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Demand chain management-integrating marketing and supply chain management

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Abstract

This paper endorses demand chain management as a new business model aimed at creating value in today's marketplace, and combining the strengths of marketing and supply chain competencies. Demand chain design is based on a thorough market understanding and has to be managed in such a way as to effectively meet differing customer needs. Based on a literature review as well as the findings from a co-development workshop and focus group discussions with marketing and supply chain professionals, a conceptual foundation for demand chain management is proposed. Demand chain management involves (1) managing the integration between demand and supply processes; (2) managing the structure between the integrated processes and customer segments and (3) managing the working relationships between marketing and supply chain management. Propositions for the role of marketing within demand chain management and implications for further research in marketing are derived.

Keywords: Demand chain management; Marketing and supply chain management integration; Customer value creation

1. Introduction

Conceptual and empirical research on the concept of market orientation has long suggested that interfunctional coordination is key to achieving the main goal of marketing, the creation of superior customer value (e.g. Jaworski & Kohli, 1993; Kohli & Jaworski, 1990). As a consequence, a stream of research on the relationship between marketing and R&D (e.g. Gupta, Raj, & Wilemon, 1986), marketing and finance (e.g. Rajendra, Srivastava, Shervani, & Fahey, 1998), marketing and engineering (Fisher, Maltz, & Jaworski, 1997) and the integration of marketing with several other functions in the formation of business strategy can be traced (e.g. Hutt, Reingen, & Ronchetto, 1988; Kahn & Mentzer, 1998). The overarching rationale of this research is that customer value is being created through the integration of areas that are not traditionally associated with marketing.

The relationship between different disciplines sharing the same customer focus and market commitment has always had an underlying internal competition for primacy, i.e. it is also concerned with how each of the functions add value to the company. Over the last decade, critical voices have stressed that marketing has generally not been very good at managing out-of-the-box and across boundaries (Piercy, 2002), has been complacent in its view that marketing "owns the customer" (Brady & Davis, 1993), has failed to provide the coherence to corporate organisation, operations and processes that its proponents claim (Rainbird, 2004), and, consequently, was outpaced by new models aimed at building value which originated mainly in manufacturing, operations or IT, but not in marketing (Doyle, 1996).

One of these models, which has rapidly become a strategic priority in many companies, is supply chain management (SCM). SCM has grown in importance since the early 1990s, although the approach was introduced in early 1980 (Oliver & Webber, 1982). SCM can be defined as "the management of upstream and downstream relationships with suppliers and customers in order to create enhanced value in the final market place at less cost to the supply chain as a whole" (Christopher, 1998). The synergies between SCM and marketing have been

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widely acknowledged (e.g. Ellinger, 2000; Martin & Grbac, 2003; Svensson, 2002), leading some to conclude that better coordination could define competitive superiority in new ways (Piercy, 2002, p. 247).

The most recently introduced approach of demand chain management (DCM) seems to capture the proposed synergies between SCM and marketing by starting with the specific customer needs and designing the chain to satisfy these needs, instead of starting with the supplier/manufacturer and working forwards (Heikkilä, 2002). Such an integration seems mandatory in today's marketplace, where customers benefit from having real-time access to their accounts, making real-time changes in their customised product configuration and communicating their individual service requirements. While most DCM contributions to date stem from SCM and operations (e.g. Childerhouse, Aitken, & Towill, 2002; Lee, 2001; Lee & Whang, 2001; Rainbird, 2004; Vollmann, Cordon, & Raabe, 1995), selected citations among marketing academics can also be traced (Baker, 2003). This paper proposes DCM as a model which can stimulate new research in marketing, and thereby leverage its contribution to value creation for the customer as well as for the company.

So far, most contributions to DCM have been based on best practice examples (e.g. Langabeer & Rose, 2002; Lee & Whang, 2001; Deloitte, 2002; SAP, 2003) and lack a conceptual foundation. In order to develop a DCM framework and derive the roles of marketing within DCM, we conducted a co-development workshop as well as focus group discussions to generate additional practitioner input.

The objectives of our paper are firstly, to show the advantages of an integration between marketing and SCM; secondly, to demonstrate how DCM can leverage the strengths of marketing and SCM and meet the challenges of customer value creation in today's marketplace and thirdly; to suggest a conceptual framework for DCM with propositions for further research addressing the role of marketing in DCM. We draw on a literature review and compare, contrast and supplement it with our findings from a discovery-orientated co-development workshop and validating focus group discussions. The article is organised into three parts: in the first part, the benefits of the integration between marketing and supply chain management are discussed. Next, the few existing works on demand chain management are presented and the concept is defined. In the third and main part, a conceptual model for demand chain management that integrates the emerging themes from our exploratory field work with the existing literature is developed and the roles of marketing within DCM are derived.

2. Marketing and supply chain management

The old "mantra" of marketing success, i.e. having the right product in the right place at the right time, suggests why SCM has increasingly gained influence in areas which were originally the domain of marketing and marketing channel management. At the same time, however, it also demonstrates the synergies between both disciplines.

In SCM, much of the recent debate has centred on the ability of the supply chain to be either "lean" (Womack & Jones, 1996) or "agile" (Goldman et al., 1995). Lean supply chains on the one hand focus on doing "more with less" by reducing waste or "muda" through inventory reduction, lean manufacturing, and a just-in-time approach. A lean approach is said to be suitable for markets characterised by predictable demand, high volume and low requirements for product variety. Agile supply chains, on the other hand, are designed for flexibility, emphasising the supply chain's ability to respond rapidly to changes in demand, both in terms of volume and variety. The market conditions in which companies with agile supply chains find themselves are characterised by volatile demand and high requirements for variety (Christopher, 2000). The trend towards commoditisation in many industries today has pushed lean as well as agile SCM to the fore. In markets where customers perceive little difference between products and in which brand loyalty dwindles, timely availability becomes a major determinant of success. Still, the tempting promises of SCM, which aims at "lowering the total amount of resources required to provide the necessary level of customer service" (Jones & Riley, 1985), should not disguise its limitations: SCM focuses on the efficient matching of supply with demand but does not provide answers to the customer conundrum, i.e. it does not help the company to find out what the customer perceives as valuable, and how this customer-perceived value can be translated into customer value propositions. In other words, supply chain efficiency by itself will not increase customer value and satisfaction (Rainbird, 2004).

Ever since the academic debate began on the theoretical foundation of marketing, the "creation of value through exchange processes" (Sheth, Gardner, & Garrett, 1988, p. 201) has been widely accepted as the "raison d'être" of marketing. Today, the value orientation is more prevalent than ever before (Flint, 2004; Piercy, 1998). Customer value can be defined as "a customer" perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate achieving the customer's goals and purposes in use situations" (Woodruff, 1997, p. 142). This definition incorporates a hierarchy with attributes, consequences and goals and thereby emphasises the active role of the customer in the value creating process. Moreover, Parasuraman (1997) stresses the dynamic nature of customer value, which doesn't only vary across customers but also within customers over time. As a consequence, companies need to understand not only what each customer values but also the drivers behind changing perceptions of value over time (Flint, Woodruff, & Gardial, 1997). Marketing's strength lies in understanding the forces which affect the way in which customers perceive value (obtaining market and customer knowledge), finding out the differing needs of customer groups (market/customer segmentation), translating them into product and service packages to meet those differing needs (customised product/service development) and marketing the packages through customer value propositions (pricing, branding, communication, promotion). A key component of present conceptualisations of the strategic role of marketing is cus-