

Research on Correlation Between CRM and New Product Development Performance

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ABSTRACT: *In highly competitive environment, how to efficiently create the products meeting customers' expectation by customer relationship management (CRM) and new product development strategy is the key of business operation strategies. This study adopts literature review and it explores the correlation among customer relationship management, new product development strategy and new product development performance. This study suggests that in order to enhance new product development performance, it must strengthen the execution of new product development strategy and customer relationship management.*

KEYWORDS: *customer relationship management, new product development strategy, new product development performance*

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I. BACKGROUND AND PURPOSE

With the advancement of technology and the rise of quality consciousness, customers' demand for product quality is higher. As product life cycle becomes shorter, reduction of new product development process and development cost are thus important. In highly competitive environment, how to efficiently create the products meeting customers' expectation by customer relationship management and new product development strategy is the key of business operation strategies. At present, it lacks the research on the effects of customer relationship management activities and new product development strategy on new product development performance. Through literature review, this study explores the effects of customer relationship management activities and new product development strategy on new product development performance. Research purposes are shown below: (1) it explores the effect of customer relationship management on new product development performance; (2) it explores the effect of new product development strategy on new product development performance; (3) it proposes the suggestions for the companies to enhance new product development performance.

II. LITERATURE REVIEW

2.1 New product development strategy

Firth and Nararanan (1996) defined strategies of new products by 3 dimensions: (1) novelty of technology used; (2) novelty of market application; (3) novelty of market innovation. According to Zhang et al. (2009), product development strategy is classified as breakthrough strategy, platform strategy and incremental strategy. Based on the reaction of enterprises to environmental change, Miles and Snow (1978) divided strategy into Prospector, Defender, Analyzer and Reactor. Liu et al. (2005) classified new product development strategy into (1) an enterprise's developing orientation for a new product, (2) market characteristic orientation for a new product, (3) technological characteristics and innovation. Based on related literatures, this study divides new product development strategy into 4 dimensions, (1) innovation competence of new product development; (2) technological competence of new product development; (3) market development competence of new products; (4) research & development competence of new product development.

2.2 Customer relationship management

Kalakota and Robinson (1999) argued that customer relationship management must rely on business activities. Customer relationship management activities include three phases: acquisition, reinforcement and retention. Ngai et al. (2009) classified customer relationship management activities into customer recognition, customer attraction, customer retention and customer development. According to Peppers et al. (1999), customer relationship management includes customer recognition. Subsequently, it classifies the customers with different values, differently responds to their needs and provides different services. Kamakura et al. (2005) suggested that customer relationship management includes analytical CRM and behavioral CRM. Swift (2001) argued that

enterprises can execute customer relationship management activities by knowledge discovery, market planning, customer interaction, analysis and modification. This study adopts four phases proposed by Ngai et al. (2009) as the dimensions to implement customer relationship management activities.

2.3 New product development performance

Ragatz et al. (2002) measured new product development performance by quality level, time to market, development cost, R&D competence and diversity of products. Thomas (1993) suggested that measures of successful product development refer to product quality, product cost, product development time, development cost and R&D competence. Calantone et al. (1995) adopted return on investment and the growth rate, sales growth rate, market share and growth rates as the measures of new product development performance. After literature review, this study applies 5 measures as the dimensions of new product development performance: (1) time of new products to the market; (2) quality of new products; (3) market share of new products; (4) success ratio to market; (5) cost of new product development to market.

III. RESEARCH METHOD

This study mainly adopts literature review and it explores the correlation among customer relationship management, new product development strategy and new product development performance. According to literature review, the hypotheses developed are shown below:

H1: Higher level of customer relationship management significantly and positively influences new product development performance.

H2: Higher level of execution of new product development strategy significantly and positively influences new product development performance.

3.1 Customer relationship management and new product development performance

Ernst et al. (2011) argued that application of customer relationship management can reinforce new product development performance. Ramani and Kumar (2008) pointed out that firms that use CRM for creating and maintaining customer relationships benefit in the product innovation process. According to Lin et al. (2009), when customers and the companies interact with each other, it provides valuable information for product development. Nazari-Shirkouhi et al. (2015) suggested that CRM can improve new product development performance. According to literature review, this study proposes H1: higher level of customer relationship management significantly and positively influences new product development performance.

3.2 New product development strategy and new product development performance

Hise et al. (1989) argued that complete and specific new product development strategy increases success rate of new products to market. Based on Balachandra and Friar (1997), specific new products strategy reinforces new product development performance. Cooper and Kleinschmidt (1987) argued that in order to enhance new product development performance, it must construct new product development strategy which meets the business objectives. According to literature review, this study proposes H2: Higher level of execution of new product development strategy significantly and positively influences new product development performance.

IV. CONCLUSION AND SUGGESTIONS

In highly competitive environment, the keys of business operation are developing the products meeting the customers' demands, lowering R&D cost and reducing time to market. According to results of this study, higher level of execution of new product development strategy significantly and positively influences new product development strategy. By implementing new product development strategy (including innovation competence of new product development, technological competence of new product development, market development competence of new products, and R&D competence of new product development), the execution of new product development performance can be strengthened. In addition, higher level of application of customer relationship management significantly and positively influences new product development performance. Therefore, this study suggests that in order to enhance new product development performance, it must strengthen the execution of new product development strategy and customer relationship management.

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