Available online at www.sciencedirect.com
ScienceDirect
Industrial Marketing Management 38 (2009) 94 – 108
INDUSTRIAL MARKETING MANAGEMENT

Market orientation and new-to-the-world products: Exploring the moderating effects of innovativeness, competitive strength, and environmental forces

Mário Augusto [1], Filipe Coelho*

University of Coimbra, School of Economics, Av. Dias da Silva, 165, 3004-512 Coimbra, Portugal

Received 5 May 2006; received in revised form 18 June 2007; accepted 26 September 2007
Available online 13 November 2007

Abstract

Recently, there has been a keen research interest in exploring the relationship between market orientation and new product development. The empirical results, however, are mixed, and this means that we do not fully understand these linkages. Furthermore, research concerning the antecedents of new-to-the-world products has focused on the study of a single product. However, it is of obvious interest for organizations to understand what drives a firm's overall performance in the exercise of developing very innovative products. In this empirical study, the authors take a component-wise approach to investigate the effects of market orientation in new-to-the-world product innovation, and examine how other variables interplay with market orientation to affect product development. Firstly, the findings show that both customer and competitor orientations, together with interfunctional coordination, are important drivers of a firm's new-to-the-world product innovation. Secondly, the results indicate that the components of market orientation are differentially moderated by a firm's innovativeness, competitive strength, and also by environmental forces.

Keywords: New-to-the-world products; Market orientation; Innovativeness; Competitive strength; Environment

1. Introduction

The pursuit of a link between organizational culture and competitiveness has spurred research on the strategic orientation of firms, and in particular, the concept of market orientation has attracted a massive interest in the last decade. A number of researchers argue the possibility that market orientation contributes to organizational performance through the new products it helps bring to market (Deshpandé, Farley, & Webster, 1993; Gatignon & Xuereb, 1997). In fact, ensuring organizational prosperity can be considered the ultimate goal of new product development efforts (Li & Calantone, 1998; Wheelwright & Clark, 1992). Therefore, of research interest for some time, has been whether market orientation affects product innovativeness, i.e., the degree of a product's newness.

The links between market orientation and the degree of product innovation are far from being fully explained (Gatignon & Xuereb, 1997; Lukas & Ferrell, 2000; Zhou, Yim, & Tse, 2005). The relationship between the three components of Narver's and Slater's (1990) conceptualization of market orientation and the development of innovative products, in particular, meets very mixed findings and arguments in the literature (e.g., Atuahene-Gima, 1996; Christensen & Bower, 1996; Gatignon & Xuereb, 1997; Lukas & Ferrell, 2000; Slater & Narver, 1994). Consequently, Zhou et al. (2005:43) have recently argued that "the central issue of whether market orientation facilitates or impedes breakthrough innovation remains unanswered". The disparate findings and contentions have led researchers to investigate how other organizational variables could possibly influence the effects of market orientation on new product innovativeness.

Thus, the goal of this article is to examine how market orientation interplays with other variables to influence the launch of new-to-the-world products, which are new to the company and new to the market. Products with a higher degree of innovation

* Corresponding author. Tel.: +351 239 790574.
E-mail addresses: maugusto@fe.uc.pt (M. Augusto), fcoelho@fe.uc.pt (F. Coelho).
[1] Tel.: +351 239 790544.

0019-8501/$ - see front matter © 2007 Elsevier Inc. All rights reserved.
doi:10.1016/j.indmarman.2007.09.007

have a higher perceived sales and financial performance (Gatignon & Xuereb, 1997; Zhou, 2006). Similarly, early entry has been associated with greater effectiveness of marketing mix strategies and greater market share (Szymanski, Troy, & Bharadwaj, 1995), and also with higher firm survival rates (Robinson & Min, 2002). Highly innovative products should thus contribute to a greater extent, to the overall performance of organizations.

Specifically, this research differentiates from other studies relating market orientation with product development, and thus contributes to existing theory and practice, by addressing a number of key gaps. Firstly, the focus of our study is on the factors contributing to an organization's performance in terms of new-to-the-world product innovation. In this way, we provide new insights, as the majority of past research investigating highly innovative products is concentrated on the drivers of a single innovation (e.g., Gatignon & Xuereb, 1997; Zhou et al., 2005). It is of obvious interest for both practice and theory not just to understand the factors underlying product innovativeness, but also to appreciate those contributing to a firm's overall performance on this matter.

Secondly, we investigate how the three components of Narver's and Slater's (1990) conceptualization of market orientation influence the development and launch of new-to-the-world products, still an unresolved issue (Lukas & Ferrell, 2000; Zhou et al., 2005).

Thirdly, we consider in our research when the expected effects of market orientation should take place, and this is important given the mixed results in extant literature concerning the relationship between market orientation and the development of highly innovative products. These mixed results suggest that the effects of market orientation may be contingent upon other variables, and this is consistent with previous studies (e.g., Baker & Sinkula, 1999). Thus, we consider the moderating effects of a firm's innovativeness and competitive strength, on the relationship between market orientation and new-to-the-world product innovation. Several authors claim that the role of innovation has been neglected in market orientation studies (Jaworski & Kohli, 1996; Hurley & Hult, 1998). Furthermore, the interplay between market orientation and innovation is not yet well-understood (Han, Kim, & Srivastava, 1998; Noble, Sinha, & Kumar, 2002), and this will be particularly true in explaining product innovation. With regard to competitive strength, Burke (1984) found this to be a significant determinant of the strategic thrust of a strategic business unit. However, investigations on product development have failed to incorporate its potential effects. Furthermore, we investigate how environmental conditions moderate the effects of the market orientation components on the development of new-to-the-world products. Lukas and Ferrell (2000) conclude that new studies should explore how environmental forces interplay with market orientation to influence different types of product innovation. We expect that the moderating effects of firm innovativeness, competitive strength, and environmental forces will help explain some of the contradictory findings in the literature.

2. Conceptual model and hypotheses

New product development and market orientation. Innovation is the adoption of ideas concerning processes, products, systems, or devices, that is considered new by the adopting unit (Damanpour, Szabat, & Evan, 1989; Garcia & Calantone, 2002). Product innovation, in turn, is “new products or services introduced to meet an external user or market need” (Damanpour, 1991:561). The degree of product newness can either be measured from the firm or customer perspective. Following the taxonomy created by Booz, Allen, and Hamilton (1982), which is frequently used in marketing research (e.g., Lukas & Ferrell, 2000; Olson, Walker, & Ruekert, 1995), new products can be classified in four categories. New-to-the-world-products are new both to the market and the firm. At the other extreme, there are product modifications, which replace existing products with just a few changes, being therefore familiar to both the firm and the market. In between, there are line extensions and me-too products. Consequently, new-to-the-world products entail the largest degree of newness, and product modifications the lowest degree of newness, both to the firm and to the market.

In this work, our concern is with the determinants of products with a high degree of innovation, given their larger implications for firm performance. In particular, this study focuses on a firm's overall new-to-the-world product innovation which, consistent with the above conceptualizations, we define as a firm's introduction of new-to-the-world products in the marketplace.

We thus depart from the majority of past research investigating the determinants of highly innovative products, which has concentrated on a single product (e.g., Zhou et al., 2005). It seems logical to consider how market orientation, a general strategic orientation, affects the innovativeness of a firm's overall product development outputs. From a managerially and theoretical point of view, a major concern is the development of individual products, but also the range of products under development (Wheelwright & Clark, 1992). Furthermore, it is quite plausible in theory that the true effects of market orientation can be more closely ascertained in relation to a general product innovation proficiency rather than to the characteristics of a particular product, the reason being that these are more likely to result from more idiosyncratic influences, and this may, to some extent, obscure the role of such a strategic orientation. Considering that the risk associated with the development of highly innovative products is a force that drives companies to invest in less innovative products, our research goal is in line with claims that firms must build the organizational structure that supports the need for having a larger number of breakthrough projects in their portfolio of new products under development (Wind & Mahajan, 1997).

Evidence of the role of market orientation in fuelling new products with a high degree of innovation is mixed. Drawing upon previous research, Narver and Slater (1990:21) defined market orientation as the organizational culture “that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers and, thus, continuous superior performance for the business”. Narver and Slater consider that market orientation embraces three components: customer orientation, competitor orientation, and interfunctional coordination. Customer and competitor orientation concerns the