CONVERTING IT-ENABLED CUSTOMER POWER INTO RELATIONAL VALUE OF IT-ENABLED CO-CREATION

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Abstract

Information technology, especially social media, has fundamentally changed the way of firm-customer interactions and has shifted more power to customers. Although an increasing number of firms are aware of increased customer power and the importance of co-creation, how to convert customer power into value of co-creation is unclear. In order to fill this gap in the literature, drawing on social exchange theory, this research develops research hypotheses to examine the relationships among IT-enabled customer power, IT-enabled co-creation efforts, and relational value. A Web-based survey is then conducted in the context of the travel service. This research is expected to contribute to the literature by identifying two types of IT-enabled customer power (self-oriented power and other-oriented power) that drive the firm to engage in IT-enabled co-creation efforts and examining the impact of IT-enabled co-creation efforts on relational value. This research believes that the research results will help firms to understand how to integrate different types of IT-enabled customer power into IT-enabled co-creation process and further create relational value.

Keywords: IT-enabled Customer Power, IT-enabled Co-Creation, Relational Value, Social Exchange Theory, Travel Service.
1 INTRODUCTION

In today’s growing customer power, co-creation is critical to the future growth of firms. Traditionally, firms have autonomous power to decide products/services they will produce and process resources into end products/services. This shows that the value creation process occurs inside the firm, and the firm is seen as the only creator of value (Gummerus 2013; Prahalad & Ramaswamy 2004). However, a number of studies indicate that the failure of many of new products are attributed largely to their failure to take into account customers’ needs (Fang et al. 2008).

A growing body of literature emphasizes the importance of the customer’s active role in the value creation process. Ha°kansson and Senhota (1989, 2006) and Gummesson and Polese (2009) argued that B2B is not an island. Because the demand of B2B is derived from consumer markets, the firm should focus on interacting with external customers rather than the firm’s internal process. Prahalad and Ramaswamy (2000) also argued that customers are fundamentally changing the dynamics of the market. The market has become a forum in which customers play an active role in creating and sharing value. In addition, the service-dominant (S-D) logic emphasizes that the customer is always a co-creator of value. The source of value creation depends on customers’ active input and exchange of operant resources (such as knowledge and skills) in the service process, and value outcomes are perceived by themselves (Vargo & Lusch 2004, 2008).

An increasing number of firms are embracing this emerging trend and are engaging in collaborating with customers and profiting from it. Prahalad and Ramaswamy (2004) argued that effective interactions between the firm and its customers can help the firm achieve a sustainable competitive advantage. A number of studies also indicate that the firm can realize benefits through implementing the co-creation activity. These benefits include lower costs (Auh et al. 2007), reduced risk (Prahalad & Ramaswamy 2004), faster speed-to-market (Carbonell et al. 2009), increased innovativeness (Füller et al. 2008), increased customer loyalty (Auh et al. 2007; Grissemann & Stokburger-Sauer 2012; Rai et al. 2012), and improved service recovery (Dong et al. 2008).

However, despite these significant sources of advantage, compared with B2B context, B2C context is usually characterized by a large distance between firms and customers (Hoyer et al. 2010). This means that firms who collaborate with customers are difficult to achieve.

Traditionally, the firm-customer interaction relies on face-to-face communication. The development of information technology (IT), particularly the social media that emerged from the advent of the Internet, has fundamentally changed interactions between the firm and its customers (Gallaugher & Ransbotham 2010). On one hand, the firm can use these IT to collaborate more efficiently with its customers (Prahalad & Ramaswamy 2004). For instance, Dell allow their customers to create unique configurations of PCs by choice of component parts when customers buy PCs from their Website (Etgar 2008). Starbucks launch a Website to encourage their customers to lay out their ideas regarding all stages of experience (including ordering, payment, and store atmosphere), and finally, these ideas
are likely to be realized (Ramaswamy & Gouillart 2010).

On the other hand, IT increases the ability of the customer to interact with other customers and firms anywhere in the world (Gallaugher & Ransbotham 2010). Through these IT, the customer can access unlimited amounts of information, produce and distribute contents, influence other customers’ actions, and shape markets (Fisher & Smith 2011; Gallaugher & Ransbotham 2010; Hoyer et al. 2010). It is clear that IT has highlighted the role of customers and has shifted more power to customers (Gummesson & Polese 2009).

Although IT intensifies the traditional firm-customer relationship and provides opportunities for the firm to collaborate more efficiently with its customers, how to identify different types of IT-enabled customer power and find way to integrate these powers into IT-enabled co-creation process and further develop relational value are unclear. In order to fill this gap in the literature, this research aims to enhance understanding of how different types of IT-enabled customer power influence the firm’s co-creation efforts and help create relational value by addressing the following questions: (1) What are IT-enabled customer powers that drive the firm to engage in IT-enabled co-creation efforts? (2) How do IT-enabled co-creation efforts influence relational value?

2 THEORETICAL BACKGROUND

2.1 Social Exchange Theory

Social exchange theory is rooted in utilitarian economics, anthropological studies, and behavioral psychology. It mainly focuses on the issues of the reward that actors obtain from, and contribute to, social interaction and interdependencies that govern exchanges (Molm 2006).

Like economic exchanges, social exchanges assume that actors engage in exchange behavior because they believe that their rewards will justify their costs. If they perceive that rewards they receive are less than costs they give, they will stop exchange behavior (Liao 2008). Unlike economic exchanges, social exchanges typically occur without any formal contracts and are primarily interested in longitudinal sequences of transactions between specific partners rather than one-shot transaction between strangers (Stolte et al. 2001).

Social exchange theory is first introduced by Homans (1958). He argues that individual self-interest provides the motivation for social exchange (Molm 2006). After the founded work of Homans (1958), Blau (1964) emphasized the norm of reciprocity in social interactions and argued that actors voluntarily provide benefits for the other because they are expected to receive benefits in return.

Power is one of the most significant features of social exchange theory (Stolte et al. 2001). The analysis of power can be reflected in the works of Blau (1964) and Emerson (1962, 1972). Their works mainly focus on the issues of what determines who has power and the connection between power and social exchange (Molm 2006). Blau (1964) argued that differences in the nature of the valued resources among actors result in interdependence and thus the need for exchange. Similarly,
Emerson (1972) proposed power-dependence theory and pointed out that power differences derive from the relative dependencies of actors on one another for the valued resources. In Emerson (1972)’s formulation, the power of actor A over actor B is determined by the dependence of B upon A for the valued resources. Emerson (1972) further pointed out that when B can increase A’s motivational investment in goals B mediates, that would make power more equal in unbalanced relations.

Social exchange theory provides a useful lens to help us understand why and how customers and firms engage in the co-creation activity and thereby create relational value.

### 2.2 The Co-Creation View

In the co-creation view, researchers focus attention on the customer’s active role in the value creation process and treat the customer as a co-creator (e.g., Grönroos 2006; Normann & Ramirez 1993; Prahalad & Ramaswamy 2004; Vargo & Lusch 2004, 2008). Prahalad and Ramaswamy (2004) emphasized that the firm must learn from and collaborate with its customer for meeting the customer’s personalized and dynamic needs. They argue that firm-customer interactions as the locus of value co-creation provide opportunities for both value creation and extraction and are the basis of customer experience. They also suggest that interactions can be anywhere in the business system, not just at conventional point of sale or customer service. In a similar vein, Vargo and Lusch (2004, 2008) proposed service-dominant (S-D) logic to help a better marketing-grounded understanding of value and exchange (Payne et al. 2008). They argue that the role of the firm is to develop value propositions according to the customer’s desires, whereas the customer is not only viewed as operant resources for the firm by providing information about needs but also viewed as a resource integrator to determine and create its own experiences.

### 2.3 Social Power

Social power is be defined as the ability of an actor to control or influence the behavior of another (Hunt & Nevin 1974). The bases of social power are originally discussed by French and Raven (1959). They classify social power into five bases: coercive, reward, legitimate, expert, and referent power. Subsequently, Raven and Kruglanski (1970) added information power into the bases of social power. Lusch and Brown (1982) later separated legitimate power into traditional legitimate and legal legitimate power. The seven bases of social power can be explained as follows (Kohli 1989). Coercive power refers to the ability of an actor to mediate punishments to other actors. Reward power refers to the ability of an actor to mediate rewards to other actors. Expert power refers to the extent to which an actor is perceived by other actors as being knowledgeable about relevant issues. Referent power refers to the extent to which other actors like and identify themselves with the actor and have regard for the actor’s quality. Informational power refers to the ability of an actor to explicate information or contingencies not adequately considered by other actors. Legal legitimate power refers to the extent to which other actors feel they ought to comply with the contractual agreements. Traditional legitimate power refers to the extent to which other actors feel they have obligation to acquiesce the actor’s
requests.

After their seminal work, several studies attempt to classify the bases of social power to use in a given situation (Johnson et al. 1993). The bases of social power and their dichotomies have been applied in the context of the firm-customer relationship. For instance, Zhao et al. (2008) used five customer powers based on the concept of the bases of social power and examined their impact on supply chain relationships. They define customer power as the ability of the customer to influence the decision of the firm.

### 2.4 IT-Enabled Customer Power

In the traditional firm-driven view, the firm engages in providing products/services at low cost and the value creation process is placed within the firm. This results in standardization of production and destruction of the authenticity and individuality (Fisher & Smith 2011). IT creates ubiquitous connectivity that provides opportunities for the customer to access new information and to learn new knowledge from other customers (Prahalad & Ramaswamy 2004). This leads to a trend toward greater needs of authenticity and individuality (Fisher & Smith 2011). If the firm’s products/services do not match customers’ preferences, customers will most likely stop purchasing from them, and vice versa (Zhao et al. 2008). Therefore, this research argues that customers have the ability to mediate rewards or punishments to the firm.

The social media technology has facilitated the development of communities which functionality enable customers to interact with other customers, to share and obtain information, to satisfy others, and to create themselves (Fisher & Smith 2011; Fuller 2010; Gallaugher & Ransbotham 2010; Jarvenpaa & Tuunanen 2013). The community has become important resources because it contains a wealth of information provided by customers and a number of potential experts who are most knowledgeable, invest in a particular product/service, and are willing to contribute. These experts establish their reputation through being recognized as a valuable information source by other customers (Grissemann & Stokburger-Sauer 2012). In addition, Nyaga et al. (2013) argued that expert power and referent power can be regard as two sides of the same coin. Therefore, this research argues that customers have power because they possess information and expertise that desired by the firm. In addition, these customers have potential to provide credibility to the firm.

### 3 HYPOTHESES DEVELOPMENT

To enhance understanding of how different types of IT-enabled customer power drive the firm’s co-creation efforts, this research first identifies two types of IT-enabled customer power based on the bases of social power: self-oriented power and other-oriented power. Self-oriented power is driven by an actor’s self-interest that consists of coercive and reward power, whereas other-oriented power refers to an actor who cares about the reaction of others and the effect on others (i.e., emphasis on altruistic motives) that consists of information, expert, and referent power. Following the works of
Fang et al. (2008) and Hoyer et al. (2010), then this research deals with two types of IT-enabled co-creation effort, including the breadth and depth of co-creation. The breadth of co-creation refers to the scope of participation across all stages of activity process in which customers can be involved in just one activity or in an encompassing activity process. The depth of co-creation refers to the extent to which customers involve in a particular stage in which customers may be superficially or deeply involved.

3.1 IT-Enabled Customer Power and IT-Enabled Co-Creation Effort

When customers have strong incentives to quest their needs of authenticity and individuality, to avoid punishment (e.g., canceling the order), it is likely to motivate the firm to involve customers in various activity processes for helping customers understand that the source of needs or ideas is transparently driven by their input and their needs or ideas will be implemented. In addition, when customers offer rewards that are perceived by the firm, it may reinforce the notion of reciprocity and is likely to lead the firm to feel obligated to take into account customers’ expectations (Nyaga et al. 2013). To facilitate own needs or ideas can be fulfilled, customers prefer to play a greater role in the value creation process. If the firm ignores customers’ requirements, they will likely lose these customers. Thus, the firm is likely to collaborate with customers. This research therefore proposes the following hypotheses:

H1: Self-oriented power positively influences the breadth and depth of co-creation.

H1-1: Coercive power positively influences the breadth and depth of co-creation.

H1-2: Reward power positively influences the breadth and depth of co-creation.

Innovators, lead users, emergent consumers, and market mavens have identified that they may be willing and able to participate in the co-creation activity (Hoyer et al. 2010). Generally, these customers have more information and a larger sensitivity about products and market dynamics than others. In addition, some customers who possess a high level of expertise and skills are better equipped to make valuable contributions to other customers and firms (Auh et al. 2007). Fisher and Smith (2011) also pointed out that because frontline users and devoted customers have the ability to find problems and shortcomings with the product, their ideas and innovations are more likely to be accepted by others. Thus, the firm with less information and expertise is more willing to rely on customers’ opinions and to help customers realize their self-development and reputation-building in the co-creation process (Fuller 2010). This research therefore proposes the following hypotheses:

H2: Other-oriented power positively influences the breadth and depth of co-creation.

H2-1: Information power positively influences the breadth and depth of co-creation.

H2-2: Expert power positively influences the breadth and depth of co-creation.

H2-3: Referent power positively influences the breadth and depth of co-creation.
3.2 IT-Enabled Co-Creation Effort and Relational Value

The relational value (e.g., loyalty) is a suitable outcome measure to capture the value of co-creation. It can reflect how the firm and the customer create a mutually beneficial relationship in the co-creation process, and finally result in an increased value for both of them (Rai et al. 2012). Similarly, Gummerus (2013) argued that understanding customer value (i.e., customer loyalty) is important because it captures the result of customers who participate in the co-creation process and allows the firm to measure its competitive advantage in the eyes of customers. Customer loyalty refers to the customer’s re-visit and recommendation intentions (Grissemann & Stokburger-Sauer 2012). It is an important construct in the relationship-focused research (Hoyer et al. 2010; Wallenburg & Lukassen 2011).

Co-creation provides a rich opportunity of interaction and dialogue for the firm to take into account customers’ unique preferences and suggestions (Auh, et al. 2007; Grissemann & Stokburger-Sauer 2012). When customers perceive that their needs are satisfied and they have opportunities of contribution and self-expression, it is more likely to underpin their decisions to be loyal to the firm. Prahalad & Ramaswamy (2004) also indicated that high-quality interactions enable customers to co-create unique experiences with the firm, and ultimately create a greater value for both of the firm and customers.

In addition, Prahalad and Ramaswamy (2004) pointed out that the dialog, access, and transparency can clearly help customers assess risk-benefits of actions and decisions. When the firm involves customers in each co-creation stage, because the characteristic of openness and transparent (Jarvenpaa & Tuunainen 2013), customers can have a greater understanding of the firm’s internal process and remove many doubts in the minds of themselves (Hoyer et al. 2010). Thus, it is more likely to facilitate customers having a greater loyalty to the firm.

In addition, previous studies indicated that interdependency serves to align both sides’ interests, and thereby contribute to exchange performance (Paulin & Ferguson 2010; Muthusamy & White 2005). Previous studies also found that co-creation has a positive effect on customer loyalty (Auh, et al. 2007; Grissemann & Stokburger-Sauer 2012). This research therefore proposes the following hypotheses:

\( H3-1: \) The breadth of co-creation positively influences customer loyalty.

\( H3-2: \) The depth of co-creation positively influences customer loyalty.

4 RESEARCH METHODOLOGY

4.1 Sample

This research empirically tests research hypotheses in the context of the travel service. This research chooses the travel service as investigative context for the following reasons. First, the tourism industry is characterized by high-contact services in which customers play a critical role in the
co-creation process (Grissemann & Stokburger-Sauer 2012). Second, the Internet has significantly changed customers’ behavior. The customers can bypass travel agents and order their airline tickets and hotel vouchers directly from the suppliers (Etgar 2008). How to maintain customer loyalty has become a challenge for travel agents. As a result, an increasing number of travel agents are starting to increase co-creation activities with their customers. For instance, customers can not only input their travel arrangements from a menu of features but also interact with travel agents to reflect their needs on the Website. In addition, travel agents are increasingly using social media to establish online communities to facilitate dialogues among their customers and to support customers to share their travel experiences and new travel ideas. A Web-based survey is used in this research to reach subjects who have experience of co-creation with travel agents in Taiwan.

4.2 Measures

The scales are adapted from established scales to suit this research context. This research operationalizes self-oriented power and other-oriented power as the second-order construct. Self-oriented power consists of coercive and reward power. Other-oriented power consists of information, expert, and referent power. The items for measuring five powers are adapted from Brown et al. (1995) and Zhao et al. (2008). Following the work of Fang et al. (2008), this research identifies three stages of co-creation activity (i.e., design, assembly, and sales of travel arrangement) and asks whether the customer is involved or not. The sum of the number of activities the customer checked is used to represent the breadth of co-creation. If the customer is involved in the activity, then this research asks the depth of co-creation with items adapted from Chen et al. (2011). The average of items of involved activities is used to represent the depth of co-creation. The items for measuring customer loyalty are adapted from Grissemann and Stokburger-Sauer (2012).

5 EXPECTED CONTRIBUTION

IT, especially social media, has fundamentally changed the way of firm-customer interactions and has shifted more power to customers. Although an increasing number of firms are aware of increased customer power and the importance of co-creation, how to convert customer power into relational value is unclear. This research aims to contribute to the literature by identifying two types of IT-enabled customer power that drive the firm to engage in IT-enabled co-creation efforts and examining the impact of IT-enabled co-creation efforts on relational value. This research believes that the research results provide new insights for firms to understand how to integrate different types of IT-enabled customer power into IT-enabled co-creation process and further create relational value.
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