Marketing - Operations Alignment: Scale Development and Validation

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Abstract. The purpose of this study was to advance the state of knowledge regarding cross-functional alignment between marketing and manufacturing. The study used configuration theory as the basis for explaining how and why this internal alignment develops within the firm. The objectives of the study included establishing a concept of marketing-operations alignment, developing and validating a measure of marketing-operations alignment in manufacturing firms, and to test the relationship of marketing-operations alignment and key strategic orientations (customer orientation and competitor orientation). A preliminary survey (n = 319 firms) was used to evaluate the reliability and validity of the dimensional factor structure of the marketing-operations alignment construct and the proposed relationships within the framework. The results of the study validated the marketing-operations alignment construct and the instrument developed to measure marketing-operations alignment in the firm. This instrument and its underlying theory provides tools for evaluating functional alignment within the firm.

Keywords: Marketing-operations alignment, configuration theory, strategic orientation

Track Business-To-Business Marketing & Supply Chain Management

1. Introduction

This research is concerned with the alignment of marketing and operations activities and its effect on customer orientation and competitor orientation. The research takes place in the manufacturing sector. Manufacturing accounts for 16% of GDP globally, and employs 14% of the global workforce (Manyika, et al., 2012). The report also states that the manufacturing sector is undergoing significant structural change, with increased competition, changes in demand patterns, and increasing uncertainty (Manyika, et al., 2012). Furthermore, manufacturing supply and demand is increasingly oriented toward the developing world (Manyika, et al., 2012). Thus, changes in manufacturing strategy are highly relevant to the industry at this time.

While, marketing and manufacturing have been considered distinct activities of the firm, and did not necessarily have a strong connection or clearly aligned objectives and tools (Benhabib, 2003). Instead, manufacturing-led firms chose to distinguish themselves during the mass manufacturing period through aspects such as physical design or color, and marketing took place following the manufacturing of the goods (Benhabib, 2003; Blenkhorn & Noori, 2011). However, the relationship of manufacturing and marketing began to change in the 1970s and 1980s, when increasingly complex manufacturing processes and competitive markets began to create problems for firms accustomed to manufacturing goods in this way (Benhabib, 2003; Blenkhorn & Noori, 2011). Blenkhorn and Noori (2011), writing originally in the late 1980s, were one of the first authors that suggested that firms should use neither a demand-pull model (with manufacturing dictated by marketing) or a technology-push model (with marketing determined by manufacturing choices), but instead should try to balance the requirements of both manufacturing and marketing.

Despite the operational and strategic importance of marketing-operations alignment, no single model or measure has emerged. There are a number of related concepts that fundamentally address the relationship between different organizational functions, such as integration, interface, coordination, and fit (Henderson & Venkatraman, 1999; Narver & Slater, 1990; Parente, 1998; Weir, Kochkar, LeBeau, & Edgeley, 2000). However, none of these alternative concepts have been developed very thoroughly either. The output of the research is a multi-dimensional instrument designed to assess marketing-operations alignment in the manufacturing sector, which could be used either for academic research or for firm-level analysis and assessment.

However, these studies are primarily exploratory and have not articulated a complete theory of marketing and operations alignment. They also have not identified a reliable, valid measure for marketing-operations alignment that can be used to assess its influence on the firm's performance. One possible theoretical model that could be used to understand the problem of alignment is configuration theory, which argues that the firm's structures and processes are shaped by the imperatives (or internal and external forces) that it faces (Miller, 1987). Thus, there are several research questions that can be defined based on the research objectives. These questions, and the approach to answering them, include:

1. What does marketing-operations alignment mean within the context of the manufacturing firm, and what are the dimensions of this concept?

2. How can marketing-operations alignment be measured in keeping with the derived theory in the manufacturing industry?

3. What is the empirical relationship of marketing-operations alignment customer orientation and competitor orientation in the manufacturing industry?

2. Literature Review

Although the term alignment is often used in the management literature, it is surprisingly rarely defined explicitly. Furthermore, as Gerow (2011) observed, the definition of alignment is often inconsistent or poorly delineated, and operationalization is also weak and inconsistent. Furthermore, many of the explicit definitions come not from marketing and operations strategy alignment, but from IT-business strategy alignment. This makes it particularly important for this research to arrive at a clear definition of the general concept of alignment in the business sense, to lay the groundwork for future discussion.

2.1.1 Configuration theory and organizational alignment

Miller (1987) initially proposed configuration theory as a way to explain how the organization responded to external and internal forces, which he termed imperatives. The imperatives "drive or organize many elements of a configuration, are the most resistant to change, and probably must change before most meaningful transformations can take place (Miller, 1987, p. 686)." The main imperatives Miller (1987) identified included the environment (the main external imperative), and organizational structures, leadership, and strategies (internal imperatives). In configuration theory, Miller (1987) stated that the organizational configuration, or its structure, goals and strategies, are the outcomes of the defined imperatives and are contingent on these imperatives. However, each of these imperatives was hypothesized to have different influences on the firm, and these influences could in some cases be difficult to determine. For example, a firm in a highly competitive environment may evolve extensive market intelligence structures and an internal meritocratic structure, while one in a less competitive environment may be less responsive and more driven by traditional structures (Miller, 1987). Miller (1987) also posited that imperatives would have different effects through the firm lifecycle, with shifts in the imperatives influencing shifts in the firm's lifecycle and processes.

Configuration theory has been used as the underlying theoretical basis for other studies related to organizational alignment. Doty, et al. (1993), discussed above, is one such study. Another such study was conducted by Vorhies and Morgan (2003), who examined the organizational fit (or alignment) between the overall business strategy and the marketing organization, and then studied the effect of this fit on performance. Another study used configuration theory to examine performance in the electronics industry (Kabadayi, Eyuboglu, & Thomas, 2007). In order to conduct their study, the authors used the most effective firms in a given environment to inductively derive a configuration model they proposed was best suited to the competitive environment. They then compared the configuration and performance of other firms and examined channel performance across these markets. The authors did find that the firms with configuration closest to the market leaders were most competitive (Kabadayi, et al., 2007). Furthermore, this study demonstrates that specific firm configurations, which include the organizational alignment of these firms, are more effective than others. Taken together, there is evidence that configuration theory supports the importance of organizational alignment..

2.1.2 Marketing and Operations Alignment

This research is mainly concerned with one specific type of horizontal organization alignment: marketing and operations alignment. The definitions is that there is integration and even interdependence between the two organizational functions, which in turn requires the marketing and operation functions to work together and collaborate (Hausman, Montgomery, & Roth, 2002; Malhotra & Sharma, 2002; Gattiker, 2007; Piercy, 2007; Sombultawee and Boon-itt, 2018). However, there are also some areas of clear delineation of the responsibility of each of the organizational functions. This is most vible in Erickson's (2012) definition, which outlines the responsibilities of each unit. In contrast, Paiva (2010) delineates activities and processes that are the joint responsibility of both groups. The operational definition of marketing and operations alignment used in this study, based on these definitions as well as the operational definition of organizational alignment, is the extent to which the operations, tactics and strategies of the marketing and operations units within an organization are consistent and the extent to which the marketing and operations units work together interdependently to achieve short-term and long-term business goals." According to Sombultawee and Boon-itt (2017) proposed that marketing – operation alignment have five dimension as following;

The coordination of goals, strategies, and to a lesser extent tactics was a common thread throughout the definition, scope, importance, and factors in effectiveness for coordination between marketing and operations. Almost all respondents agreed that alignment of goals and strategies between the Marketing and Operations departments was within the appropriate scope of cooperation, with a few participants elaborating that these goals and strategies should be aligned further to the organizational goals and strategies as expression in mission and vision, values, and long-term strategic planning. However, it is not only long-term strategic goals that are appropriate for alignment. The interview responses indicated that coordination of short-term decisions such as production planning decisions was also appropriate, with some respondents suggesting that even weekly co-planning of activities would be appropriate. Thus, coordinating decisions may be the most important such factor, applying not just to long-term strategic decisions but also to short-term operational and tactical decisions at least to some extent.

The exchange of information was also a common theme running throughout the responses. Communication and exchange of information about goals, processes, and even less relevant information such as departmental culture and values was cited as one of the most important or obvious aspects of what cooperation between marketing and operations really meant. In fact, "mutual communication" (Marketing Manager, Food Co.) was the leading aspect of cooperation identified. Many of the other aspects identified less commonly, like training and interdepartmental interaction, also involve aspects of communication and information exchange. Thus, information exchange, along with coordinating decisions, is another predominant aspect of cooperation between the marketing and operations department.

Leadership strategy, surprisingly, was not a predominant theme in many aspects of the interviews. However, it was identified as important by some participants, particularly in its facilitation of aligning strategic goals and coordinating decisions and in implementing policies that promote interdepartmental exchange of information and shared goals and strategies. Thus, leadership strategy and particularly coordination of leadership strategy across the departments should be considered as an important aspect of cooperation between departments.

Reward systems. Alignment of incentive and reward systems was identified as one of the main tools used to promote cooperation between departments, along with KPI-based measures. However, alignment of reward systems was not mentioned in the basic definition of cooperation. This suggests that this alignment could primarily be an incentive mechanism to encourage aspects like communication between departments and information exchange.

Performance evaluation through KPIs was commonly identified as a means of evaluating the cooperation outcomes, identified by most of the participants. However, the participants also provided a good insight into the use of KPIs, in that they are measured relatively infrequently and are indirect, outcome-based measures of cooperation. Thus, measurement of cooperation may be inadequate as actually implemented, although most organizations interviewed did use them to measure performance on metrics like financial performance, quality, production efficiency, and waste..

3. Methods

The The study used a multi-method research design in order to first develop a draft instrument and then to test and refine it. The research MacKenzie, Podsakoff and Podsakoff (2011) processes for constructing, testing and validating the proposed instrument. The first phase of the research involved semi-structured interviews with subject matter experts, which were analyzed using content analysis in order to create the initial multi-item instrument to assess marketing-operations alignment process. This instrument was then tested in the second phase, which involved quantitative research and validation.

A preliminary qualitative case study was used to formulate the conceptual framework of the study. A multiple case study is a detailed, in-depth study of a small number of cases from different perspectives, which allows for comparison of the situation and evaluating its different aspects (Yin, 2014). Data was collected via interviews and analyzed using template analysis.

The questionnaire was distributed to a full list of registered firms operating in the four target industries (Automobiles, Food, Furniture and Electronics), using a combination of email and mail surveys. A total of 319 responses (n = 319) were received. The data was analyzed by using structural equation modeling (SEM).

4. Results and Discussion

4.1 Results

To aid analysis and provide a sample profile that could be compared to determine representativeness, various respondent and firm characteristics were these characteristics demonstrate who responded to the sample. Although the full sample included 319 firms, only 319 firms provided personal or firm information. Since this information was not critical to the analysis, the firms that did not provide this information were included in the further analysis rather than being removed from the sample.

The position of individual respondents was the first piece of information collected. The largest group of individual respondents held other roles or did not specify their roles (51.7%). A small group of top management respondents were also included (4.1%). Executive management in operations (13.5%) and marketing (8.2%) were also relatively well-represented. Respondents were also likely to come from the middle management tier of the operations (5%) or marketing (17.6%). The representation of operations (18.5%) and marketing (25.8%) was slightly disproportionate, however.

Respondents were also asked about the number of years working in the company and the number of years in the current position. It was most common for respondents to have worked at the company for more than 10 years (33.5%), followed by two to five years (23.5%), less than two years (21.9%), and six to ten years (21%). Overall, fewer respondents were relatively inexperienced (less than six years of experience) (45.4%) than relatively experienced (six years or more of experience) (46.5%). The level of experience was relatively higher. The largest group did have less than three years of experience (37.3%). This was followed by those with seven to nine years of experience (31.3%), 10 to 12 years of experience (17.9%), more than 12 years of experience (16.9%), and four to six years of experience (6.6%). Overall, a smaller group was inexperienced (six years or less) (43.9%) than experienced (seven years or more experience) (56.1%). Overall, the individual respondent characteristics indicate that the respondents were experienced and well-placed to respond to questions about marketing-operations alignment.

The purpose of this analysis was to provide an investigation the proposed theoretical structure of the model and the relationships between the individual components. Table 4.1 summarizes the goodness of fit criteria, which were evaluated using the same values as above. As this table shows, the model passed both absolute and relative goodness of fit tests, and therefore was adequately fitted to the data (□2 = 508.44, df = 574, p = .97; □2 /df = .88; CFI = 1.00; GFI = .92; AGFI = .90; RMSEA = .000). Therefore, the goodness of fit of the model as developed is adequate.

In summary, marketing-operations alignment, customer orientation and competitor orientation indicates that the theoretical relationships did exist (Figure 1). In addition to the multidimensional component structure of MOA, which was tested in the section above, the results showed the expected effect of MOA on CUO and COO. Furthermore, there were minimal indirect effects in the model, indicating that there are no latent relationships that would add substantially to the accuracy of the model if included. Therefore, the relationships proposed within the model are consistent with what was observed in the data. Thus, this model is the most parsimonious model available and does not require any further adjustment to account for missing relationships.

The relationships between marketing – operations alignment, customer orientation and competitor orientation did exist, with a strong total effect of marketing-operations alignment on both customer orientation and competitor orientation. Customer orientation and competitor orientation are both constructs that reflect the firm’s market orientation, or the approach it uses to identify and meet the needs of its market (Grinstein, 2008). Firms do not necessarily use only a single market orientation; instead, they may choose different market orientations for different activities, or as part of a spectrum of development activities (Grinstein, 2008). Thus, it is possible that marketing-operations alignment could have different structural relationships to each of these outcome constructs depending on the firm’s mix of activities. In practice, the total effect of marketing-operations alignment on each of these outcomes was similar, and there were few indirect effects detected in the second-order testing. This indicates that it is the marketing-operations alignment (latent) variable, rather than the individual dimensions of these variables, that has the strongest effect on the customer orientation and competitor orientation of the firm.

5. Conclusion and Recommendations

The definition of the marketing constructs provides evidence that these two factors are in fact related. For example, customer orientation relates to how the firm identifies and meets the needs of its customer base (Deshpandé, et al., 1993), while competitor orientation relates to how the firm acts in response to its competitors (Grinstein, 2008). In the terms of configuration theory, these two organizational characteristics relate to how the firm identifies and responds to internal and external imperatives (Miller, 1987). Thus, the structural relationships between the constructs are explained by their theoretical linkage, even though this linkage has not been explored in detail previously.

There is still more work to be done in this area which could improve the understanding of marketing-operations alignment. For example, further research could address factors like the organizational, leadership, market antecedents of marketing-operations alignment, following configuration theory's proposal that organizational, leadership, and external imperatives influence the structural configuration of the firm (Miller, 1987). Further research could also help identify further consequences of marketing-operations alignment, such as financial performance or other organizational performance measures.

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