

Impact of Appraisal Concerns on Marketing Information Sharing Behavior in Social Commerce: Integrating User Emotions and System Feedback Dynamics

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Abstract: This study, grounded in the theory of evaluation apprehension, aims to develop a comprehensive model that integrates user psychology, emotional dynamics, and system functionalities to examine user behavior in marketing information sharing. A methodological blend of online surveys and offline lab experiments is employed to explore the obstructive role of evaluation apprehension in the dynamics between perceived sharing value and the behavior of sharing marketing information. Additionally, the study investigates the operational mechanism of system feedback attributes - a distinct system characteristic - in the user sharing process, specifically focusing on its moderating effect on the inhibitory influence of evaluation apprehension. On a practical note, it provides strategic insights for businesses from the angles of user psychology, reward mechanism design, and system architecture to encourage more active user participation in sharing marketing information.

Keywords: Perceived Sharing Value; Self-serving Elements; Emotional Dynamics; Virtual Organization; User Participation.

1. Introduction

In recent years, the behavior of information sharing and dissemination by users has emerged as a pivotal subject of academic inquiry. Studies have predominantly investigated the determinants of users' willingness to share from three perspectives: the characteristics of the information, user emotions, and system features. These studies have largely focused on contexts such as news, health, and medical crowdfunding, while the sharing and dissemination of marketing-related information have received relatively less attention. The limited research in this area has mostly centered on unveiling the mechanisms behind users' information-sharing behavior from a positive standpoint, encompassing factors such as community interactivity, economic incentives, and anticipated positive emotions (Hua, Wu, & Zheng, 2017). However, there is a notable scarcity of in-depth research on potential negative emotions and other impediments in the user sharing process. As the old saying goes, "money talks can harm relationships." In social media, the most distinct feature of marketing information lies in its economic and business attributes. Sharing such information may inadvertently reveal personal details about one's financial status and consumption philosophy. Recent studies have found that the higher the complexity of friends on a personal social platform, the lower the user's intention to post commercial information on social networking sites. Additionally, users believe that even if they share such information, it might be ignored by their friends (Hong et al., 2017). Furthermore, the feedback from the audience after sharing is a significant concern for the information sender. Therefore, before sharing marketing information, users need to expend more cognitive resources to weigh the pros and cons, making them more cautious in their communication. Especially, users have certain expectations about the outcomes of sharing information, weighing the potential

gains and losses before making a decision. According to Prospect Theory, people are more sensitive to losses than to equivalent gains. Losses primarily include the uncertainty perceived after sharing information, increased social costs, negative feedback from the audience, and impact on self-image, potentially leading to anxiety about being judged by others (DePaulo & Fisher, 1980). The ways in which businesses phrase their messages to reduce this sharing anxiety and how platforms can design better sharing mechanisms to enhance user experience are pressing issues that need addressing. In light of this, the present study proposes the following research questions: (1) When users perceive high value in sharing help-seeking marketing information released by businesses, are they more likely to choose to share it? (2) Are users influenced by the anxiety of being judged when making decisions about sharing marketing information, and what is the mechanism behind this? (3) What role does system feedback feature (i.e., the richness of feedback information) play in the process of users sharing marketing information? This study approaches from the perspective of loss aversion, focusing on the psychological changes of social media users when sharing marketing information. By exploring the interactive impact mechanism between perceived sharing value, anxiety of being judged, system feedback features, and marketing information sharing behavior (Ma & Chan, 2014), it emphasizes the crucial role of audience feedback in influencing the decision-making of information sharers (Yang, 2019). This research aims to uncover the patterns in consumer sharing behavior, guiding businesses on how to adjust marketing strategies from the psychological perspective of users, and directing platform operators on how to present feedback information through system design to reduce users' negative emotions like anxiety about being judged, thereby encouraging more proactive sharing and participation (Meek et al., 2019).

2. Literature Review

Table 1. Comparative Analysis of Incentive-Based vs. Non-Incentive Marketing Communications

Category	Incentive-Based Marketing Information	Non-Incentive Marketing Information
Features	Businesses use coupons, points, and other rewards to attract consumers.	Information about new product launches, reviews, and business events.
	Requires the support of others, like likes and assistance, to gain benefits.	
	Examples include referral programs, group purchases, price slashing, and interactive marketing games.	
Differences	Self-interest precedes altruism, with a greater manifestation of material rewards.	Driven more by intrinsic motivations, such as altruism and self-efficacy enhancement.
	When sharing this type of information, the primary consideration is the help one can receive afterwards, such as discounts or points rewards, before considering benefits for others.	Self-interest is primarily reflected in psychological aspects, like the perception of hedonic value and positive emotions.
Commonalities	Carries economic and business attributes.	Sharing this information could reveal personal economic status and consumer beliefs to some extent.

The process of sharing information on social media is intricate and influenced by multiple factors, including the nature of the information and the system, as well as the personal motives, traits, and emotions of the sharer. Intrinsic and extrinsic motivations, encompassing aspects like pleasure, utility, reciprocity, urgency, uniqueness, and community belonging, are vital. However, most existing studies have focused primarily on the positive aspects of these factors, with insufficient attention to possible negative impacts (Jin, Fang, & Zhou, 2016). Research has indicated that negative emotions, such as social media fatigue and anxiety, have a significant effect on user behavior. This study aims to investigate these psychological barriers, especially in the context of help-seeking marketing information, which is a relatively under-researched area (Vilnai & Levina, 2018). Notably, help-seeking marketing information tends to be driven more by extrinsic motivations, with materialistic self-interest often preceding altruistic motives (Li, Liu, & Zhang, 2018). This

research also explores the contrasting sharing mechanisms between help-seeking and non-help-seeking marketing information (Kahneman & Tversky, 1979). In the realm of online recommendation systems, which are a variant of information sharing, it has been found that monetary incentives might not be effective when the social distance between individuals is minimal. This study diverges from these findings by examining the role of incentives in sharing within close-knit social circles (see Table 1). Furthermore, it acknowledges the distinct nature of help-seeking marketing information sharing behaviors compared to other types of help-seeking activities on social media (Ko, 2018). In scenarios like group buying and bargain-hunting, the benefits of sharing extend to both the sharer and the helper, creating a reciprocal dynamic that merits deeper exploration (Han, Xu, & Chen, 2018). Additionally, this research delves into the dynamics of information diffusion, focusing on the impact of negative feedback and evaluation anxiety (Zhou, Zhang, & Zhang, 2016). It recognizes that the fear of negative evaluation by others can significantly influence online behavior, a phenomenon that remains less understood in the context of social media. In conclusion (Kantar, 2018), this study expands upon existing research by concentrating on both the perspectives of the information sharer and receiver, specifically in scenarios involving help-seeking marketing information. It aims to examine the influence of evaluation anxiety on sharing behavior and the role of system feedback, thus addressing the gaps in understanding the complex dynamics of online information sharing (Liu, Li, & Zhang, 2017).

3. The Current Study

This study, drawing on the principles of Social Exchange Theory, scrutinizes the motivational factors that drive social media users to share marketing content. The research begins by exploring the idea that users weigh a combination of personal and others' benefits when deciding to share information. They are more likely to share when they perceive the value of doing so, encompassing both self-oriented benefits like rewards and social status enhancement, as well as altruistic gains such as the satisfaction of helping others—to outweigh the associated costs. A significant aspect of the study also examines the role of appraisal apprehension in influencing information-sharing behavior (Osatuyi & Qin, 2018). Informed by Loss Aversion Theory, it is posited that the decision to share is not solely predicated on the value derived from the information. Users also consider the potential for negative evaluations, a concern that becomes more pronounced when personal privacy is at risk. This leads to the suggestion that appraisal apprehension could negatively affect the relationship between the perceived value of sharing and the actual behavior of sharing marketing information. Additionally, the study explores the impact of system feedback features on social media platforms (Liu, Tan, & Sutanto, 2018). It is hypothesized that the richness and quality of system feedback could alleviate the negative influence of appraisal apprehension on both the perceived value of sharing and the consequent sharing behavior. This mitigation effect is attributed to the fact that richer feedback provides users with more insight into how their shared content is received by others, potentially reducing negative emotions associated with the sharing process. This aspect of the study aims to shed light on how system design and feedback mechanisms can influence user behavior in digital social spaces (Cheung, Lee,

& Chan, 2015).

4. Methodology

In the current digital era, user interaction with marketing content and consumer transactions are predominantly facilitated via mobile devices, with the WeChat platform serving as a principal conduit for information sharing. Accordingly, this research initiative has been crafted to include a trio of marketing messages, each situated in a realistic social shopping environment. Participants are instructed to complete all survey tasks on their mobile devices. The independent variables are measured using a scaled approach, while the dependent variables are centered on the actual choice behavior of users, specifically their decision to share or not share information. Scenario one focuses on group purchasing, employing a commonly recognized and frequently purchased brand of tissue paper as the stimulus. Two purchasing options are presented: a direct purchase at the price of 19.90 Yuan or a group purchase at a discounted rate of 15.90 Yuan, which requires sharing the information and assembling a group of eight within 24 hours. The second scenario involves collecting 'likes' for a marketing message featuring four McDonald's burger meals, where sharing the message and garnering 79 likes allows one to enjoy a free meal from the presented options. The third scenario is centered around coupon sharing, where a well-known shopping platform offers a coupon that provides a discount with no minimum spend requirement, accessible upon sharing the information and inviting 18 friends to participate. The survey is structured into three distinct segments. The first section explores the typical information-sharing habits of users on WeChat, including the frequency and methods of sharing different types of marketing content. The second segment involves an experiential survey where participants are asked to review the three types of marketing messages and make decisions regarding sharing. To avoid bias from the sequence of presentation, the order of these scenarios is randomized. Participants are then asked to select one scenario, revisit it for a detailed assessment, and complete scales that measure perceived sharing value and concerns about appraisal from others. To ensure the robustness of the survey, measurement items for the study's latent variables were extracted from items previously employed in relevant domestic and international research. These were then tailored and refined to fit the context of this study by a group of three experts in the field of Information Systems. The items underwent multiple rounds of translation between English and Chinese by five graduate students to refine their linguistic expression. Table 2 in the study outlines the final measurement items for each variable, their sources, and the outcomes of an exploratory factor analysis. The factor extraction method employed was Principal Component Analysis, using a criterion of eigenvalues equal to or greater than 1. Rotation was executed using the Varimax method, and only factor loadings of 0.500 or higher were considered. The measurement items for the latent variables were assessed on a 5-point Likert scale (see Table 2). The final part of the survey collects demographic data, such as gender, age, educational background, and the number of WeChat friends. For data analysis, this study utilizes SPSS 22.0 and Amos 24.0 software. The questionnaire link was predominantly circulated through WeChat, adopting a snowball sampling approach to ensure a diverse range of respondents. Of the 257 questionnaires received, 216 were deemed valid after

excluding 41 incomplete responses.

Table 2. Measurement Items and Exploratory Factor Analysis Results

Latent Variable	Item	Factor Loading
Perceived Sharing Value	I think sharing this information can help me	0.790
	I think sharing this information can bring me benefits	0.743
	I think sharing this information can increase my communication with others	0.890
	I think sharing this information can improve others' impressions of me	0.776
	I think sharing this information can improve others' information efficiency	0.825
	I think sharing this information can bring value to others	0.858
	I think sharing this information can help others	0.861
Appraisal Concern	Even if I know others' opinions are not important, I worry about how others will see me after sharing this information	0.817
	After sharing this information, others' evaluations of me have a big impact on me	0.800
	I am afraid of not receiving feedback from others after sharing this information	0.807
	I worry about the impression I leave on others by sharing this information. I am more concerned about others' opinions of me when sharing this information	0.892 0.861
	I don't know how others perceive the information I post	0.740

5. Results

Table 3. Overview of Statistical Methods and Results in Assessing Questionnaire Validity and Reliability

Statistical Test or Measure	Description	Result or Value	Interpretation or Benchmark
Harman's Single-Factor Test	Assesses common method bias.	Largest factor explained 30.477% of total variance.	Below 40% threshold, indicating lack of severe bias.
Kaiser-Meyer-Olkin (KMO) Measure	Assesses sampling adequacy for factor analysis.	KMO = 0.887	Higher than the 0.800 benchmark, indicating suitability for factor analysis.
Bartlett's Test of Sphericity	Tests the hypothesis that the variables are unrelated.	Significance < 0.001	Indicates that the variables are related and suitable for factor analysis.
Exploratory Factor Analysis	Identifies underlying variable structures.	Two distinct factors extracted; all factor loadings except EA2 > 0.500.	Factors account for significant explained variance; EA2 as an exception.
Reliability Analysis	Cronbach's Alpha, CR, AVE for questionnaire consistency.	Cronbach's Alpha > 0.700; CR > 0.600; AVE > 0.500.	High reliability of scale data.
Convergent and Discriminant Validity	Assesses validity of measurement results.	Not specified	Ensures alignment with research objectives.

In this scholarly inquiry, we initially employed Harman's single-factor test to rigorously assess the presence of common method bias. The results of our factor analysis, revealing that the largest factor explained a mere 30.477% of the total variance, comfortably reside below the 40% threshold. This finding indicates a lack of severe common method bias among the variables under consideration. Further, we delved into the Kaiser-Meyer-Olkin (KMO) measure and the Bartlett's Test of Sphericity. The KMO value stood at 0.887, which is notably higher than the 0.800 benchmark, and the factor's significance level was found to be less than 0.001. These metrics collectively affirm the suitability of our sample data for factor analysis. Our exploratory factor analysis demonstrated that all factor loadings, with the exception of EA2, exceeded the 0.500 mark. Importantly, no items were identified as loading significantly on multiple factors or as being irrelevant to the theoretical dimensions proposed. Two distinct factors were extracted from this analysis, accounting for a significant portion of the explained variance. Turning to the reliability analysis of our questionnaire, we employed a

trio of robust measures: Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE). These measures are instrumental in assessing the consistency, stability, and reliability of the questionnaire results. Our analysis revealed that the Cronbach's Alpha values for the variables in question were well above the 0.700 threshold, with CR values exceeding 0.600, and AVE values surpassing 0.500. These findings underscore the high reliability of our scale data (see Table 3). We then scrutinized the measurement results for both convergent and discriminant validity to ascertain their alignment with the intended research objectives.

The standardized factor loadings, along with CR and AVE values, were employed to gauge convergent validity. Each of these indicators surpassed the 0.500 benchmark and attained significance. For discriminant validity, a comparison was made between the square roots of the AVE values of the latent variables and the correlation coefficients between different latent variables, with the former expected to exceed the latter. This comparison further reinforced the validity of our questionnaire. In our binary logistic regression analysis, we designated perceived sharing value as the independent variable and appraisal concern as the moderating variable. This analysis sought to elucidate the impact of these variables on the dependent variable of users' marketing information sharing behavior. Prior to the regression, both perceived sharing value and appraisal concern underwent a process of centralization. In this regression model, the act of sharing information was coded as 1, while not sharing was coded as 0. Given the involvement of three distinct types of marketing stimuli in this study, we introduced scenario as a categorical variable in the form of dummy variables. These were incorporated alongside demographic variables such as gender, age, educational level, and WeChat friends count in a hierarchical regression analysis. Our regression results unveiled that perceived sharing value significantly positively correlated with marketing information sharing behavior. Additionally, we observed that appraisal concern played a significant negative moderating role in this relationship. Furthermore, a chi-square analysis of participants' marketing information sharing behavior choices revealed a stark contrast in sharing rates between participants with low and high perceived sharing values. This analysis provided empirical support for our hypothesis, demonstrating a higher likelihood of information sharing among participants with a greater perceived value in sharing. A subsequent chi-square test under varying levels of appraisal concern showed significant positive correlations in both low and high appraisal concern conditions. However, an increase in appraisal concern was observed to substantially weaken the positive impact of perceived sharing value on marketing information sharing behavior. In an effort to delve deeper into the reasons behind participants' reluctance to share information, an open-ended survey was conducted among those who opted not to share in the scenario questionnaire. Through a meticulous textual analysis, we identified key reasons for this reluctance: concerns about bothering or inconveniencing others, the complexity and pressure of sharing within social circles, fear of leaving a negative impression, and apprehension about the lack of response and support. These findings suggest that negative psychological factors, such as appraisal concern, are significant impediments to information sharing, even in instances where users perceive a high value in sharing.

6. Discussion

In the theoretical landscape, this study pioneers an exploration into the less-discussed realm of assistance-seeking information sharing within the burgeoning framework of new social shopping patterns. Prior research has predominantly fixated on the precursors influencing user engagement in sharing non-assistance types of marketing information, such as word-of-mouth endorsements and business-generated content. By juxtaposing these conventional information types with the nascent concept of assistance-seeking in marketing, this study forges new insights into the user dynamics of sharing behavior in the digital marketplace (Van Mierlo, 2014). This inquiry extends the boundaries of existing research on assistance behaviors and recommendation marketing, delving into the nuanced mechanisms that underpin the sharing of assistance-seeking marketing information. A key contribution of this research lies in its divergence from the traditional focus of marketing information sharing studies, which have often been limited to examining the role of positive stimuli. By identifying the perceived value's boundary conditions as being contingent upon appraisal concern, this study not only fills a critical gap but also broadens the applicability of appraisal concern theory. Traditionally confined to offline scenarios like public speaking and organizational settings, this research demonstrates the relevance and impact of appraisal concern in the online social media context (Cheung, Lee, & Lee, 2013).

It aligns with findings from prior studies, such as those by BORDIA et al., that highlighted the reluctance to share knowledge in physical organizational environments due to high levels of appraisal concern. However, it extends these observations to the digital domain, revealing a similar hesitancy among users to share valuable marketing information online, driven by apprehensions of negative evaluations. This phenomenon is further complicated in online settings by factors such as delayed feedback and the permanent nature of digital records, contributing to the users' perceived uncertainty or ambiguity regarding audience reactions. In addition to its theoretical contributions, this study ventures into the system design aspect, focusing on the influence of system feedback attributes on user behavior within information systems. This aspect enriches existing understandings of user behavior in response to system characteristics like quality and usability. The study's novel emphasis on the role of feedback attributes following user postings unveils that enhancing these aspects can significantly diminish the obstructive role of appraisal concern in the user's information sharing process. Practically, the study sheds light on the pivotal role of perceived sharing value in influencing marketing information sharing behavior. The real-shopping-information-based scenarios employed in the study reveal a paradox: despite the perceived value, the actual sharing rates among users were relatively low. This highlights an imperative for businesses to focus more on the consumer benefits of sharing, both for the sharers and the receivers, thus amplifying the perceived value and potentially guiding more effective marketing campaign designs. This could involve strategies such as intensifying participation rewards, minimizing risk associations, or simplifying the tasks in marketing activities. The study's findings about the deterrent role of appraisal concern in sharing processes indicate a complex interplay between consumer preferences for economic benefits and the social costs of sharing,

particularly in terms of appraisal concern (iResearch, 2019). It suggests that businesses should be mindful of the social costs imposed on consumers by shared shopping models. Leveraging only economic incentives or enforcing user sharing might superficially appear to reduce costs but could inadvertently lead to adverse emotional experiences for users. To counteract this, businesses could consider approaches that reduce social pressure, such as enabling anonymous sharing, simplifying marketing tasks, diversifying sharing channels, and increasing the enjoyment associated with sharing (Shang, Wu, & Li, 2017). Finally, the study's revelations on the influence of system feedback characteristics on user behavior underscore the potential of enhancing feedback display in social media platforms. By showcasing more comprehensive feedback information, such as viewer counts, likes, and shares, systems can alleviate the inhibiting effects of appraisal concern, thereby fostering a more conducive environment for user engagement and proactive information sharing (Chang & Dong, 2014).

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