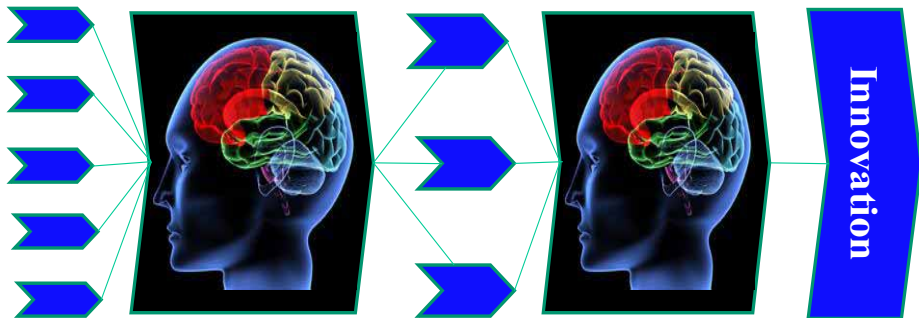


Hongqing Sun

CKM-Embedded Innovation Marketing as Success Driver for Product Innovation

Theoretical Framework and Empirical Research



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Dedication

I dedicate this book to my mother and father. You have always believed in me and input lifelong prayers and supports to enable me to finish this gigantic task.

This book is especially dedicated to the people of Germany, who welcomed me with open arms, with kindness, with support, with your strict style to academy and with your relaxed approach to life.

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Most importantly, I have to appreciate the support and encouragement from my family, especially my parents, who have provided havens for my heart. I would like to thank my family for their cheerleading and perseverance in forging the road ahead so that I may realize the possibilities of higher goals in a myriad of ways.

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Crossing all the hurdles and reaching this milestone is a humbling experience for me. There are many people that made this childhood dream a reality. I am eternally grateful to everyone in sharing their expertise with such patience, tenacity, intrepidity, and fortitude. If I forgot anyone, then I sincerely thank you here!

Abbreviations

B2B	business to business
B2C	business to customer
CK	customer knowledge
CKM	customer knowledge management
CKMC	customer knowledge management competence
CRM	customer relationship management
e.g.	exempli gratia (means for example)
i.e.	id est (means that is or in other words)
IT	information technology
KM	knowledge management
NPD	new product development
SGS	Stage-Gate system

Abstract

CKM-embedded Innovation Marketing as Success Driver for Product Innovation: Theoretical Framework and Empirical Research

By Hongqing Sun

Innovation is considered to be a key factor for companies since the beginning of business research (Schumpeter 1934). Thus there is no need to convince that innovation is important, especially for current economical environment with intensive competition and fast changing markets and technologies, but to make sure of that “how to innovate” is the key issue (Drucker 1998). With the increasing customer competence, the role of customers is changing from pure passive adopters of consuming products or services to coequal partners in the process of adding value as co-designers (von Hippel 2001; Reichwald, Piller et al. 2003). Therefore, one important approach that has emerged in the last decades on “how to innovate” more successfully is to integrate customers earlier and more deeply into the innovation process (von Hippel 2001; Thomke and von Hippel 2002).

Customer relationship management (CRM) has been accused for over-promising but under-delivering frequently. Recent studies conducted in the domains of CRM and knowledge management (KM) have proposed that these two approaches can have great synergies, which lead to customer knowledge management (CKM) as an integrated management approach and competence that can exploit and use customer knowledge (CK) systematically and dynamically to enhance the business performance. The basic theme behind CKM is to generate and utilize CK to add value to customers as well as to companies, by delivering the right product/service, at the right price, to

the right people, at the right time and location, and through the right distribution channel (Al-Shammari 2009). This study confirms this idea by conceptualizing the term of CKM and key elements of customer knowledge management competence (CKMC), and develops a CKM-embedded innovation marketing framework as well as a theoretical model to explore how CKMC impacts on new product advantage, relationship quality and other factors.

In short, with emphasis on relationship management and interaction management in innovation marketing, this study proposes and empirically tests a theoretical framework for CKM-embedded innovation marketing to explore challenges and chances of customer integration under CKMC in new product development (NPD), and to manifest CKM-embedded innovation marketing is a success driver for product innovation. This theoretical framework of CKM-embedded innovation marketing is proposed to serve as a point of origin to reveal possible lacks of relationship management in innovation, knowledge management in CRM and to be a possible explanation for the mechanisms of CKMC in NPD. The related theoretical model based on structure equation modeling (SEM) and hypotheses have been tested quantitatively by examining the paths between CKMC, Intensity of customer interaction, customer relationship quality, knowledge exchange quality and new product advantage. The analysis report shows that CKMC not only influences new product advantage directly, but also influences it in an indirect way positively and significantly through interaction and relationship quality. Thus, it proves the particular importance of relationship management in innovation, especially in the context of China. Based on theoretical deduction and empirical testing, this study discusses strategies for cultivating CKMC and managing customer knowledge and relationship in innovation marketing processes, to improve the innovation performance. Limitations and further research directions are also discussed at the end.

This study contributes to the literature on CKM in NPD in several ways:

- (1) by reflecting traditional CRM from customer, relationship and management aspects respectively and developing a complementary knowledge-enabled CRM framework, named CKM, to strengthen the competitive strategy that businesses need in order to stay focused on customers' needs and to integrate a customer-oriented approach throughout an organization;
- (2) by developing a comprehensive understanding of CKM-embedded innovation marketing as a high-involvement product attribute approach to build long-term interactive relationships with customers and as a success driver for product innovation;
- (3) by developing a construct that captures the defining characteristics of the CKMC composed of knowledge management infrastructure capability and customer knowledge process capability, which implicates the "Wave-Particle Duality" of knowledge management (Allee 1997a) with both object management and process management;
- (4) by providing an empirical test of the proposed theoretical model, which indicates the direct and indirect impacts of CKMC on new product advantage as well as the importance of relationship quality in the innovation processes.

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