

HOW DOES THE ENTERPRISE CO-CREATE VALUE WITH CUSTOMERS ON SOCIAL MEDIA

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ABSTRACT

To help the enterprise utilize social media to co-create value with customers, this study proposed a five-stage model after reviewing the literatures of internet-based co-creation and collective action theory and having in-depth interviews with industry experts. This model was illustrated its applicability using a case study approach.

Keywords: social media, value, co-creation, collective action

INTRODUCTION

With the innovation of business model and development of new technology, interaction between enterprises and customers is enhanced. Currently, the customers not only passively accept the products and services, but also participate in the business operation process and play the central roles to strengthen innovation and create values (Etgar, 2008; Hoyer et al., 2010; Nambisan & Baron, 2009; Payne et al., 2009; Sawhney, Verona, & Prandelli, 2005). The importance of co-creation has been widely recognized by firms and been confirmed by early researches (e.g. Chen, Tsou, & Ching, 2011; Füller et al., 2009; Hoyer et al., 2010; Sawhney, Verona, & Prandelli, 2005; Schulteß et al., 2010).

Social media, e.g. Facebook, LinkedIn, MySpace, which have been commonly discussed in recent years, are fundamentally changing interactions between firms and consumers (Hoyer et al., 2010; Kaplan & Haenlein, 2010; Kim, Jeong, Lee, 2010; Mangold & Faulds, 2009). Social media provide an unparalleled platform for users intentionally or unintentionally establish different kinds of content to interact with others (Calder, Malthouse, & Schaedel, 2009; Chen, Fay & Wang, 2011; Eyrich, Padman, & Sweetser, 2008; Steyn et al., 2010; Xiang & Gretzel, 2010). Thus, interaction between enterprises and consumers, as well as that among the consumers, are more frequently than past (Kaplan & Haenlein, 2009 ; Parra-López et al., 2010; Gallagher & Ransbotham, 2010). In this emerging dynamic, consumer empowerment environment, firms cannot neglect the good opportunity to utilize the social media to communicate and co-create with customers (Kane & Fichman, 2009; Kaplan & Haenlein, 2009).

Social media have all the features of the internet-based platforms. The main features include the direction of communication, the intensity and richness of the interaction, and the size and scope of the audience (Sawhney et al., 2005). In addition, social media rely on users to co-create content (Kim, Jeong, Lee, 2010), and enable the firm to monitor customers' feedbacks and let customer to know other customers' opinions (Gallagher & Ransbotham, 2010). Moreover,

group-based sociability is also an essential feature of social media. Users can establish online interpersonal relationship by declaration of concern about the social activity, join the community they would like to care about, and originate a series of social action. Because of the social linkage of social media, individual can build up social bonding and social bridging (Eisenbeiss et al., 2012; Smith, 2010; Karahasanovic et al., 2009; Ellison, Steinfield & Lampe, 2007), and then enhance information exchange and increase the power of collective wisdom. Owing to the above-mentioned reasons, social media can be a better platform for firms to co-create with customer.

How to encourage and facilitate consumers to co-create with firms in social media environment effectively becomes an important issue and remains less clear. The importance of processes is widely acknowledged in the literature on service-dominant logic and co-creation (Payne et al., 2009). The enterprises should have proper management according to the interaction and development in different stages of co-creation process. Maglio et al. (2009) and Spohrer et al. (2008) both elaborated general process of co-creation from the perspective of service system interaction. Others explored the activities in which the consumers can participate through online technology upon new product development process (e.g. Sawhney et al., 2005; Hoyer et al., 2010).

However, with high interactivity, social linkage and other features of social media, co-creation in social media environment should have more dynamic connection and meaningful relationships among the firm and consumers. The co-creation can be developed more unconsciously and unintentionally. Therefore the co-creation process in social media environment is different from that in other environments, and needs to be further clarified. This study aims to fill the research gap. Since co-creation is a process of collective action, this study based on Maglio et al. (2009) and Spohrer et al. (2008) and collective action theory suggested by Hargrave & Van de Ven (2006), presents a five-stage process model for describing social-media-based co-creation. We then conducted a case study to illustrate how a best-practice firm is employing the process model to reach the objectives of each stage and enhance the performance of co-creation in social media environment.

The remainder of the paper is organized as follows. The next section expounds the theoretical background. We then report the research steps and process. In the following section, we depict the proposed model for co-creation in social media environment. In order to examine the feasibility of the proposed model, we further illustrate the model in the context of several noteworthy social media efforts using a case study. We then discuss the model features and conclude the research findings.

THEORETICAL BACKGROUND

Co-creation

Co-creation is a kind of interactive process. Spohrer et al. (2008) and Maglio et al. (2009) proposed the Interact-Serve-Propose-Agree-Realize model to illustrate the co-creation from the perspective of service systems interacting. Value co-creation of service systems are service interactions. First, one system actively interacts with another system. In certain circumstances, if effective service interactions between subsystems happened, then a subsystem will produce a proposal. The proposal may be refused by the other system, but if the proposal is accepted, then after the continuous interaction the agreement will be reached. Both the subsystems will strive to

make proposals to be achieved. Core issues of co-creation, which should be recognized by the enterprises, include the enhancement of effective interaction, development of a series of valuable proposals, common consensus, the force of change, and realization of the goals.

Verganti (2009) suggested the enterprise that emphasizes on innovation would invest in so called collective laboratories, whose members include media, consumers, cultural organizations, research and educational institutions. The enterprise pays attention to the interaction with the members, and exchanges the information with them. In the process, the enterprise would approach the members and use their capabilities to recognize and influence people's ways of giving meanings to things. The first step in the process is listening in order to learn the meanings of the new products. The second step is interpreting and the purpose is to allow the enterprise to develop the unique plans. By interacting with the members in collective laboratories, the enterprise evaluates the knowledge acquired and combines the knowledge with its own techniques and assets. The outcome of the interpretation is to develop the unprecedented products. The third step is addressing, which aims to allow the members to convince the consumers of the innovative products.

According to Payne et al. (2009), co-creation processes include emotional engagement, positive surprise, and knowledge sharing (Payne et al., 2009). Their study explored the process of co-creation from the perspective of relationship management and suggested that the enterprises and the consumers would experience the relationship development of acquisition, stabilization and enhancement. Different relationship development processes should be managed accordingly so that the customers can have sufficient knowledge to involve in co-creation process. From the perspectives of the co-producers' psychology, Etgar (2008) built a decision-making model for the individuals that participate in co-production process. First, in order to enhance the consumers' intention of production, environmental conditions, the consumers' personal factors (operant resources), product factors and stimulus should be constructed. Second, the stimulation of motives must be recognized. The stimulus includes economic, psychological and social drives. The consumers will then calculate the costs. After the consumers' calculation, if the benefits are larger than the costs, co-creation will be launched. The process ends with the evaluation on the output and results of the co-creation decision.

Collective action model and co-creation process

Upon social media, enterprises provide interactive environment for the users (the enterprises and the consumers) to generate the content and allow the consumers to have the power and opportunity to co-create value. The consumers using social media are the main protagonist of co-creation process. Therefore, in social media environment, user's perception of the tasks and goals of the participants in co-creation are different from that are in other environments.

Social media is the product of technology innovation. It has created great power through the convenient and intensive human interaction using innovative application of online technology. Collective action model proposed by Hargrave & Van de Ven (2006) is therefore an adequate theoretical lens for investigating the co-creation on the platform of social media. According to the model, "change and innovation" come from the participants' confronting and dialectical process in the fields. With the users' continuous dialogue and interaction, the consensus of the community brings the force of change. The enterprises will change under such pressure. With conflicts, explanation and learning, old and outdated concepts will be replaced. Through theorizing, new ideas and concepts will be legitimated. Thus, the concepts will be correct and

proper for people, and introduced to other participants in the organizations. Collective action model emphasizes agency and change, which indicate the dynamics of collective action. For the co-creation in social media environment, agency and change are identical as the users intentionally or unintentionally establish different kinds of content to accomplish various types of collaborative creation.

To implement co-creation in social media environment, first, the firms must design different types of interactive clues to attract users to join in, and trigger the *rational interaction*, which means effective interaction between the consumers and the enterprises or other consumers (Maglio et al., 2009; Spohrer et al., 2008). Second, the enterprises should develop the users' involvement in the community, construct *consumer engagement*, have the consumers' trust and accumulate relationship assets. The dimensions of the relationship include product knowledge relationship, community-identification relationship and interpersonal relationship through interaction and connection (Nambisan & Baron, 2009). The relationships will lead to the innovative proposals (Etgar, 2008; Füller et al., 2009; Verganti, 2009). With continuous interaction, various *proposals* are introduced. For the enterprises, the consumers' knowledge sharing and complaints are the most important external sources of ideas (Schulteß et al., 2010). Thus, the enterprises should enhance the consumers' knowledge sharing and conduct listening, as suggested by Verganti (2009). In addition to recognize the knowledge and value, they should also continue identifying and increasing the users' involvement. By social interaction features of social media, other consumers can read and discuss the proposals, and share common consensus toward particular issues. It then generates the force of community in virtual environment. With the accumulation of the force, the enterprises will develop *the action of interpretation*, and finally produce new products/services. By the diffusion of the community influence, the enterprises *realize the value*.

RESEARCH METHOD

Since there are few related literatures, this study adopted the perspective of practical logic (Neuman, 2000) and qualitative method. As suggested by Gummesson (2002), "construction of the model for practical use should be based on discussion and interaction with the practical managers"; hence, this study constructed the co-creation process model in social media environment by three steps. First, in model design step, this study focused on literature review and collection of secondary data. Based on comparison method of Neuman (2000), this study established a primary five-stage model for co-creation process in social media environment, which describes the process and the tasks of the enterprises in the stages of interacting, engaging, proposing, acting, and realizing.

Next, in order to further describe how the enterprises can apply social media to accomplish the objectives using the primary model, in-depth interviews with industrial experts were conducted to enrich the model and clarify the tasks, means and mechanism in different stages. To ensure the quality of industrial experts' practical experience, before the interview, this study screened the candidates' enterprises using the criterion of the operational performance on social media. The approachability as well as the business scale and industrial representativeness of the enterprises were also considered. Eight companies, which have maintained fan pages of at least 20,000 members on Facebook were then selected. They were respectively from sectors of digital broadband, electronic product, sports product, content, digital media, e-mail service, online game, and telecommunication. The expert interviews were conducted with the marketing managers of

the selected enterprises. The inclusion criteria were based on the suggestion of Kumar, Stern, and Anderson (1993), each interviewee has practical experience with social media in the enterprises for at least one year.

Before the interview, the researcher sent a mail that illustrates the research purposes and interview protocol. The interview outline was drafted based on the content of the primary model developed in the first stage. Each subject was interviewed for about two hours. Data analysis was conducted following the process suggested by Pawlowski and Robey (2004). It was repeated between data review and explanation of theories. In the hermeneutic process, the personal descriptions represented “the part”. The complete conceptual model was developed continuously upon the new data and concept collected in each interview as well as the related literature (Pawlowski & Robey, 2004). Interview data were coded to reflect constructs that were both drawn from the literature and surfaced as new constructs during the analysis. Through comparing the concepts and the literature, this study recognized the reasonable explanation and main clues (Patton, 1990), and modified the model to result in concrete clues of themes in each stage. The above process was repeated to construct a complete model.

The third step is to examine the proposed model. This study illustrated the complete co-creation process model using the case study method (Yin, 1994). The study selected the case which can provide great amount of information to research questions (Patton, 2002). According to the report announced by Altimeter Group’s research in July 2009, the selected case was the enterprise that have actively promoted the brands on various social media among top 100 well-known brands in the world (Li, 2009). The enterprise has utilized social media as the main marketing and business strategies. Its branch in Taiwan started interacting with the consumers by social media in 2009. By November 2011, there were approximately 800,000 fans on their Facebook fan pages, and the number of fans was above 3 percent of the total population of Taiwan. Thus, the case was suitable for evaluating the model. Sources of data included an in-depth interview with its chief brand manager (CBM) and secondary data of the articles posted on its Facebook fan pages. The interview was executed on a semi-structured way. Following the instruction of Krauss et al. (2009), this study developed the outline of interview according to the complete model obtained from the second step. The articles were collected from May 5 to August 31, 2011. The articles posted by the managers and the customers’ responses were reviewed by the researchers. A total of 62 article groups were examined.

Data acquired in the interview were transcribed and analyzed with the secondary data. Constant comparative method was conducted in accordance with the procedures suggested by Smith (2010). First, one researcher categorized the articles based on topic type. Next, the objectives and means of the enterprise’s posted messages, as well as the customers’ specific responses, were assessed. Coding and analysis were then executed based on the complete model. Data analysis used the pattern-matching rule suggested by Yin (1994), and this study repeatedly explored the fit between the model and data. In order to ensure that the findings can be traced back to the original data and examine the decision-making, this study established the researcher’s log in order to avoid the threat from the validity.

THE PROCESS MODEL OF CO-CREATION

This section illustrated the proposed co-creation process model as shown in Figure 1.

Interact

This stage has two objectives. First, it is important to create an attractive community, as having a large fans base is the foundation of interaction. The second objective is to facilitate the effective interaction of the community. At this stage, the enterprise as a service system should clearly define the purposes and strategies for utilizing social media. Position of employing social media is different from the official websites of the enterprises. The enterprise should consider which channel of social media to be adopted and what business resources and strategies to be invested according to the operational purposes. The means of interaction include dialogue with the consumers (D), open access for the consumers (A), reduce the risk (R) and maintain the transparency of information (T) (Prahalad & Ramaswamy, 2004).

In terms of dialogues, the enterprise should use a variety of media to attract consumers by articles with a great amount of pictures. The enterprise's agent should talk with the consumers, instead of speaking to them. They should interact with the consumers with great passion and treat them as friends. The topics initiated by the enterprises must be easy to remember, simple and able to facilitate discussion. Thus, the users can engage in dialogues. As to open access for the consumers, the platform should open for public use, and the content should be related to daily life so that it can attract the consumers by offering interesting news and update. Regarding reducing the risk, it is important that the members share the real content. The unreal content in social system will influence everyone and create distance (Koch, 2010). Therefore, the enterprise must guarantee the proper content delivered in user groups; the operation of social media should be open and the enterprises should ensure that all kinds of opinions can be posted and not carelessly revise the articles.

According to the industrial experts' opinions, two clues can be added: funny (F) and benefit (B). In addition, they also suggested that the firm's article posting, promotion, friendliness, speed and simplicity of the responses are critical. Most of the experts suggested that the interesting information noun necessarily directly related to the products or brand can be attractive to consumers. User pages on social media need to be favorable ones, so that the users feel they can acquire useful information. Discounts and free gifts are also tools to attract users' participation and interaction. In sum, DARTFB are the clues to facilitate the interaction at initial stage.

Engage

This stage is to enhance the consumers' engagement. The objectives include gaining consumers' trust, loyalty, sense of belonging, and perceived value toward social media platform operated by the enterprise. Engagement is manifested in a set of experiences, such as stimulation and inspiration, social facilitation, temporal, self-esteem and civic mindedness, intrinsic motive and enjoyment, utilitarian, participation and socialization, and community (Calder et al., 2009). Kilger & Romer (2007) also claimed that six experiences are representative of the engagement construct domain: inspiration, perceived reliable participation, better decision making, life-enhancing, increase of social involvement, personal timeout, and attention or receptivity of the project. Therefore, the enterprise must enrich the experience of consumers to attract them participate in social media and arranging some users' specific activities is a useful means to create better experiences. For instances, the enterprise can encourage the users by providing favorable discounts so that they would be familiar with the enterprise's brands/products. This approach can increase the consumers' opportunities to participate in co-creation (Payne et al. 2009 ; Füller et al., 2009; Calder et al., 2009).

According to the industrial experts' opinions that deleting the consumers' messages would discourage the consumers from creating the content and providing information of new products would stimulate the consumers' interest to participate in co-creation. In this stage, the firm can enhance the consumer engagement by allowing them build their own personal experiences including the consumers' uploading of films related to their use of the products in addition to holding online activities and giving gifts to increase the customers' attention and interest in the projects.

Propose

The objective of this stage is to enhance the consumers' knowledge sharing and proposals. Based on the principle of listening, the focus is on the interaction between the consumers and the enterprise or among the consumers and to facilitate the development of proposals consciously or unconsciously, including the consumers' comments about the enterprise and the process of proposition, and the exposure of their preference.

One critical issue in this stage is to guide the consumers to share more ideas, and another is to include all types of consumers to participate in the process (Hoyer et al., 2010). Creative thoughts are influenced by the interaction between the individuals and the social environment (Amabile et al., 1996 ; Csikszentmihalyi, 1999). Building an environment that supports and encourages creative thinking will promote the demonstration of the creativity. At this stage, the enterprise should support the innovation of the consumers and organizational members. The support of innovation includes constructing the emotional, cognitive and action encounters in order to acquire more creative proposals by approaching the consumers' ideas (Weigand & Arachchige, 2009).

Based on the experts' opinions, emotional support comes from other consumers' responses, friendly environment and moving stories. Cognitive encounters include the enterprise's professional and complete responses. An effective action encounter emphasizes simple interface, the consumers' feedback, the firm's rapid responses, and the transparency of information.

Act

The stage is to develop consensus and power of collective innovation to lead to the changing action of the enterprise. The means to create collective action are through the continuous communication, which facilitates the consumers to read and confer with the proposals, share opinions, and revise the proposals. The process will result in an implementation of change action to adjust the enterprise's value creation by utilizing the generated power of collective creation.

According to the experts' opinions, there are three ways to observe the collective creation power. The first is the diffusion and sharing of brand knowledge among the consumers. With the effective communication upon users' personal identities, the consumers share the brand and product information to other potential consumers and influence other consumers' behavior. The second is the effect of collective force on the enterprise. After a series of interactive processes, the consumers' proposals become the expectation of the product or service, which demonstrate the consumption preference and habit of the online community. The expectation of the consumers is kind of market road map which influences the future activities of the enterprise. The third is that, during the interaction, good ideas are developed consciously or unconsciously by the consumers and have higher feasibility in implementation.

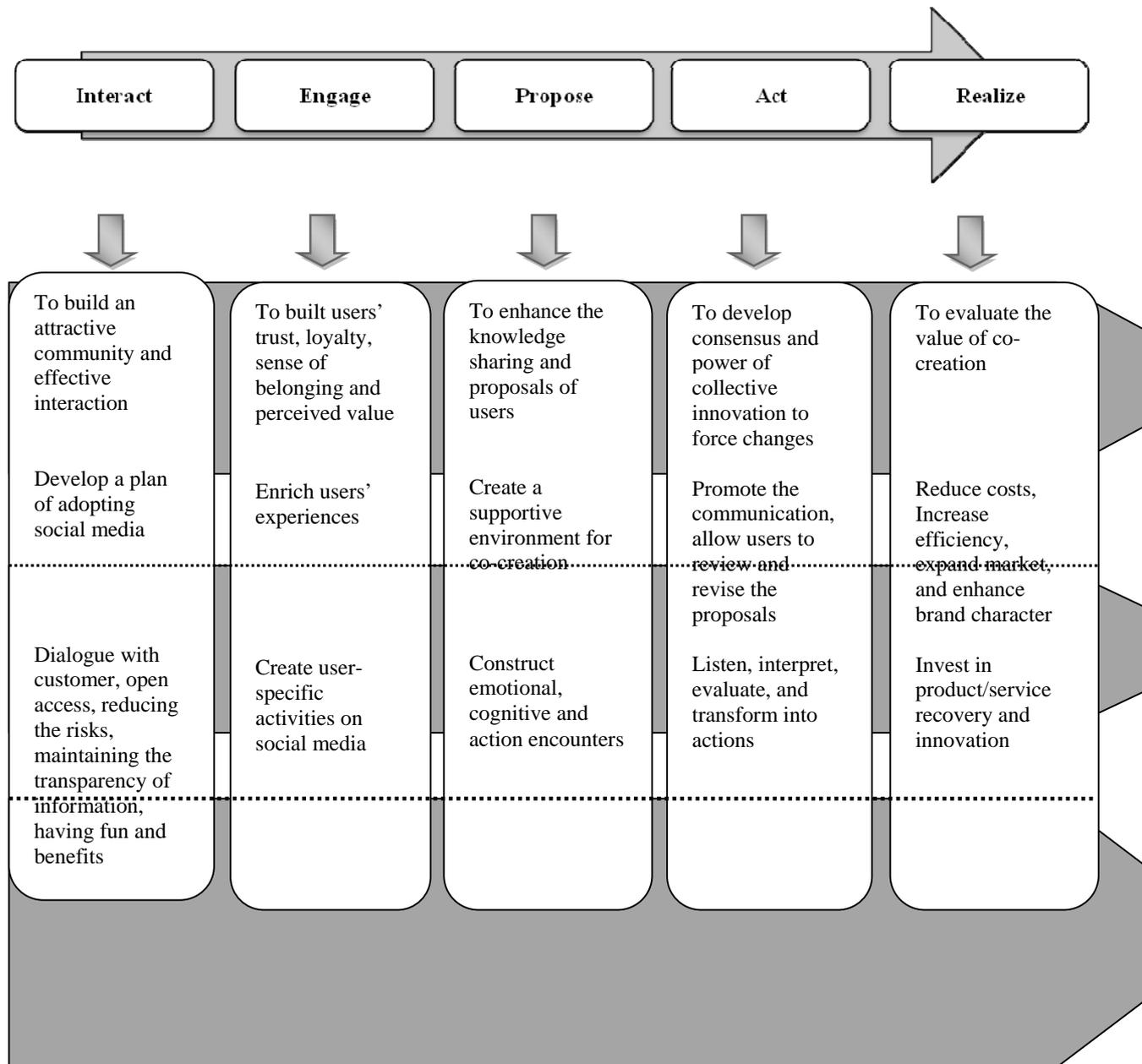


Figure1. Co-creation process model

The implementation of the change action includes the enterprise's listening, interpretation, evaluation and transformation in response to the development of the above-mentioned consumers' force. The enterprise can use the social media instead of the focus group method used for new product development to acquire more useful market information and make corresponding decision to launch the new project.

Realize

In this stage, the objective is to evaluate the value of the collaborative efforts of the enterprise and the consumers. The enterprise's measures to acquire competitive advantages include

reducing the costs of market survey and new product development, increasing production efficiency, replacing employee engagement partially by consumers (Palmer & Lewis, 2009).

According to the experts' opinions, social media provide plenty data of users for the enterprise to recognize the consumer structure or learn the consumers' preference by their responses to different product information presented on social media. Therefore, the enterprise can increase the control of product development and reduce the failure cost of products accordingly. Second, by the community force of social media, the enterprise can widely contact, engage and interact with more consumers than before (Sawhney et al., 2005). Third, business efficiency could be improved. The experts argued that, through co-creation, there will be more products matching the consumers' demand for innovation, which can increase the consumers' positive attitude toward products, purchase intention and repurchase intention, and word-of-mouth intention and loyalty toward the products. The argument is consistent with the existing studies (Franke, Keinz, & Steger, 2009; Payne et al, 2009). Fourth, the enterprise can define the characters of the brands by interacting with the consumers on social media. The brands will be more concrete and consumer-perception-oriented and it will increase the value of products/brands and bring enormous business benefits.

CASE STUDY

The study illustrates the proposed model by examining a case in this section. The case firm is the Taiwanese franchisee of a leading global coffee-shop chain. The firm started interacting with the consumers by social media (Facebook) in 2009. All Facebook users can join the fans group.

Process

In the stage of interaction, it is necessary for the enterprise to plan the operation of social media, invest in business resources and create the opportunities to approach the consumers. The CBM of the case firm specifically emphasizes the use of social media for the brand management. She personally supervises the messages and comments of the company and the consumers on Facebook fans page every day. There is a group of members help to analyze the consumers' comments. The platform plays two roles. First, it allows the enterprise to interact closely with the customers. The managers used the platform to dialogue with the consumers instead of speaking to them. Second, the platform enhances the conversation among the consumers.

Consumer engagement emphasizes the enterprise's meaningful connection and relationship with the consumers through social media. According to the CBM, in order to develop the consumers' engagement and attachment, the activities for fans on Facebook are well designed. Social media users can experience the firm's products and services by those activities, such as "one treat of Frappuccino with creative works in www.frappuccino.com.tw... after the consumers enter the stores, it guarantees the consistency between the service content and the information received by the consumers on social media". Thus, the consumers can develop their relationship with the enterprise by social media and the interaction will increase their active engagement in the media. "The users who frequently leave the messages in fan pages are mostly the loyal customers," the CBM said.

The firm emphasized that, in the proposal stage, listening and constructing an environment, which encourages and supports creative thinking, is necessary. According to the CBM, after the enterprise introduces the "trip of Lohas" – an environment-reserving campaign, the consumers developed emotional identification and engagement. Thus, the enterprise will easily acquire the

users' related proposals of the issue, such as "sealing film for hot coffee is not environmental, and it should be improved."

In the action stage, the CBM believed that through continuous interaction and encouragement for the consumers' reading and discussion of others' proposals will result in more creative ideas. For instance, the enterprise provided the recipes of creative drinks by "creative dialogue" activities and allowed the fans group to have free interaction to brainstorm new ideas. The consumers' ideas were then be organized and evaluated for possible execution by the related departments of the firm.

As for the stage of realization, the CBM indicated that the repeated interactive cycle and continuous product modification and innovation resulted from the Facebook fan pages have brought the firm and customers unforeseen favorable win-win outcomes.

Objective

The enterprise had more than 800,000 fans on Facebook and the number was still increasing. The appeal of the platform operated by the enterprise was to interact with the customers. Whether at home, in the office, or on the road to the office, the customers would exchange the experience of products, share the latest news, receive the feedback, and cherish the earth with the enterprise through the Internet. Thus, to attract a large number of fans and establish the effective community interaction were the main objectives of the enterprise in the stage of interaction.

During the stage of the engagement, the firm aimed to allow the consumers to search for and evaluate the product information through interaction and interesting co-experience. Through community network of the brand, the customers would respond to related issues and learn the knowledge about the product and service. The consumers found it useful to join the fans group and would use it more frequently. This met the firm's objective of enhancing the customer engagement.

In the proposal stage, the CBM claimed that listening to the consumers' ideas about the brand and exchanging ideas with each other have always brought them some surprises. Although the consumers' share both positive and negative comments on the platform, the firm never commented on or tried to fix their opinions. Developing the consensus and power of collective innovation was the objective of the action stage, as the CBM said: "We expect to see the power of sharing and the wisdom of the crowd, which we believe to be helpful to the enterprise. By customers' interaction and discussion, the consensus on certain issues is developed, and become the direction of the firm's action."

For the enterprise, the objectives to maintain the fan pages is to recognize the customers' opinions, approach the customers' lives, and promote the image of the brand. After the action stage, the firm will evaluate the value realized from the fan pages to see if the objectives are achieved.

Means

The firm's interaction with the consumers was based on the clues of DARTFB. The way to promote dialogue included exposing the brand in daily life through daily events. For instance, the firm posted the message on the fan page: "Refresh you in different kinds of melody in the Friday afternoon! Do you prefer relaxing and passionate Bossa, unique Jazz or French Paris? Select your own song for today." As to reducing the consumers' risk of getting wrong information,

important information could be connected with the official website; thus, the consumers could get the complete information.

The means for consumer engagement included the increase of attention/interest, feeling reliable participation, better decision making, promoting the perceived participation in the society and enhancing personal identity. For the increase of participation in the society, the enterprise promoted the activities of the environment care. The movements received enthusiastic responses and were supported by a huge amount of consumers. The firm continued to engage with the consumers on similar issues. For instance, the customers drank coffee in the stores with their own cups for environmental protection. With the diffusion of social media, most of the consumers in Taiwan were concerned about the environment care. In average, there were nearly 900 participants in each store. Once the consumers had emotional encounters, the enterprise would acquire the users' related proposals, such as "the sealing film for hot coffee is not environmental and it should be improved."

In the proposal stage, the CBM suggested that the most important thing to encourage proposal was the "incentive of rewards." It was a useful means to directly have a great amount of quick responses. In addition, action encounters for proposal included the use of social media tools. For instance, as the CBM mentioned: "With simple voting mechanism, users are more likely to participate in and offer responses." She also indicated that when the consumers are familiar with the products or have real experience and there are videos or pictures and the related knowledge/information website connection, the proposals will increase. Cognitive encounters include professional and complete responses. The CBM suggested that sincere dialogue and inquiry, responses, avoidance of the use of official language and immediate responses are more likely to lead to the consumers' active and constructive responses, thoughts and ideas. As to emotional support, "the consumers' concerns are valued by the enterprise; the enterprise creates warm, friendly and approachable environment for the consumers on Facebook," she claimed.

The consumers' co-creation power has been identified in the case study. The CBM said: "The consumption issues regarding the dealing process and result will be directly presented on social media. The diffusion of social media is fast and effective. The positive ideas will enhance the image of the brand." She also indicated that by long-term supervision and management of the fan pages, the firm has better control over the consumer market than before. She mentioned: "With the collective power, we realize that it is not the single case and should be valued. The social media application can provide the background of the users in fan groups, thus, we can recognize the users' responsive, habits and preference. In addition, the enterprise can conduct the market survey by using the voting mechanism on social media to acquire market information and make decision to engage in new market projects."

In the case study, the firm can realize three kinds of value by co-creation. First is the cost reduction, the CBM argued that the feedbacks from the paid advertisement, the news announced on the official website, and the information on Facebook are similar. She said: "The use of social media to construct a fans page is free; however, its power of attraction and diffusion is impressive. Although currently the employee effort in value creation process cannot be substituted by consumer engagement, paid advertisement can be replaced and the consumer engagement also reduces the costs of market survey and new product development." Next is the increase of business benefits, the CBM mentioned: "The paid advertisement does not necessarily match the target markets. By social media, we can directly face the consumers who have the intention to approach us and it is a more effective means." More importantly, by co-creation, the

enterprise can quickly respond to the consumers' demands for the products and services. For instance, she said: "We have designed the activities for the potential customers. When the staffs of the retail sales do not follow the instruction, the users usually complain on Facebook. We can deal with it immediately and ask the stores to improve and provide service recovery. We will also show what we have done to the customers' comments on social media and the action is recognized and appreciated by the online users. It is an excellent approach of free advertising." The last is the expansion of the consumer base, the firm could transmit the information to the users' lives and they might share the information as well as their positive comments to their friends by forwarding on the social media. Thus, the firm can effectively expand its market.

DISCUSSION

Distinct from the model proposed by Etgar (2008), which was based on the perspective of the consumers, this study focuses on the application of co-creation platform and business engagement from the aspect of business operation. Participants' interaction is the start of co-creation and it is important to build a community for the participants. To establish an interactive environment for co-creation, besides the clues of DART suggested by Prahalad & Ramaswamy (2004), this study argues that having "fun" and "benefit" should be included in the platform. By employing various types of interactive tools on social media, fun and benefit are increased. As shown in the case study, the enterprise facilitates the interaction by daily events, arranging and approaching the community, which concurs with our proposed model. Operation of social media should be engaged in the consumers' daily lives and it should be different from the official website. Content of social media should be useful for the consumers, and it is unnecessarily to be directly related to the products.

With the community established for potential co-creation, the enterprise should try to maintain its users and enhance their engagement. That is, the firm should underscore the connection between the enterprise and the consumers on social media. Notably, it is essential to develop the fans' sense of belonging and value at the stage. Five dimensions indicated by Kilger & Romer (2007) can be applied to develop consumer engagement.

After the engagement stage, the enterprise should decide how to guide the consumers to share more and better ideas. This study finds that encounters of cognition, emotion and action will enhance the quantity and quality of the consumers' proposals. To encourage the understanding of product-related content (Nambisan & Baron, 2009) and to strengthen the creative use of channels to enhance encounters (Payne et al., 2009) are the basic factors of the consumers' active participation in virtual co-creation. With the features of high media richness of social media, which is capable of advancing interaction, the enterprise can fulfill these two requirements. For instance, in the case study, the enterprise introduces the products and promotion campaigns by videos and pictures largely and the consumers are very acquainted with the products and their related events. The function of easy voting (e.g. Poll Daddy Polls, Questions) of social media allows the enterprise to quickly acquire the consumers' responses to the change and innovation of the product or service.

Three kinds of the consumers' collective creation power are identified in the case study. It means that by social media, the users are able to express their own opinions, and there will be continuous dialogue between the enterprise and the consumers and among the consumers. That will bring the positive force for value creation. Therefore, the enterprise should invest the

resources in the operation and management regarding the content of social media, and integrate resources of different departments in order to increase service interaction (Maglio et al., 2009).

The case study results suggested that the realized value of co-creation on social media has three major kinds. First, the enterprise can reduce the costs. For instance, the enterprise can precisely focus on the targets thus can lower the marketing costs. Besides, co-creation on social media can help enterprise to identify the customers' needs more effectively thus reduce the loss of product development and allow the new products/services to enter the market quickly by utilizing the great collective force on social media. Second, the enterprise will interact with more consumers by more encounters and engagements. This means a market expansion that usually needs to take a lot of time and money to achieve in the past. Third, the enterprise can quickly respond to consumers' dissatisfaction with products or services by offering service recovery. The co-creation on social media also promotes the consumers' positive attitude toward the brand and increases their purchase intentions and word of mouth referrals. However, the fourth advantage was not obviously presented in the case. Our model argues that the enterprise will enhance the brand character via interaction with customers on the social media and the brand image will be more consumer-perception oriented. This study infers that the insignificance can be attributed to that the case enterprise already has very strong brand personality; it is the leading firm in the market and the brand has been positioned and developed pretty well.

CONCLUSIONS

Social media have become the popular tool for the people in daily communication and contact. Since the meaning and value of the brand is co-created through the interactions of consumers involved with the brand and the brand images reflect the complete experience customers have with and around the brand's products and services. Social media provide consumers and enterprises an excellent platform for co-creation. This exploratory study suggests a co-creation process model on social media. The model has five main stages. First, by various types of interactive clues provided by social media, the enterprises have effective interaction of value co-creation with the consumers. Second, the enterprise develops consumer engagement and creates an environment to motivate consumers' propositions. Basically, consumers' engagement with something is a collection of experiences. It is necessary to realize that there is more than one path to engagement and the different paths offer distinct experiences to the consumers. Third, there are various proposals developed. By continuous dialectical process and negotiation, the collective power in virtual environment can be generated. The accumulation of the power will lead to the enterprises' actions, and finally result in creating values for new products or services. Through the diffusion of the community, the enterprise will realize the value.

Based on literature review and expert interviews, this study clarifies the co-creation process in social media environment. For each stage of the process, the objectives to be accomplished by the social media operator and the means to fulfill the objectives are presented. The proposed process model was examined in a case study, which manifest the applicability of the model. The co-creation process model in social media environment suggested by this study can supplement the past researches and serve as a reference for the enterprises to implement in practice.

This study suggests how the enterprise constructs the consumers' co-creation platform on social media from the managerial perspective. However, the study has its limitations. First, the experts' suggestions are based on their own experiences and analyses of the respective industrial contexts;

they do not necessarily represent the whole reality. Next, although this study established the screening criterion for choosing the industrial experts for in-depth interview and the case selected for examining the proposed model was a representative firm in Taiwan; real co-creation in social media environment might differ according to the enterprise's business scale and industrial characteristics. Therefore, the application of the model needs to be careful in order to have better results. Future study can further refine the model by gathering more data from its real implementation for the improvement of its effectiveness in practice. The researchers can also study from the consumer's perspective. For instance, to probe into the factors of the consumers' participation in co-creation on social media is another direction for the future study.

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