Industrial Marketing Management 40 (2011) 139–148

Contents lists available at ScienceDirect

Industrial Marketing Management

Marketing metrics' usage: Its predictors and implications for customer relationship management

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ARTICLE INFO

Article history:
Received 17 September 2008
Received in revised form 17 June 2010
Accepted 23 August 2010

Keywords:
Marketing metrics
Customer relationship management
Value-based organizational culture and processes
Cross-functional conflict
Innovative value proposition

ABSTRACT

This research aims to determine the conditions that foster use of marketing metrics in customer relationship management (CRM) and identify the organizational factors that strengthen/weaken the impact of usage of marketing metrics on CRM performance. Based on the customer value-based theory of the firm and the contingency perspective, a research framework was developed to shed light on the predictor roles of customer value-based organizational culture and processes in determining usage of marketing metrics, and foster an understanding of the moderating roles of marketing-supply chain conflict, and innovative value proposition on the marketing metric-performance relationships. Empirical evidence from a sample of 209 business firms confirmed the main effect that customer value-based organizational culture and processes support a firm's use of marketing metrics that in turn enhance its CRM performance. Notable moderating effects were also identified. Although marketing-supply chain conflict *weakens* the impact of marketing metrics usage in achieving superior CRM performance, innovative value proposition *strengthens* the conversion of marketing-metric-related knowledge into superior CRM performance.

1. Introduction

Marketing metrics have received substantial attention from both managers and scholars in recent years. From a managerial perspective, top management increasingly calls for "marketing accountability" pressuring marketers to produce metrics that document marketing's ROI. From an academic perspective, the growing interest in marketing metrics can be attributable to five theoretical angles (Ambler, 2003). First, in line with control theory which suggests the need for *ex-post* information on marketing programs as an essential part of the cycle of analysis, planning, implementation and control (Jaworski, 1988; Kotler, 2003), marketing metrics are used to evaluate past performance to improve future strategy and execution. Second, in keeping with agency theory that focuses on contract between a principle and an agent and the need for *ex-post* data on the extent to which the principal's objectives have been met (Jensen & Meckling, 1976), marketing metrics could be used to document enforcement of the contract between corporate and functional (e.g. marketing) management (Ambler, Barwise, & Higson, 2001). Third, reinforcing the wider quest for a balanced scorecard of performance (Kaplan & Norton, 1996) which puts emphasis on such intangible assets as brand equity that account for a large and increasing proportion of shareholder value, marketing metrics are used to measure its various dimensions. Fourth, consistent with the literature on market orientation (Jaworski & Kohli, 1993; Narver & Slater, 1990) that argues for the need of market sensing and appropriate cross-functional responsiveness to the resulting data, marketing metrics are part of 'marketing sensing'. Finally, as marketing metrics become more widespread among firms, institutional theory (Meyer & Rowan, 1977) suggests that their use will become an institutional norm. Nonetheless, despite the growing recognition of the strategic importance of marketing metrics, most marketing metrics have yet to be shown to be associated with current and future financial performance (Lehmann, 2002).

Marketing metrics, which is the focus of this study, refers to gathering of data on marketing campaigns, channels, treatments and customer responses in order to track the effectiveness of customer relationship management (CRM) activities (Hirschowitz, 2001).

Operationally, the present study focused on how firms used marketing metrics as tools for customer relationship management in the trade show context. The rationale for selecting trade shows as its research context rested firmly on the nature of trade shows, and can be traced back to the various roles and activities played by trade shows over managing key customer relationships. By nature, "trade shows are market events of a specific duration, held at intervals, at which a large number of companies present the main product range of one or more industry sectors and mainly sell it on the basis of samples" (UFI, 2008). At a system level, the success of a trade show demands the support of a whole industry, whose players must be willing to accept the show as a valid forum for establishing and cultivating business relationships. At an interaction level, since the true value of trade shows stems from its aid to relationship

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0019-8501/$ – see front matter © 2010 Published by Elsevier Inc.
doi:10.1016/j.indmarman.2010.09.002

development between buyers and sellers (Rice, 1992), the present study sees individual trade shows as good venues for carrying out research about firms' activities tasked with the objectives of developing and maintaining customer relationships.

Apart from the nature of trade shows as platforms for buyer–seller interactions, its various roles and functions in managing customer relationships also make it an appropriate context for studying the practice of marketing metrics in aid of CRM. Fundamentally, trade shows are important relationship learning programs (Li, 2006; Rosson & Seringhaus, 1995), whereby exhibitors deliberately develop learning relationships with visitors to collect, disseminate and use the newly obtained customer information from trade shows in order to meet the customers' changing needs over time, and increase the return on trade show information (Bettis-Outland, Cromartie, Johnston, & Borders, 2010). Procedurally, effective participation in trade show counts not only on the preceding stages of establishing show objectives, pre-show planning, at-show implementation, and post-show follow up activities, but also hinges on the evaluation stage (Tanner, 2002). The feedback from evaluation should inform the next event participation process staring from the setting of show objectives (Fu, Yang, & Qi, 2007). The upgraded role of the evaluation stage over the whole trade show participation planning process reinforces the view of using various indices and marketing metrics when addressing marketing accountability. More specifically, as a form of live communication, trade shows play a major role over integrative marketing communication in real time. By giving the target group a personal encounter, a hands-on experience of the company and its brands in a stage-managed and emotional setting, trade shows are particularly instrumental in engendering unique lasting memories and better suited to fostering and sustaining customer loyalty (Kirchgeorg, Springer, & Kastner, 2010). Finally, functioning as a major element of key account management (KAM), trade shows have a pivotal role to play in solving specific problems that arise at different stages of relationship development between firms in a dyadic KAM scenario (Blythe, 2002). In view of the nature and various functions of trade shows over development of customer relationships, the current study takes advantage of the research opportunities offered by trade shows to examine the practice of marketing metrics and its impact on CRM.

Two themes in the literature of CRM are of particular relevance to this research: knowledge of the antecedents of CRM effort and the conclusions that have so far been drawn about the impact of CRM effort on performance of CRM programs. With regard to antecedents that may influence level of CRM effort, organizational characteristics consisting of culture, configuration, and strategy have been reported. Taking the organizational culture perspective, previous researchers have identified market orientation as a critical predictor of marketing metrics (Ambler & Wang, 2003; Kokkinaki & Ambler, 1999). Adopting the organizationally embedded view of marketing, some scholars (Jarachandran, Sharma, Kaufman, & Raman, 2005) reported customer-centric management system as a very significant factor affecting use of (relational) information in managing CRM programs. Using an innovation adoption perspective, other investigators (Ko, Kim, Kim, & Woo, 2008) revealed very powerful impact of such organizational characteristics as prospective strategy and information system maturity on the CRM adoption process. However, a key problem with the existent approach is that firms fail to recognize individual key customers in their own context. Despite the promise and potential benefit of customizing offerings based on knowledge of individual customers, much CRM remains focused on market segmentation (Mitussis, O'Malley, & Patterson, 2006) and much of the practices of CRM remains rooted in the mix management paradigm (Gordon, 2000). Given the growing importance of the customer value perspective which argues that customers choose continuing relationships with those suppliers that consistently offer higher value (Wang, Lo, Chi, & Yang, 2004), this study argued for a customer-focused approach to engage strategically important key accounts in value-creating CRM activities. In keeping with a customer value-based theory of the firm (Slater, 1997), this study aims to extend the existent literature by examining the relationship between marketing metrics and two key factors namely: customer value-based organizational culture and processes.

With respect to the impact of using marketing metrics to keep track of marketing effectiveness, two competing models have emerged: those that suggest a direct relationship and those that propose a moderated relationship. Whereas Ambler and Kokkinaki (1997) have found a significant positive relationship between perceived importance of marketing metrics and business performance in United Kingdom, the UK relationship between use of metrics and business performance was not replicated in China (Ambler & Wang, 2003). Although Jarachandran et al. (2005) reported that technology used for CRM can strengthen the effect of relational information processes on CRM performance, Reinartz, Krafft, and Hoyer (2004) did not detect any moderating effect of CRM technology use on the relationship between CRM processes and CRM performance. These conflicting evidences highlight the need for more research in this area. Accordingly, this study aims to determine whether the relationship between usage of marketing metrics and CRM performance is contingent upon implementation context. In addressing the performance consequences of using marketing metrics, this study proposed that *implementation barrier* in terms of conflicting perspective between supply-chain-management and customer-relationship-management regarding goals and tasks for CRM would hinder the firm's deployment of the acquired marketing metrics information, and lead to mismatch between what is needed by customers and what is offered by the firm. In contrast, *implementation facilitator* in terms of coordinated deployment of the acquired marketing-metrics-information to understand the needs and behavior of customer and develop and offer customer-focused value propositions is needed to actualize the full benefits of CRM.

The first objective of this study is to investigate the direct effect of customer value-based organizational culture and processes on usage of marketing metrics. A second objective is to examine whether some firms are more effective than others in deploying marketing-metrics information to achieve higher levels of CRM performance. The outcomes of these objectives will have important implications for managers who are tasked with identifying the drivers that assist firms to better leverage their capabilities. The remainder of this paper is organized as follows. Section 2 reviews the literature on conceptualizations of marketing metrics. The conceptual model is proposed and described in Section 3. The data collection and analyses are discussed in Sections 4 and 5, and the managerial and research implications are presented in Section 6.

2. Review on conceptualization and measurement of marketing metrics

Research points to a multiplicity of marketing metrics. While Meyer (1998) noted many hundreds of measures tapping into marketing effectiveness, Ambler and Riley (2000) identified a total of 38 measures of marketing effectiveness, Clark (1999) found 20 such measures, and Davidson (1999) proposed 10 key metrics on marketing measurability. Attempts have been made to sort out numerous measures of marketing metrics into some over-arching metrics. Kokkinaki and Ambler (1999), for instance, deduced that marketing metrics can be summarized into six categories: 1) financial measures (i.e. turnover, contribution margins, and profits), 2) measures of competitive market (i.e. market share, advertising share, and promotion share), 3) measures of consumer behavior (i.e. customer penetration, customer loyalty, and new customers gained), 4) measure of consumer intermediate (i.e. brand recognition, satisfaction, and purchase intention), 5) measures of direct customer (i.e. distribution level, profitability of intermediaries, and quality of service), and 6) measures of innovativeness (i.e. new products