When Being Surprised Increases Consumer Co-Promotion in Social Media?

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Abstract—Co-creation during the innovation process has become an evolving research field which has seen a great deal of attention from both academics and practitioners. Although innovation literature is rife with the suggestions to leveraging social network to collaborate with consumers in new product development, extent literature does not offer much guidance to engage consumers in online co-promotion phase. Since consumers tend to believe more in other consumers, engaging consumers in online endorsing might be particularly fruitful in helping to foster acceptance. In this article, the authors consider the nexus of social media and consumer online co-promotion behavior by examining how surprise intensity and task structure affect consumer endorsing content generation in social media. The results show that surprise intensity helps to foster co-promotion willingness. Task intensity weaken the positive effect of surprise intensity on co-promotion intention. Regarding social network type, it didn't moderate the effect of surprise intensity on co-promotion willingness. The findings shed light on consumer co-commercialization, a potentially important new agenda in cocreation in innovation process. This study contributes to co-creation and engagement marketing literature. At the same time, managers obtain recommendations for leveraging surprise intensity and task structure to enhance the success of co-promotion engagement initiatives.

Keywords—Consumer co-promotion; Surprise intensity; Social media; Task intensity

1. INTRODUCTION

Engaging customer to co-create during the innovation process is becoming the major source for firms’ competitive advantage[1][2]. Enhancing customer engagement and engagement marketing effectiveness is now a leading management objective for firms[3][4]. Customers are now active contributors to a wide variety of innovation paradigms and marketing functions, going beyond financial patronage.

With the exponential growth of mobile users and dissemination of social media, companies and researchers realized the potential of engaging consumer to endorse product/service in social media[5]. Holistic framework for strategic social media marketing highlights the explorer approach facilitating collaboration rather than simply broadcasting information[6]. Since consumers tend to believe more in other consumers rather than company, engaging consumers in online co-promotion content generation might be particularly fruitful in helping to foster acceptance. With the emerging trend of consumer endorsing in recent years, customer co-innovation has also take a new direction to engage consumers in co-commercialization process (beyond new product development).

Prior researches on customer co-creation in innovation process predominantly focus on the early stage of new product development (e.g., idea generation, concept testing). Although these studies offer vital documentation of the beneficial aspect of customer co-creation in contrast to traditional corporation oriented innovation, consumer co-commercialization (i.e., endorsing) in social media has largely been neglected. This neglect is surprising, as consumer endorsing in social media should play a pivotal role in other consumer’s evaluation of products and services which better reach target market. Social media engagement is a booming business and research agenda with consumers’ ubiquitous access to digital information. Predicting social media performance metrics helps for brand building[7]. No matter how amazing marketers think their mobile engagement marketing is, consumers are drowning in media. How to get people read the content and drive the growth of business is an overarching question. Although there is a growing realization that mobile marketing and advertising is crucial to outcomes, this is still an emerging era of inquiry whose key variables, relationships and implications for markers are not yet clear. Underling effective elements (i.e., co-creation, psychology) to use in this nascent field is essential.

Overall, this study shed initial light on consumer co-commercialization, a potentially important new agenda of co-creation in innovation process. It is an important step in advancing our understanding of consumer co-creation activities in a way that transcends traditional aspects of co-creation contexts (i.e., ideation, selection and fabrication of new product development), mobile marketing (i.e., corporation oriented mobile advertising) and knowledge sharing (i.e., organizational knowledge sharing). How to engage consumers to create endorsing content in social media has seen hardly any attention thus far. To address the above research gaps mentioned above, we consider the nexus of social media and consumer endorsing behavior by examining how surprise intensity and task structure affect consumer endorsing content generation intention in social media.

A. Research Questions

We attempt to address the following questions:

RQ1: What effect does surprise intensity have on consumer co-promotion content generation willingness?
II. LITERATURE REVIEW AND HYPOTHESES

A. Customer Co-creation Theory

A useful theoretical framework for understanding consumer endorsement in social media is customer co-creation theory. Co-creation is an important paradigm in which a body of theoretical statements such as innovation, service science and marketing have been developed. In this paper, following the innovation perspective, we conceptualize customer co-creation as a process in which customers consciously and actively engage in a firm’s innovation process, taking over innovation activities traditionally executed by the firm[8].

Customer co-creation, as an important paradigm in innovation literature, has been an evolving field that received scholarly attention. Previous research on co-creation in innovation can be broadly categorized into three major research themes. First, research on the conceptual research has primarily focus on the patterns (e.g., idea generation and selection in new product development, company-customer interactions) of customer involvement and characteristics of innovators[9][10]. Perceptions of company responsiveness and personalization based on existing consumer interactions affect how participants rate the company, the quality of their own potential company interactions, and their likelihood of purchasing products form the company[11].

The second theme has focused on knowledge co-creation. Stimulus ideas and problem decomposition helps low -knowledge customers to generate online ideas more than high-knowledge customers. Dialogic co-creation affects customer relationship strength, valuation of knowledge and capability of customization, facilitating service innovation[12]. Knowledge management system user empowerment is significantly associated with knowledge sharing and work environment enhances user empowerment[13]. Social web knowledge sharing is a mediator in the relationship between human resources practices and innovation performance in knowledge-intensive manufacturing small and medium-sized enterprises. Technological and organizational factors have greater impact than environmental factors on social web knowledge sharing[14].

More recently, a third research focus has shifted its attention on the role of social network on co-creation[15][18]. Lynch, O'Toole, & Biemans (2016) identified a comprehensive set of metrics to measure the involvement of a network of customers in NPD. Social network concepts and indices of degree, betweenness and closeness centrality are well suited in identifying customers embedded in social network whose relational ties are indicative of their influence and stature[15].

Although these studies have shed light on conceptualization, antecedences and outcome of customer co-creation, little is known about how to engage customers to consciously and actively engage in promotion content generation that traditionally executed by the firm. B. Pleasant Surprise and Expectancy Theory

Surprise is the astonishment, wonder, or amazement that grows with the unexpectedness and importance of an event[19]. Expectation is the core concept of surprise and there is a positive relationship between the degree of unexpectedness and the intensity of surprise.

Delighting customers by pleasant surprises is an important strategy in creating memorable consumption experiences and customer delight[20][21]. Unexpected financial and non-financial recognition of good performance increase subsequent performance of the low performers[22]. Despite the criticality of surprise in achieving customer delight, previous studies also realized that there are potential downsides to surprising customers by raising expectations. Providing an explanation helps to avoid raising customer expectations to unsustainable levels and enhance delight[23].

Benefit of surprise may go beyond delight emotions. Drawing on decision affect theory, surprise enhances emotional experiences, sometimes even making objectively better outcomes less pleasurable than an unexpected, less good one[24]. Extant research has demonstrate the beneficial effect of surprise on consumer choice behaviors such as unplanned purchases[25].

Social media create an entirely new advertising channel. Consumers “like”, “share”, even “create comments” to endorse on social media. Markers design engagement initiatives to encourage customer to endorse on social media. Co-promotion content generated by consumers rather than firms could be higher novel and beneficial. Intrinsic motivation antecedents such as timeliness, location and personalization of the advertisement message, as well as extrinsic motivation antecedents like consumer innovativeness and perceived enjoyment help to foster consumers’ attitude toward mobile advertising[26]. Consumers process advertising for co-created products similarly to the way they process brand alliance advertising, communicating consumer co-created new product can enhance product attitude, brand attitude and purchase intention for familiar brand[27].

Prior researches argue for the role of emotion on consumer endorsing in social media. Warmth positively affects consumers’ intention to endorse brands on social media and that warmth fully mediates the effect of brand type (i.e., nonprofit vs. for-profit) on consumers’ intention to endorse brands and branded content on social media[28]. Besides warms, pleasant surprise enhance delight emotion which my further affect consumer choice behavior such as endorsing in social media. Thus we suggest the following:

H1: Surprise intensity is positively related to consumer co-promotion content generation intention in social media.

We build on expectancy theory as an overarching theoretical framework to derive a conceptual model that investigates the role of surprise intensity and task structure in affecting co-promotion content generation willingness. Expectancy theory holds that behavioral choice is dependent upon motivational force, which is a function of the valence of anticipated outcomes and the expectancy that an act will be followed by anticipated outcomes. In our conceptual
framework, the behavioral choice is engaging in endorsing or not, pleasant surprise is the motivational force, task structure influences the valence of behavioral choice.

Customer engagement marketing, a firm’s deliberate effort to motivate, empower, and measure customer contributions to marketing functions, makes a shift in marketing and innovation research. Customer creativity, knowledge stores, persuasion capital and network assert are the four customer-owned resources which make the benefit of task-based engagement initiatives more evident[3][4].

With the emerging trend of social media marketing, both the social media platform made up of friends such as Facebook and social media platform made up with strangers are appealing to engagement marketers. In common condition, people would like to share with friends than strangers. Pleasant surprise foster delight emotion[19] and even unplanned purchases[25], it may also foster consumer’s sharing willingness with strangers. It would be interesting to investigate whether consumers react different when they received pleasant surprise. Thus, we test the following:

H1: Task intensity, high task intensity and multi-time task intensity separately as was verified in the pilot study. We carefully designed the five distinct advertisement posters to represent the intended task. Each poster comprised the same elements: a corporate picture that representing French bakery store named “Paris Croissantis” and “Paris Baguette” (endorsed by a famous star in a famous movie) belongs to the same corporation with higher quality positioning than “Paris Baguette”. Participants were told that French bakers would use traditional French baking techniques to make classic taste bread and cake in the store.

In line with previous research, we use corporate advertisement posters to operationalize the five conditions. We carefully designed the five distinct advertisement posters to represent the intended task. Each poster comprised the same elements: a corporate picture that representing French employees working with various breads in the store, a firm logo on upper-left hand in the corporate picture, a short informative text stating opening marketing campaign, a n example of consumer co-promotion picture that matched the verbal message content in the campaign.

The compensation for participating in the marketing campaign are same (2 classic tastes bread and a cup of coffee for free) but task are different. Two posters encourage consumers to generate co-promotion content in social media made up of strangers (Dazhong dianping) for the low task intensity, high task intensity and multi-time task intensity separately as was verified in the pilot study. The other three posters are designed as co-promoting in social media made up of friends (Wechat) for low task intensity, high task intensity and multi-time task intensity separately.

C. Measures

1) Study variables: Surprise intensity was measured by three-items seven-point (1=strongly disagree; 7=strongly agree) scale, with items “I have experienced pleasant surprise when seeing the advertisement in three consecutive days in Wechat or Dazhong dianping”. The average of three items was calculated to represent the respondents’ surprise intensity. The alpha coefficient of this scale is 0.86. All items were measured on a seven-point Likert scale with anchors “strongly disagree” and “strongly agree”. A between-subject experiment was used to test the hypothesis. We examined the following five conditions of consumer co-promotion task structure: low creation intensity, strangers’ social network (condition 1); high creation intensity, friends’ social network (condition 2); high creation intensity, strangers’ social network (condition 3); medium creation intensity, friends’ social network (condition 4); multiple intensity task, friends’ social network (condition 5).

2) Participants: Participants were 221 undergraduate students (37.6% males; Mage=20.22, SD=1.06). They are given course credit for participation.

3) Procedure: Participants were randomly assigned to one of the five groups. Before being exposed to their individual treatment, participants were told that a branded French style bakery store named “Paris Croissantis” is going to open near the university. None of the participants have the experience to shop in “Paris Croissantis” before.

Researcher further mention that “Paris Croissantis” and “Paris Baguette” (endorsed by a famous star in a famous movie) belongs to the same corporation with higher quality positioning than “Paris Baguette”. Participants were told that French bakers would use traditional French baking techniques to make classic taste bread and cake in the store.

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agree), “I am surprised with the free desert offer”, “I am astonished with the free desert offer”, and “I am amazed by the free desert offer” (Gyung Kim & S. Mattila, 2013). Further, we ask participants to indicate agreements with the statements about their willingness to generate co-promotion content in wechat/Dazhong Dianping using two items 4-point semantic differential scale (Vendemia, 2017) and further modified as appropriate.

2) Control variables: To test the robustness of our proposed relationships and control for extraneous influences, we incorporated market mavenism, opinion leadership and co-promotion experience as control variables. First, to ensure that consumer co-promotion content generation intention is not affected by domain-specific opinion leadership[2][30], we treat domain-specific opinion leadership as a control variable in our framework. We measured opinion leadership using 5-point Likert scales with 4 items. Because the literature suggest that a maven is among the most active and influential agents who actively share market information and opinions with other consumers[31], we also control this relationship in our model. We measured market mavenism using four items adapted from previous research[32]. In addition, we control for the effect of perceived experience with the specific co-promotion activity in social media[29].

IV. RESULTS

First, it is found that within the five groups there are no significant differences between groups with regard to market mavenism, opinion leadership and co-promotion experience(all measured before treatment), which indicates that randomization procedures were effective. Dependent variable of co-promotion willingness differs significantly among the groups(F=5.401**, p<0.01).

Further, to test the proposed hypotheses and explore the research questions, hierarchical regression analysis is conducted(Table I). The effect of the three covariates were controlled(market mavenism, opinion leadership and co-promotion experience).

Results demonstrate significant interaction effects of surprise intensity and task intensity on co-promotion willingness. β=0.107**(p=0.009). High-creation promotion task is considerably more appealing to high surprised consumers than low surprised customers. Moreover, the findings reveal that there is no significant interaction of surprise intensity and social network type(strangers/friends) on co-promotion willingness.β=0.047(0.463). Model 1 (R²=0.451, F=29.591, P=0.000), Model 2 (R²=0.468, F=23.568, P=0.000), R² change=0.017 (F change=3.469, p=0.033<0.05).

V. DISCUSSION

Previous innovation research has shown that situations of user co-innovation paradigm, in which customers actively engage in the innovation of a product and services, better yields value (e.g., likelihood of new product/service success, personal benefit) than situations traditional firm innovation in which customers take no part in the innovation process. However, these studies have largely neglect the way in which customers are involved in the product/service commercialization stage. Moreover, little is known about how firms might manage co-commercialization process that engage consumers to endorse product/service in social media. Therefore, the goal of this study was to better foster consumer endorsing content generation in social media by customizing task structure on the basis of surprise intensity.

To address these questions, we conduct a field experiment to investigate consumer’s reaction to self-endorsing marketing campaigns. In particular, we first explored the relationship between surprise intensity and co-promotion content generation intention in social media. The findings support our assumption that surprise intensity positively affects self-endorsing content generation intention in social media. Thus, this study provides a deeper understanding of exceeding expectation in self-endorsing online and shed light on its favorable effect. In a second step, we explored the task structures firms might employ to utilize these effects. Specially, we focus on different social network type and different task intensity. The results suggest that task intensity reduce the positive effects associated with higher exceeding expectation while social network type does not. For consumer endorsing in social media, whether the social network is made up of friends or strangers does not matter when consumers perceive exceeding expectation value.

This study contributes to the academic innovation and marketing literature in several ways. Foremost, our theoretical arguments have implications for co-creation literature, which thus far has focused primarily on customers’ involvement in new product development phase; as opposed to commercialization stage, its conceptualization[1][9], customer characteristics[8][15], the role of social network[16] and its value for both the firm and customers. To date, although companies realized the enormous potential of engaging consumers to co-promote products/services in social media, little is known about consumers’ involvement in co-commercialization phase. The present study makes a major contribution to address the this research gap and provides key insights into how to engage consumers in co-promotion initiatives in social media. Specifically, this study offer an expectancy theory perspective on co-creation that explains how surprise intensity affects co-promotion content generation willingness.

Second, the current research extend research on engagement marketing. Extant literature on the outcome of customer engagement and engagement marketing has primarily on the psychological outcomes such as trust or economic returns on engagement initiatives. Research on how firms may design effective engagement initiatives and tools to increase customer resources and knowledge sharing has been scarce[3]. Specially, the study is the first to offer an answer to the important question of consequences of engagement orientation on innovation[4] by showing that firms can employ surprise strategy and task customization strategy to gain high customer engagement in endorsing content creation. This study provides the first empirical investigation of the impact of varying the task structure from engagement initiatives on online promotion content generation.
Third, this study extends research on knowledge sharing in social media. Although prior researches have analyzed the consequences of psychological empowerment[13] and motivations[32] on online knowledge sharing, little is known about the role of unexpectedness on knowledge sharing. Besides incorporating friends, firms should incorporate more information from strangers in making recommendations[33]. Thus, this study make an important progress to existing research by illustrating the high benefit of surprise strategy and take social network type (friends/strangers) as well as task intensity into consideration.

Our study holds several important implications for innovation and marketing managers. First, our results imply that to enhance customer engagement in co-promotion content generation, firms can employ surprising strategy. In light of the favorable effect of surprise intensity on consumer co-promotion content generation willingness, it is crucial for firms to design unexpected event or lower expectation before launching an engagement initiative. Marketing managers can induce measures of customer perception in their market research to estimate the present perception and demand of their primary customer segments. By taking into account the existing degrees of customer perception, managers can develop a better surprising strategy.

The current study offers new insights into how companies can engage consumers to co-promote product/service though task structure customization based on surprise intensity. Markers can use the findings of this study to design task-based engagement initiatives to involve consumers in co-commercialization in social media. When determining how to implement task-based co-promotion engagement marketing programs, managers should consider the task structure. Several aspects of the related findings are notable. The study revealed an interaction effect of surprise intensity and task intensity on co-promotion willingness. When delivering high intensity creation task to engage consumers in co-promotion, high surprise intensity resulted in higher co-promotion willingness than low surprise intensity. Regarding social network type, it didn’t moderate the effect of surprise intensity on co-promotion willingness. It implies that if providing consumers with high intensity pleasurable surprise, they wouldn’t mind whether to promote in social network made up with friends or strangers. This lead to the interesting conclusion that surprise intensity is an important factor to prompt consumers to endorse in social media. Indeed, according to decision affect theory, surprise enhances emotional experiences[23][24] and consumer choices such as unplanned purchases[25].

This study has limitations that may providing opportunities for further research. In our filed experiential study we investigate the relationship between surprise intensity and customers’ co-promotion willingness in social media and examined how task structure affects this relationship. The study’s findings may be generalized to other co-promotion context, further filed research that replicate our results in other co-promotion setting is needed. Another opportunity for further research refers to other task-based engagement initiatives that companies may employ to further utilize the benefit of surprising event. In this research, we focus on social network type (strangers/friends) and task intensity. Study results show that although task intensity weaken the positive effect of surprise intensity on co-promotion content generation willingness, the intention of sharing with friends or sharing with strangers makes no significant difference once customer are highly surprised. Additional task-based engagement initiatives whereby consumers interact jointly for co-creation may be applicable to co-promotion context. The investigation of such task structures may be a promising avenue for further research.

**REFERENCES**


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**TABLE I.**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Co-Promotion Content Generation Intention in Social Media</th>
<th>Model 1</th>
<th>Model 2</th>
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<tr>
<td></td>
<td></td>
<td>(\beta)</td>
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<tr>
<td>Intercept</td>
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<td>Main Effect</td>
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<td>(\beta)</td>
<td>SE</td>
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<tr>
<td>Surprise intensity</td>
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<td>Social network type</td>
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<tr>
<td>Task intensity</td>
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<td>0.050</td>
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<tr>
<td>Interaction Effect</td>
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<td>(\beta)</td>
<td>SE</td>
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<tr>
<td>Surprise intensity x Social network type</td>
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<td>0.064</td>
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<tr>
<td>Surprise intensity x Task intensity</td>
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<td>Control Variables</td>
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<td>Market Maven Items</td>
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<td>Opinion Leadership</td>
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<td>Co-promotion Experience</td>
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<td>0.030</td>
</tr>
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\(^*\) p<0.01 \(^*\) p<0.05 Nonstandard coefficient


