcome of a successful marketing campaign on social media. The critical role of intention to repost in social commerce, especially in the marketing process of social commerce should be paid more attention in future studies on social commerce.

Secondly, prior research on social media has mainly focused on either marketing or technological aspects (e.g., Ngai et al. 2015). Scholars adopting the former aspect mainly focus on the content and design of a marketing message, without differentiating social media marketing from other types of marketing (e.g., Hajli et al. 2017; Zhou et al. 2013; de Vries et al., 2012). In contrast, research leveraging the latter aspect mainly pays more attention on technical factors, without emphasizing the value of social media for marketing activities by looking at marketing factors (e.g., Yu, et al. 2018; Liu et al., 2016; Lu et al. 2016). Recognizing the deficiency in these two aspects and the need to integrate the both, we demonstrate that both technological and marketing features are important to generate participants' positive experience with social media marketing and, subsequently, their intention to repost a marketing message. By integrating these two types of features, our study contributes a more holistic predictive model of designing a marketing message in social commerce research, instead of narrowly emphasizing either marketing or technological aspects.

Thirdly, related to the first point, this research highlights the importance of marketing features, rather than the media features in predicting participants' reposting intention. That is, participants rely more on the content of messages when evaluating the value of a marketing campaign and developing subsequent reposting behavior, and less on the media platform where this campaign is conducted. Even the role of technology has been touted in previous IS research, this study points out that, under the context of social

media marketing, the importance of developing a more nuanced theoretical understanding on the impact of non-technical factors, e.g., the informative and visual aspects of marketing messages, on participants reposting intentions and behavior.

Fourthly, we extend the literature associated with the S-O-R framework by conceptualizing the stimuli, organism and responses under the context of social media marketing. Specially, we highlight that the marketing and social media features of the messages posted in social media contribute to perceived utilitarian value (cognitive experience) and perceived hedonic value (affective experience) separately. These two constructs are important as they show the underlying mechanisms between stimuli to responses. That is, why certain marketing and social media features can lead to stronger positive impacts on participants' reposting intention of marketing messages on social media.

This paper also contributes to practice. Most companies are still in the phase of exploration and experimentation in social commerce and are struggling to understand the implications of social media for their business, especially for marketing activities. This study offers insights to managers who are irrationally involving in the mania of social media marketing without paying enough attention to the critical success factors. Specially, our results suggest that managers should not only consider choosing social media platforms, but also focus on the design of marketing elements in marketing messages on social media. Managers usually put much more efforts in choosing the most popular social media platforms. However, a popular social medium with well-designed technical features supporting interactivity and social presence does not sufficiently guarantee the success of a marketing campaign. Instead, vivid and sufficient marketing elements, such as rich information and appealing images, are another key to attract participants' intention to repost. By doing so, participants are more likely to appreciate the value of and enjoy involving in social commerce which in turn increases intention to repost the marketing message. Our findings suggest that social media developers should offer more message design features, especially sufficient informational and visual elements, in order to support successful marketing campaigns.

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Appendix A. Screenshots of WeChat



Figure A1. Screenshot of a marketing message posted at WeChat Moments



Figure A2. Screenshot of details of a marketing message posted at WeChat Moments

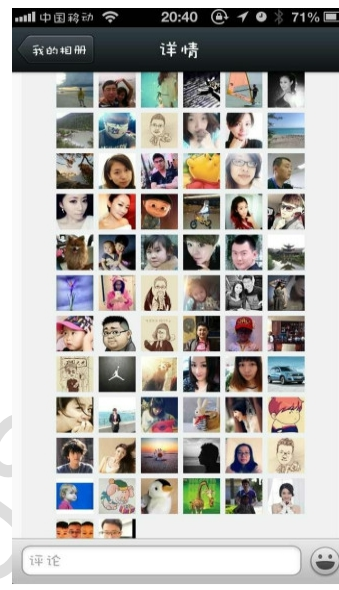


Figure A3. Screenshot of a list of friends who clicked "like" for the reposted message

Appendix B. Construct measurement

Construct	Measure	Sources
Informativeness (IF)	IF1. I feel that WeChat marketing activity is a good source for timely information.	Tsang et al (2004)
	IF2. WeChat marketing activity provides the information I need.	
	IF3. WeChat marketing activity provides the information I am interested in.	
Image Appeal (IA)	IA1: The images used in the WeChat marketing message appeal to me emotionally.	Cyr et al. (2009)
	IA2: The images used in the WeChat marketing message are appropriate.	
	IA3: The images used in the WeChat marketing message are satisfying.	
	IA4: I prefer images of people using the products.	
	IA5: I prefer images of products only.	
	IA6: The images used in the WeChat marketing message are attracting.	
	IA7: The images used in the WeChat marketing message are exciting.	
	IA8: The images used in the WeChat marketing message are interesting.	
	IA9: The images used in the WeChat marketing message make the products look appealing.	
Social Presence (SP)	SP1. There is a sense of human contact in WeChat.	Gefen and Straub (2003)
	SP2. There is a sense of personalness in WeChat.	
	SP3. There is a sense of sociability in WeChat.	
	SP4. There is a sense of human warmth in WeChat.	
	SP5. There is a sense of human sensitivity in WeChat.	
Interactivity (INT)	INT1. I am able to control my communication at WeChat.	Ou and Davison (2011)
	INT2. Via WeChat, the other parties can respond to my communication quickly.	

		INT3. Using WeChat allows me to acquire information in an interactive way.	
Perceived Utilitarian Value (PUV)		PV1. The WeChat marketing activity offers value for money. PV2. The WeChat marketing activity is beneficial to me. PV3. Participating in the WeChat marketing activity is worthwhile to me. PV4. Overall, participating in the WeChat marketing activity delivers me good value.	Sirdeshmukh et al. (2002); Babin et al. (1994);
Perceived Hedonic Value (PHV)		PCE1. I find participating in WeChat marketing activities to be enjoyable. PCE2. The actual process of participating in WeChat marketing activities is pleasant. PCE3. I have fun participating in WeChat marketing activities.	Babin et al. (1994); Zhou et al. (2012)
Intention to Repost (IR)	to	IR1: If I had the chance to repost a WeChat marketing message, I would do so. IR2: It is probable that I am going to repost a WeChat marketing message. IR3: I am ready to repost a WeChat marketing message at any time. IR4: If and when the occasion arises I will repost this WeChat marketing message. IR5: Even if this marketing message is also posted on alternative social media, I prefer repost it on WeChat.	Wirtz et al (2013)

Appendix C. The scenario used in the survey questionnaire

In the next section, you will read a scenario and answer several questions based on the scenario. Please imagine the scenario as a real event in your daily life.

Scenario:

The CEO of an e-commerce company in your city posted a marketing campaign message titled “Get Your Free Hairy Crab by Collecting ‘Like’” in his/her WeChat Moments. Anyone who reposts this message in his/her Moments and receives 64 “likes” from friends will receive a box of hairy crabs valued 888 RMB.



Suppose one of your friends posted this marketing message in his/her Moments, how would you feel and how would you respond to this message? Please reply to following questions based on your real thoughts. There are no right or wrong answers for these questions.

Appendix D. Results of Principal Components Factor Analysis

	IF	IA	SP	IT	PV	PCE	IR
IF1	0.81						
IF2	0.79						
IF3	0.77						
IA1		0.78					
IA2		0.80					
IA3		0.77					
IA4		0.74					
IA6		0.81					
IA7		0.73					
IA8		0.69					
IA9		0.65					
SP1			0.75				
SP2			0.78				
SP3			0.74				
SP4			0.80				
SP5			0.79				
INT1				0.75			
INT2				0.72			
INT3				0.81			
PUV1					0.74		
PUV2					0.76		
PUV3					0.76		
PUV4					0.72		
PHV1						0.75	
PHV2						0.76	
PHV3						0.75	
IR1							0.83
IR2							0.85
IR3							0.87
IR4							0.84
IR5							0.71

Appendix E. The results of two statistical models

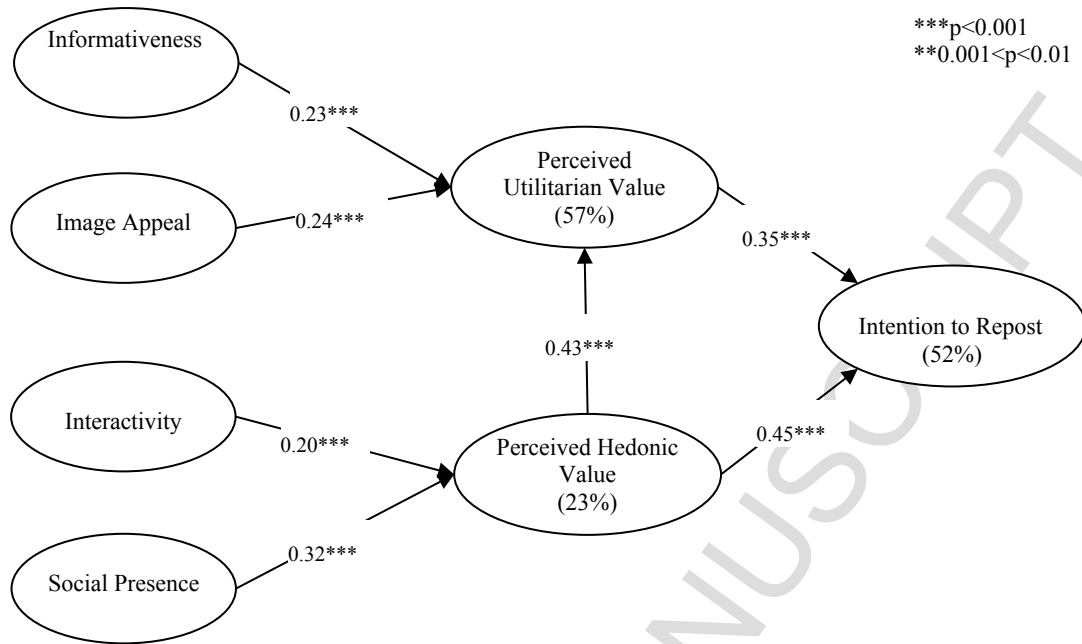


Figure E1. Results of the Parsimonious Model

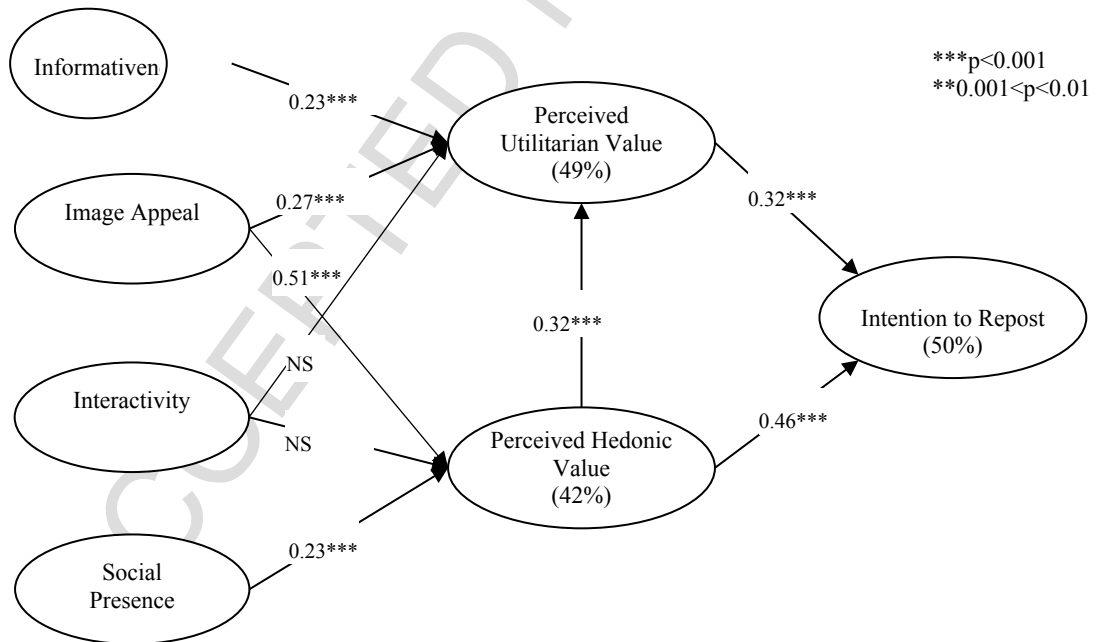


Figure E2. Results of the Hypothesized Model

Appendix F. The Post-doc Analysis on Mediating Effects

List of IV, Mediator, DV and Coefficients in Regressions							Results
IV	M	DV	IV→DV	IV→M	IV+M→DV		
					IV→DV	M→DV	
IF	PUV	IR	0.53***	0.55***	0.28***	0.45***	Partial mediation effect
IA	PUV	IR	0.54***	0.61***	0.27***	0.44***	Partial mediation effect
IA	PHV	IR	0.54***	0.61***	0.21***	0.53***	Partial mediation effect
INT	PUV	IR	0.27***	0.34**	0.06 ns	0.58***	Full mediation effect
INT	PHV	IR	0.27***	0.36**	0.02 ns	0.65***	Full mediation effect
SP	PHV	IR	0.33***	0.46***	0.02 ns	0.64***	Full mediation effect

*** Significant at $p < 0.001$ level; ** Significant at $0.001 < p < 0.01$ level; ns indicates not significant.

IV: independent variable; M: mediator; DV: dependent variable (Manager-assessed Service Performance).

The three-step mediation test suggested by Baron and Kenny (1986):

Step 1: IV→DV is significant.

Step 2: IV→M is significant.

Step 3: IV + M→DV: (a) If M is significant and IV is not significant, then M fully mediates the impact of IV on DV. (b) If both M and IV are significant, then M partially mediates the impact of IV on DV.

Media or Message, Which is the King in Social Commerce?:

An Empirical Study of Participants' Intention to Repost Marketing Messages on Social Media

- Participants' perceived utilitarian and hedonic value as the two key mediating mechanisms to transmit the effects of marketing stimuli and social media stimuli on participants' intention to repost a marketing message on social media.
- Informativeness and appealing image capture marketing stimuli, and interactivity and social presence capture social media stimuli.
- marketing stimuli has more salient effects in predicting participants' reposting intention when compared to social media stimuli