Electronic Commerce Research and Applications 13 (2014) 295–304

Contents lists available at ScienceDirect

Electronic Commerce Research and Applications

journal homepage: www.elsevier.com/locate/ecra

How does customer self-construal moderate CRM value creation chain?

Jia-Yin Qi [a], Qi-Xing Qu [a,*], Yong-Pin Zhou [b]

[a] School of Economics and Management, Beijing University of Posts and Telecommunications, PR China
[b] Michael G. Foster School of Business, University of Washington, Seattle, United States

ARTICLE INFO

Article history:
Received 1 February 2013
Received in revised form 28 May 2014
Accepted 1 June 2014
Available online 4 July 2014

Keywords:
CRM value creation chain
Customer value
Organization value
Self-construal

ABSTRACT

Most of the existing literature on CRM value chain creation has focused on the effect of customer satisfaction and customer loyalty on customer profitability. In contrast, little has been studied about the CRM value creation chain at individual customer level and the role of self-construal (i.e., independent self-construal and interdependent self-construal) in such a chain. This research aims to construct the chain from customer value to organization value (i.e., customer satisfaction → customer loyalty → patronage behavior) and investigate the moderating effect of self-construal. To test the hypotheses suggested by our conceptual framework, we collected 846 data points from China in the context of mobile data services. The results show that customer's self-construal can moderate the relationship chain from customer satisfaction to customer loyalty to relationship maintenance and development. This implies firms should tailor their customer strategies based on different self-construal features.

1. Introduction

Over the past decades, many firms have implemented customer relationship management (CRM) to facilitate the development of firm-customer relationships (Rogers 2005). According to a 2013 Gartner report, the worldwide CRM market experienced 12% growth in 2012, three times the average of all enterprise software categories[1]. However, according to the same survey, 70% of CRM projects resulted in either loss or no bottom line improvement. Many executives reported that their CRM initiatives not only failed to deliver profitable growth, but also had damaged long-standing customer relationships (Richards and Jones 2008). Thus, it is essential to critically examine whether and how CRM creates value and provide guidance for practitioners to improve the CRM value creation chain.

According to Payne and Frow (2005), CRM creates two kinds of value: value that customer receives from the organization and value that the organization receives from its customers. The former is called customer value and is the base of CRM value creation; the latter is called organization value and becomes the outcome of providing and delivering superior product/service. Thus, the CRM value creation chain spans from customer value to organization value. A firm's CRM implementation will achieve better performance if it can effectively manage its CRM value creation chain.

The research area most related to the CRM value creation chain is one that explores the relationship between CRM dimensions (value drivers) and CRM outcomes. Yim et al. (2004) identified four dimensions of CRM implementations and investigated their effect on customer satisfaction, customer retention, and sales growth. Richards and Jones (2008) outlined ten propositions to describe the relationship among seven CRM drivers and three kinds of customer equity. Krasnikov et al. (2009) examined the positive impact of CRM implementation on firm's operational cost efficiency and firm's profit efficiency. Liu et al. (2012) linked CRM applications to shareholder value, and showed that competition features can moderate the CRM value. Shang and Lu (2012) examined four CRM dimensions' impacts on firm performance in the context of freight forwarder services. Hakkak et al. (2012) studied the role of CRM in improving organizational effectiveness. It is evident that much of the CRM research reviewed above has focused on organization value; empirical exploration of the link between customer value and organization value is still in its infancy (Graf and Maas 2008). Moreover, almost all the research is at the aggregate level; very little has been done at the individual customer level.

Another related active research area is service profit chain (SPC). The SPC model, introduced by Schlesinger and Heskett (1991) and later expanded by Heskett et al. (1997), illustrates the relationship between employee satisfaction, customer satisfaction, customer loyalty, and firm's financial performance. SPC integrates operation management (OM) and human resources management (HRM) for organizational improvement in the context of a service organization (Yee et al. 2009). The SPC proposition has inspired much investigation into the relationship between customer

* Corresponding author. Address: P.O. BOX 295, Beijing University of Posts and Telecommunications, Beijing 100876, PR China.
E-mail address: quqx85@gmail.com (Q.-X. Qu).

[1] http://www.forbes.com/sites/louiscolumbus/2013/04/26/2013-crm-market-share-update-40-of-crm-systems-sold-are-saas-based/

http://dx.doi.org/10.1016/j.elerap.2014.06.003
1567-4223/

satisfaction, loyalty, and firm performance (Gelade and Young 2005, Maritz and Nieman' 2008, Chi and Gursoy 2009, Kim et al. 2014), which is very similar to our CRM value creation chain. Nevertheless, work in SPC is still done at the aggregate level. Our work explores the mechanism between customer value and organization value at the individual customer level.

In this paper we aim to investigate the following research questions (RQ):

RQ1. Is there a general CRM value creation chain model at the individual customer level which to provide the link from customer value to organization value? Which factors are involved in the CRM value creation chain, what are the relationships between these factors, and which is the most crucial factor?

To our knowledge, our paper is the first to construct an entire CRM value creation chain at the individual customer level from customer value to organization value.

RQ2. Does customer self-construal moderate CRM value creation chain? At the national level, cultural factors have attracted some research attention. Huber et al. (2007), and Cunningham et al. (2006) introduced cross-culture into customer value analysis, and found that customers in different countries have different value drivers of customer value. Graf and Maas (2008) suggested that future customer value research pay more attention to the characteristics of cultural differences. Qi et al. (2012) investigated the impact of cross-cultural factors on customer lifetime value, but they did not consider the difference between customers from the same cultural background. Markus and Kitayama (1991) argued that although independent and interdependent self-construal are predominant in individualistic and collectivistic cultures respectively, individuals within a given society can be less or more independent or interdependent. Moreover, Hackman et al. (1999) demonstrated that independent and interdependent self-construal orientations are two separate constructs and suggested that the predictive capacities of these two variables are investigated separately. In this research, we investigate the roles of independent and interdependent self-construal in the CRM value creation chain.

By answering RQ1 and RQ2, we make two major contributions. First, our CRM value creation chain from customer value to organization value at the individual customer level provides new insights for both theoretical CRM development and practical CRM implementation. For theoretical CRM development, this value chain model suggests the mediation effect of customer loyalty on the relationship between customer satisfaction and customer patronage behavior. For CRM practice, this value chain model suggests managers pay more attention to the entire value chain, rather than just the beginning of the chain (i.e., customer satisfaction).

Second, we are the first to investigate the moderating effect of customer's self-construal on CRM value creation chain. We hope to stimulate more research on CRM value creation process. We also believe that our findings can help executives to formulate better customer strategies to make their CRM value creation chain effective.

The data for our analysis were collected from mobile data service in the telecommunication industry of China, for three major reasons. First, China is the world's largest mobile telecom market, with the number of subscribers increasing rapidly from 145 million in 2001 to 986 million in 2011. Second, based on China Mobile's annual reports, in the past five years, the proportion of voice services in the total revenue decreased 4.8%, 9.9% and 16.7% for China Mobile, China Telecom, and China Unicom, the three main telecommunication service providers in China. In its place, various value-added mobile data services – including short message service (SMS), games, electronic transaction, and web browsing – are becoming greater revenue sources for telecommunication service providers. Third, while it is clear that the adoption and consumption of mobile data services differ by customers based on their characteristics (Kim et al. 2004, Choi et al. 2005, Qi et al. 2009, Kakousis et al. 2010), very little is known about whether and how self-construal could impact on this difference.

The rest of the paper is organized as follows: We begin with the theoretical background and hypotheses development. We then present our research methodology and the results. Next, we offer possible explanations of the results, the theoretical and managerial implications of the findings. Finally, we present limitation and future research direction.

2. Theoretical background

2.1. Customer value

There are various ways to define, understand and apply customer value (Parasuraman et al. 1985, Eggert and Ulaga 2002, Walker et al. 2006, Flint et al. 2002, Rosendahl 2009). In this paper, our definition of customer value follows "customer value from a customer's perspective" in Graf and Maas (2008), which is the value generated by a firm's product or service as perceived by the customer, or the fulfilment of customer goals and desires.

Graf and Maas (2008) also reviewed the relationships between the customer value construct and other central marketing constructs. Among these relationships, they generalized the relationship between customer value and customer satisfaction, and concluded that customer satisfaction is a post-consumption assessment by customer about the purchased product or service. Customer value is the antecedent of customer satisfaction, and customer satisfaction is the consequent of customer value (Fishbein and Ajzen 1975, Lin and Wang 2006, Turel and Serenko 2006, Kuo et al. 2009). Thus, customer satisfaction can be regarded as an indicator of customer value.

2.2. Organization value

There are also several close concepts related to organization value (Richards and jones 2008, Songailiene et al. 2011, Srivastava et al. 1998, Rust et al. 2004, Blattberg and Deighton 1996). In this paper, organization value means the economics of customer acquisition and customer retention for cross-selling, up-selling and getting customer loyalty. This is similar to customer value from a company perspective in Srivastava et al. (1998), in which the ultimate goal of organization value is to maximize a firm's profitability from customer.

There are two kinds of indicators for organization value: customer loyalty and customer patronage behavior. Customer loyalty can be seen as the emotional organization value, and customer patronage behavior is the behavioral organization value.

The most direct way to monitor the change of organization value is to observe the change of customer patronage behavior. Aurier and N'Goala (2010) classified customer patronage behavior into relationship maintenance and relationship development, both of which contribute to long-term profitability. Relationship maintenance describes how long a firm can keep relationship with a customer, and relationship development reflects how much a firm can get profitability from a customer.

Customer retention is a central concern for CRM (Reinartz and Kumar 2000, Gustafsson et al. 2005). Based on earlier research, we use customer relationship duration ("duration" for brevity) to represent relationship maintenance. Duration refers to the length of a customer's business relationship with a specific firm.

Retaining customers alone is not enough to develop revenues, margins and profits (Reinartz and Kumar 2000). Firms' profitability also depends on their ability to get current customers to use their services/products more intensively (usage of service) and buy