Chapter 4
Fighting Against the Economic Crisis: Innovation in B-to-B Markets Through Co-creation

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Abstract The special characteristics of industrial markets favour customer involvement in product development. Besides the influence in the development process, its participation fosters opportunities for managers in terms of innovation, value co-creation and customer retention. Based on the social exchange theory and resource-based view, the present research discusses a theoretical model that can promote dynamic capabilities and increase customer retention through value co-creation. The special characteristics of industrial markets favour customer involvement in product development. Besides the direct influence in the development process, participation increases the opportunities open to managers in terms of value co-creation and customer retention.

4.1 Introduction

Customer relationship management (CRM in advance) is a recurring topic in recent industrial marketing studies. Firstly, because it offers a way of compensating the saturation in industrial markets, especially in a context of economic recession. Secondly, several characteristics of Business-to-Business (B-to-B in advance) markets, such as long-term relationships, derivative needs, interaction purchase processes and professionalism, make possible the inclusion of customers as an active

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participant in product development (Wilkinson 2008). Thirdly, because the closer a business relationship is, the higher the benefits will be (Ulaga and Eggert 2006); customer retention (rather than acquisition) becomes an increasing priority as companies try to reach their full financial potential (Gupta et al. 2004).

After retaining a customer, the next point an industrial company should strive for is to achieve the involvement of the customer in the development and innovation process. Companies desiring to exploit their unique resources in innovative ways need to tap into the resources offered by other organisations, in this case the knowledge and experience of their industrial customers (Ford et al. 2011). This inclusion can only be mutually beneficial because the competitiveness of industrial firms is closely linked to the capabilities of their suppliers (Håkansson et al. 2004). The latter are also a rich source of new ideas and innovation, since they may suggest different solutions which the firm could never have previously imagined. This cooperation may then lead to the creation of dynamic capabilities based on a higher added value (Wilkinson 2008; Cabanelas et al. 2013). The challenge is to increase the advantageous cooperation while managing the relationship to the mutual benefit of both partners (Ford et al. 2011).

However, we are dealing with a topic that still needs more research because previous studies analysing the relationship between innovation, customer retention and a company's economic success have led to ambiguous findings. While some studies found a correlation linking customer retention to increased profitability (Gupta et al. 2004), other evidence shows that retaining customers does not necessarily augment a company's commercial success (Krafft 2007). Thus, in order to achieve financial success, a company needs to strike a balance between the effort required in maintaining customer relations and the effectiveness of the same in increasing profitability. Furthermore, most existing studies about customer retention analyse the problem from the customers' perspective (Narayandas and Rangan 2004); there is a shortage of studies which investigate independent variables from the suppliers' point of view. And often the dimensions included in the analysis are insufficient; a comprehensive evaluation of a company's overall situation may have a great influence on the decision of whether to continue a business relation (Bolton et al. 2008).

Thus there is a lack of research in CRM relating to customer retention and co-creation (Mithas et al. 2005); including innovation, and customer knowledge, integration and interaction from the suppliers' point of view. In the light of these shortcomings, the current research will theoretically address several research questions to develop a model applicable to customer retention and co-creation: Can a manufacturer positively influence customer retention by involving the customer at an early stage in a development project? Is it possible to create value and dynamic capabilities (e.g. innovation) through cooperation? Which customer retention variables will be most affected by this involvement? Thus addressing these questions will be the main focus of this research project, where customer interaction, involvement and knowledge, and innovation have much to contribute to the market orientation of companies. To this end, the research will develop an eclectic approach built on social exchange theory and a resource-based view (RBV) of the firm.

The paper is divided into five sections. The first explains the theoretical research background. The second analyses the special characteristics of industrial markets that are central to the third section concerning customer interaction and integration, and the subsequent value co-creation and customer retention. The fourth section focuses on the implications and the model developed from the literature review while the fifth closes the paper with a discussion and conclusions.

4.2 Theoretical Background

The management of B-to-B is so complex that it cannot be explained simply by using just one background theory (Narayandas and Rangan 2004). From our point of view, the foundations behind the retention of industrial customers are based on two main theories: the 'Social Exchange Theory' and the 'Resource-Based View of the Firm' (and its derivative approach known as 'Dynamic Capabilities'). However the application of these theories may involve other theoretical contributions: the scarcity of resources and power ('Resource Dependence Theory'), the interaction between different partners ('Inter-organisational Theory'), the institutionalisation of relationships ('New Institutional Economic Theory') and the inherent opportunity cost of relations ('Transaction Cost Theory'). Thus we aim to build up an eclectic approach to industrial customer retention, with the main focus on the former theories.

'Social Exchange Theory' is based on propositions by Thibaut and Kelley (1959), who investigated the exchange and mutual behaviour in interpersonal relations of at least two individuals. This social exchange, from the marketing point of view, includes the exchange of products or services; thus can also be applied to inter-organisational business relations. The partners participating in a relationship usually assess its rewards and costs based on the principles of the 'social exchange theory'. If an interaction shows social and economic advantages, it will lead to the intended customer loyalty (Briggs and Grisaffe 2010). In a B-to-B relationship, interaction on a regular basis leads to certain codes of conduct and standards, creating a relationship of predictability and obligations (Thibaut and Kelley 1959). These codes of conduct regulate aspects such as communication or synchronisation of concrete acts and expectations, leading to reduced interaction costs and finally to an improved interaction result (Ramani and Kumar 2008). Thus the 'Social Exchange Theory' helps us to understand the development of long-term relations, the value-creation process and the consequential customer retention (Reinecke and Hahn 2003). The interaction would only be successful if all parties create a significantly larger benefit than the costs involved in the value creation. Thus, active and voluntary participation of customers is basic.

The RBV holds that existing differences in performance can be attributed to the possession of a series of unique strategically valuable resources (Barney 1991; Peteraf 1993). Particularly, the cooperation facilitates access to new resources and favours the innovation and a greater adaptation to highly dynamic environments. In short, co-creation gives access to intangible skills and resources which are present outside the traditional environment, offering advantages to accessing information and opportunities, thus providing benefits which an organisation acting on its own would have difficulty accessing (Gulati 1999). Cooperation with customers and the subsequent co-creation tap into a resource called ‘customer knowledge’, empowering a virtuous cycle of: closeness, learning, anticipation of demands, long-term relationships, customer loyalty retention and value (Mithas et al. 2005). In this paper we also apply a derivative approach of the RBV known as Dynamic Capabilities (Eisenhardt and Martin 2000).

The value creation, as the process by which the resources of two companies are combined in order to achieve something that one of the parties could not achieve on its own, is built on both theories. Since the customers are actively co-creating value with their suppliers, making use of each other’s resources and the interaction are basic prerequisites. Thus, the innovative capabilities and the social interactions that take place in parallel with business have an important role in the evolution and length of relationships and in the use and value of resources (Johnson et al. 2008). This is possible because of the differential nature of B-to-B markets.

4.3 The Differential Nature of B-to-B Marketing

The identification of the special characteristics of the B-to-B environment is basic for those companies operating in those markets (Homburg and Rudolph 2001).

Derivative needs: Since there is a link between the value-added chains of provider and customer, any change in the processes can affect costs and values, and a competitive advantage can arise (Kleinaltenkamp 2000). Then, the exchange process is complexer because the provider has a good position to offer an added value for his customer through cooperation; the question is how the provider can help the customer to create an acknowledged competitive advantage which can benefit the other members of the whole value chain.

Longevity of relationships: Business relationships in B-to-B markets are interaction processes that led by personal contacts and long-term business perspectives with an economic target. The purchasing processes are usually long and time-consuming, but once decided the demand cycles are frequent and long-term. It offers time to comprehend customer needs and its evolution.

Organisational buying behaviour: The organisational buying behaviour is more focused on organisational targets than on subjective goals; the purchase decisions are usually multi-personal and consequently more rationalised, often including various departments to professionally justify the decisions (Backhaus 1999), therefore are more formalised and require a longer framework. Sometimes originate the apparition of buying or selling centres which manage interactions with suppliers.

Professionalism: The decisions in industrial markets are usually taken by people with specific formation or knowledge in the product or service. Since the deciders are not usually the owners of the firm, they have to explain the reasons of their decisions; the procedure needs a high involvement and professional research interviews.

Structure of phases: Since the industrial goods purchasing processes can have important consequences in terms of time and money, and since past research has found evidence that process satisfaction is often more important than product satisfaction in industrial markets (Tanner 1996), the process requires good coordination, verification and structuring.

Globalisation of markets: The customers of industrial markets are very often international. The reasons are usually overcapacities, domestic markets saturation, fast product changes, and increasing efforts for research and development. The international markets include different challenges, new competitors and different customers with new expectations, culture and information.

Transparency of markets: The scarce number of customers leads to a higher dependency of them and leads to an increased dependency on the information about the competition (Kleinaltenkamp 2000). As a consequence, customers can easily change their provider and also spread negative/positive feedback by word-of-mouth to other customers.

4.4 Integration and Interaction: Co-creation and Customer Retention

4.4.1 Customer Integration

During the product development process, firms operating in industrial markets need to integrate external factors. The result is a multistage process with two defined steps: pre-combination, the provider autonomously creates a potential achievement, and final-combination, creation of the product including internal and external requirements (Reichwald and Piller 2006). Therefore, the product can be purely developed in co-operation with the customer, combining customer information and knowledge, with the provider's capabilities. During this process the customer integration is achieved via information and knowledge exchange; then, the systematic collection and evaluation of customer information to create products that meet customers' expectations is an essential criterion for success. If both partners contribute in the integrated development, it would be a win-win process. The goal is reaching the 'interactive value creation', that means co-operation, social exchange and resource and capabilities sharing during the different phases of the value creation process.

4.4.2 Customer Interaction

The interactive value creation highly depends on the integration of external factors and on the communication between customer and provider during the product development process. By definition, the interaction needs the contact between at least two individuals, a chronological order of actions and reactions, and the attention of involved parties to meet the partners' needs. It should include procedures to stimulate partners in the achievement of joint-activities and, in consequence, joint-values. The change of paradigm that highlights the cooperative nature of value creation instead of the autonomous one is associated to this idea (Payne et al. 2008). However, despite the co-creation concept gaining increasing attention in academic circles, there are still many challenges for which academics need to come up with solutions.

4.4.3 Value Co-creation via Customer Integration

Value co-creation involves dialogue and interaction between customers and suppliers during the product design, production, delivery and consumption phases (Payne et al. 2008). Through joint activities and sharing of resources, firms can develop products or services that one company could not have created on its own (Freiling 2004). This option calls for considerable collaborative effort and active partnership, where each partner is prepared to increase benefits or reduce sacrifices through monetary or non-monetary incentives. In consequence, co-creation assumes that the value is co-developed jointly and reciprocally through interaction between the provider and beneficiary through the pooling of resources and expertise. This approach contradicts the basic tenet of traditional economic theory that makes a distinction between the roles of the customer and the supplier, and views dependency negatively (Prahalad and Ramaswamy 2004). However, combining the resources of different companies in industrial relationships enables partners to achieve goals which could not otherwise be achieved alone: Value is co-created through reciprocal and mutually beneficial relationships (Vargo et al. 2008).

Prahalad and Ramaswamy (2004) identified four steps for effective value co-creation processes. The first is dialogue, which allows customers to contribute their views to the development process. The second is access, although it is not necessary to own a resource or capability to achieve this. The third is risk assessment, the likelihood of harming the customer–supplier relationship. The fourth is transparency: partners no longer expect opaqueness of prices, costs and margins, and thus the information asymmetry disappears. Furthermore, firms need to commit themselves to the co-creation culture and the development of joint capabilities and cooperative innovations with their partners (Ramaswamy 2009); and the managerial culture should fully endorse the co-creative structure. In addition, value co-creation also presupposes cross-functional interaction and cross-firm working groups, to be accompanied by the definition of procedures, design of tools and measurement of the potential financial impact of identified initiatives (Cabanelas et al. 2013).

The sudden appearance of co-creation on the marketing scene makes the customer—a traditionally uncontrollable force—into a key resource for developing dynamic capabilities, such as innovative or personalised solutions. The customer is now a primary integrator of resource and a core component of the value creation process.

4.4.4 Dynamic Capabilities

Among the major effects of co-creation, the development of dynamic capabilities may be highlighted. Eisenhardt and Martin (2000, p. 1107) define dynamic capabilities as 'a firm's processes that use resources—specifically the processes to integrate, reconfigure, gain and release resources—to match and even create market change'. They need the identification of organisational and strategic routines to achieve new resources to initiate market changes (Eisenhardt and Martin 2000). The relationships and the knowledge blend between supplier and customer favour the emergence of immaterial advantages related to learning processes, dissemination of knowledge and fostering innovation (Omil et al. 2011). Thus the generation of dynamic capabilities is highly dependent on the ability to cooperate and effectively combine different forms of knowledge among agents (Cabanelas et al. 2013). Such impulses to learn, innovate and develop capabilities should be themselves an important incentive for increased cooperation and a key motivation to the firm master customer retention.

4.4.5 Customer Retention

Customer retention may be conceptualised as a system of activities established by the supplier to improve transaction activities that is based on the positive attitude of the customer and that results in a readiness for repurchasing. It then requires the repetition of different kinds of transactions (such as information, goods or money) between two partners based on prior behaviour and future expectations. While previous behaviour includes purchasing behaviour, future perspectives including the repurchasing potential, other potential product acquisitions (cross-selling), price tolerance, customer satisfaction and the recommendation potential (goodwill). Our research tries to explain theoretically how previous behaviour can affect the future prospects after co-creation in industrial markets. This is based not on reason but on the potential benefits that customer retention can offer to these companies.

4.5 Discussion: Model and Theoretical Propositions

The characteristics of industrial markets include the challenges and opportunities which managers have to contend with in order to retain customers. The interaction over time during long-term relationships, product specifications which may have to be modified due to deviating requirements, the exchange of information during the decision-making process and the buying behaviour and professionalism—all these allow the integration of the customer in the development process. The company can then comprehend customer needs and acquire resources in the form of customer

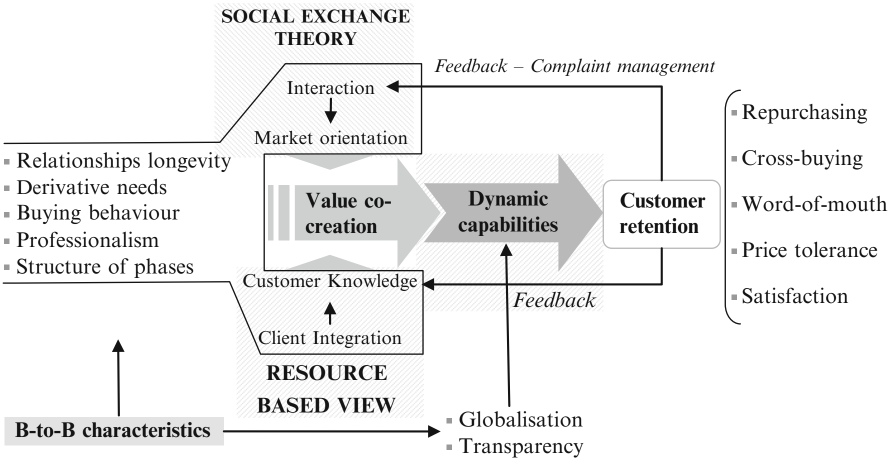

Fig. 4.1 Value co-creation, dynamic capabilities and customer retention

knowledge that can be used in the cooperative creation of products and services. Once the co-creation process begins, the customer–supplier exchange nurtures a spiral of benefits in the form of dynamic capabilities: learning, innovation and adaptation. Having achieved dynamic capabilities, customer retention becomes easier because the company's supplier, having developed customised and innovative products (through a multidisciplinary approach), is now better adapted to their needs and inspired by the success of having worked jointly on a common project. The potential benefits are likely to be in terms of repurchasing behaviour, cross-buying (where possible), recommendations, higher price tolerance and satisfaction. Furthermore, the process enables a continuous feedback through interaction and complaint management. Thus benefits of customer retention are to be expected where the co-creation process is properly managed by the company's decision makers (Fig. 4.1).

From the model (Fig. 4.1) a number of propositions arise that need to be validated empirically in future research:

1. *The interaction allows a better understanding of customers' demands that can be internalised in the firm through co-creation activities.*
2. *The integration of customers in the development process provides key resources to a firm for value creation.*
3. *Co-creation fosters the development of dynamic capabilities that potentially increase the customer retention.*

The propositions would need an organisational culture of retaining customers based on value creation through cooperation. This could ultimately lead to an increased market share, higher profitability and more innovation, and better overcome the economic crisis.

4.6 Conclusions

CRM provides a positive response to the competitive environment which companies are facing today. If managers can achieve customer retention, they can look to the future instead of having to deal exclusively with day-a-day operations. The involvement and cooperation of customers in the development process—co-creation—is one way of retaining them. The characteristics of industrial markets make customer interaction and integration not only possible but essential. Through paying attention to social exchange theory and RBV, it is possible to integrate the customer's point of view in the product development, at the same time as allowing the company to gain access to innovative ideas and to a new resource called customer knowledge. Thus with value co-creation the company is in the enviable position of being able to create dynamic capabilities based on innovation, customisation and learning that should not only lead to customer retention but also to its consequent benefits. However, in future research there remain two main challenges which the authors have faced: The first is to test the model empirically to assess its reliability. The second is to offer specific options for managers who want to incorporate value co-creation in their business processes. In other words, in future research the authors aim to reduce the limitations which apply to this present paper.

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