

MARKETING-SALES INTEGRATION: THE ROLE OF MINDSET DIFFERENCES

By

JUN XU

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

2008

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To my parents, my wife, and my daughter

ACKNOWLEDGMENTS

I would like to thank my parents for their endless support for my academic pursuit. Also, I would like to thank my wife, who is now a management professor, for her support in both my academic and family sides of life. I would also like to thank my daughter, who has provided me with tremendous happiness and motivation during my Ph.D. study. Finally, I especially thank Dr. Bart Weitz, my supervisory committee chair. Without Bart, I would not be able to even make any academic advancement during my Ph.D. study. Our relationship is not just an advisor-student relationship. It is also a lifetime friendship!

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Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

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By

Jun Xu

August 2008

Chair: Barton Weitz
Major: Business Administration

This dissertation focuses on the mindset differences between marketing and sales employees (e.g., short-term versus long-term orientation, result versus process orientation, and relationship versus product orientation) to explore issues related to the integration of activities performed by these two functional areas. Drawing from the research in social categorization and organizational diversity, a dual-process model of marketing-sales mindset differences is outlined. In this model, both the positive and negative aspects of marketing-sales mindset differences are examined. Specifically, two underlying processes, the social categorization process and the information processing process, are proposed to involve in the effect of mindset differences on marketing-sales integration. In the social categorization process, perceived marketing-sales mindset differences are proposed to be positively related to the relationship conflict between these two functions, indicating the negative aspect of marketing-sales mindset differences. In the information processing process, perceived marketing-sales mindset differences are proposed to be positively related to the perceived novelty of information sent between these two functions, indicating the positive aspect of marketing-sales mindset differences. This model also suggests that organizational identification moderates the social categorization process and cross-functional learning moderates the information processing process.

This dissertation also explores the antecedents and consequence of the marketing-sales mindset differences. Specifically, three factors are proposed to affect the actual marketing-sales mindset differences: the selection of marketing and sales employees with cross-functional working experiences in both marketing and sales areas, the cross-functional training of current marketing and sales employees in both marketing and sales areas, and the adoption of the institutionalized organizational socialization tactics. In addition, marketing-sales mindset differences are also proposed to eventually affect the behavioral cooperation between marketing and sales and the subsequent firm performance. Methodologically, this dissertation also develops and validates a new scale of marketing and sales mindset to measure the marketing-sales mindset differences.

I tested the conceptual framework by using a cross-sectional survey design collecting data from 88 matched pairs of senior marketing and sales executives from the same businesses. The empirical results generally support the proposed dual-process model of marketing-sales mindset differences. Specifically, the results show that perceived mindset differences are positively related to the relationship conflict between marketing and sales, and this relationship is moderated by the level of organizational identification in the sale data. Also, in both marketing and sales data, the results show that perceived mindset differences is positively related to the perceived novelty of information sent between marketing and sales when the level of cross-functional learning between marketing and sales is high. The results also show that percentage of marketing and sales employees with cross-functional working experience in both marketing and sales areas is negatively related to the actual marketing-sales mindset differences. These results suggests that firms can manage the marketing-sales mindset differences by developing strong organizational identification and by promoting high level of cross-functional learning between

marketing and sales. Also, the results suggest that firm can adjust the level of the marketing-sales mindset differences by adjusting their organizational recruitment policy.

CHAPTER 1 INTRODUCTION

Marketing's interfaces with other business functions within the company have attracted considerable attention. Effective coordination between functional areas with diverse competences enables firms to exploit synergies and develop competitive advantage. Coordinating marketing's activities with other functional is particularly important because marketing is responsible for the relationship between the firm and its customers.

Compared to marketing's other interfaces (e.g., marketing's interface with R&D, with manufacturing, and with finance), the interface between marketing and sales has received little attention in academic research. Most of marketing scholars tend to treat sales as a function within the marketing domain, and thus assume that cooperation between marketing and sales is automatically achieved through hierarchical control. However, in most companies, marketing and sales are separate functions (Kotler, Rachham, and Gruner 2006; Homburg, Jensen 2007; Homburg, Jensen, and Krohmer 2008).

Moreover, cooperation between these two separate functions is far from harmonious in business practice. For example, marketing often complains that salespeople ignore corporate branding and positioning standards in a rush to close the sales. Sales responds by stating that "the one-size-fits-all" type of generic corporate message made by marketing impedes their sales efforts (B to B 2003, p. 17). Similarly, marketing maintains that "we develop good leads at trade shows, but sales doesn't follow up." On the other side, sales argues that "marketing wouldn't know a qualified lead if it is tripped on one. Marketing is locked in an ivory tower and doesn't have a clue as to what customers really want." (Sales & Marketing Management 1999, p. 27). A recent survey of senior executives from a wide range of industries reports that improving

marketing and sales cooperation would have the greatest impact on firm performance (The Economist-Accenture 2003).

The friction between marketing and sales is costly. For example, it is estimated that as much as eighty percent of marketing's expenditures on lead generation and sales collateral are wasted—ignored as irrelevant or unhelpful by sales. On the sales side, it is reported that forty to sixty hours out of a typical salesperson's month are devoted to redoing, often poorly, collateral materials that marketing should have generated in the first places (Aberdeen Group 2002).

Rouzies and her colleagues (2005) suggested that an important impediment to marketing-sales cooperation is the mindset differences – different perspectives on issues and approaches for addressing problems between marketing and sales functions. Rather than the differences in the observed behaviors, mindset differences refer to the differences in cognition between marketing and sales. Mindset differences are believed to impair marketing-sales cooperation independent of goal differences, a commonly believed impediment to cross functional cooperation. For example, in an interview with both marketing and sales managers, Schultz (2003) found that when asked to implement the same decision of increasing customer awareness, marketing managers interpreted it as doing more advertising, whereas sales managers view this decision as hiring more salespeople. Similarly, in a dialogue between marketing and sales, Cespedes (1995) showed that both marketing and sales reached the consensus on mutual information exchange. But sales thought that the critical information to be shared is the timely information from customers, whereas marketing believed that the most important information to be exchanged is about the customer's expectation of tomorrow.

Following the anecdotal evidence and prior conceptual speculation, Homburg and Jensen (2007) conducted the first empirical study related to the marketing-sales mindset differences.

Their study showed the existence and the impact of mindset differences on marketing-sales relationship and firm performance. Despite of this pioneering study, there are still some important issues left unaddressed.

First, extant marketing-sales interface research has mostly concentrated on the negative aspects of mindset differences, that is, the relational tension between marketing and sales created by their different mindsets in their social exchange. Little research, however, has explicitly investigated the potential benefits that marketing-sales mindset differences can bring to the firm by melding different perspectives to develop creative approaches to business problems.

Second, existing marketing-sales interface research has basically focused on providing evidence on the existence and the impact of marketing-sale mindset differences on the related outcomes. Few studies have advanced to the next step in managing the marketing-sales mindset differences in business operation.

Third, despite the prior conceptual articles, the nature of marketing-sales mindset differences has not been thoroughly examined. Specifically, the content and underlying structure of marketing-sales mindset differences have not been compressively understood. Note that in their pioneering empirical study, Homburg and Jensen (2007) developed a scale of marketing-sales thought-world differences. This scale includes both the cognitive orientation differences and the competence differences between marketing and sales. However, their cognitive orientation differences measure only covers a limited number of the components of marketing-sales mindset differences (i.e., customer versus product orientation, and short-term versus long-term orientation). As they pointed out in their discussion section, their scale of thought-world differences doesn't cover all of the dimensions of marketing-sales cognitive orientation

differences. They called for future research to explore more comprehensive aspects of cognitive orientation that describe the marketing-sales mindset differences.

Last, in research methodology, past empirical research has collected the mindset differences responses largely from single side of dyads, either from marketing or sales side. Few studies, however, have collected measures from the matched pairs of both marketing and sales informants in the same business.

In this dissertation, I attempt to address these gaps. First, I investigate both the negative and positive aspects of marketing-sales mindset differences. Specifically, I propose a dual-process model of marketing-sales mindset differences. Drawing from the similarity-attraction theory (Byrne 1971) and self-categorization theory (Turner et al. 1987), I propose a social categorization perspective of marketing-sales mindset differences. Under the social categorization process, marketing-sales mindset differences are proposed to create the relational tension between marketing and sales in their social exchange, indicating the negative aspect of marketing-sales mindset differences. Meanwhile, borrowing from the diversity research (Jehn, Northcraft, and Neale 1999; Pelled, Eisenhart, and Xin 1999), I also suggest an information processing perspective of marketing-sales mindset differences. Under the information processing process, marketing-sales differences can actually bring potential benefits to marketing and sales in their informational exchange. This informational benefit constitutes the positive aspect of marketing-sales mindset differences. Collectively, my dissertation combines both positive and negative aspects of marketing-sales mindset differences in a united research framework.

Second, my dissertation provides insight for firms to manage the marketing-sales mindset differences in their business operations. Specifically, I investigate the moderating effect of organizational identification in the social categorization process of marketing-sales mindset

differences. I suggest that by developing strong organizational identification, firms can mitigate the negative impact of marketing-sales mindset differences on their relational exchange. I also examine moderating effect of cross-functional learning in the information processing process of marketing-sales mindset differences. I suggest that by promoting active cross-functional learning between marketing and sales, firm can actually realize the potential informational benefits of marketing-sales mindset differences in their informational exchange. In addition to these moderating effects, I also explore the antecedents of marketing-sales mindset differences by examining the effects of organizational recruitment, training and socialization practices (e.g., marketing and sales employees' cross-functional working experiences and training, and the organizational socialization tactics).

Third, I develop a new measure of marketing-sales mindsets that includes the comprehensive aspects of cognitive orientations of marketing and sales. Based on this new measure, the scale of marketing-sales mindset differences is thoroughly assessed. Specifically, drawing upon value congruence research (e.g., O'Reilly, Chatman and Caldwell 1991), I examine the contents and structures of marketing and sales' mindsets by assessing the underlying values held by these two functional areas. Mindsets are defined as the internalized normative beliefs about specific modes of conduct or end-state of existence that is personally or socially preferable to an opposite or converse mode of conduct or end-state existence (Rokeach 1973). I assess marketing-sales mindset differences by comparing marketing's and sales' value profiles. The resultant value differences indicate the degree to which marketing and sales differ in their mindsets.

Finally, in research design, I collect data from the matched pair of marketing and sales managers from the same strategic business units (SBUs). A total of 88 matched pairs of

marketing and sales senior executives in the same SBUs have already been collected. The analyses and the empirical results are based upon these 88 dyadic data.

The dissertation is organized as follows. In Chapter 2, I review the literature on the marketing-sales interface, with a focus on the research that has explicitly addressed the marketing-sales cooperation/conflict. Then, I present my conceptual framework of the dual-process model of marketing-sales mindset differences and propose each of the individual hypotheses in Chapter 3. In Chapter 4, I describe the overview of the methodology, the development of the marketing-sales mindset differences measure, the data collection process, and the description of the sample data collected. Afterwards, I provide the empirical results based upon the 88 matched pairs of marketing and sales executives' responses in Chapter 5. In the last chapter, the Chapter 6, I discuss the theoretical and empirical implications of my dissertation, and the limitation, and the direction for the future research in marketing-sales interface research.

CHAPTER 2 LITERATURE REVIEW

The prior literature relevant to my dissertation is the research, primarily in management, that has examined the factors affecting cross-functional conflict and coordination in general. The literature review in this section will focus on extant research that has specifically addressed the interface between marketing and sales.

An overview of the past research in marketing-sales interface arrives at the following two conclusions. First, since most of the marketing's cross-functional research often treats marketing and sales synonymously, only a limited number of studies have explicitly addressed the interface between marketing and sales. Second, among these limited body of studies, most of them view the marketing-sales interface as a mere subset of the cross-functional interfaces. Therefore, they addressed the marketing-sales cooperation/conflict largely by extending the generic findings identified in other cross-functional interfaces to the context of marketing-sales interface (Dewsnap and Jobber 2000). Specifically, this line of research focus on the generic factors that result in marketing-sales cooperation/conflict, ranging from goal congruity, bidirectional communication, trust, to the norms of information sharing.

While these studies have highlighted the commonality between marketing-sales interface and other cross-functional research, little research, however, has examined the factors that are unique in marketing-sales interface and considered the inherent characteristics of marketing-sales interface (i.e., the mindset differences) that lead to marketing-sales cooperation/conflict. Whereas the generic factors (e.g., goal congruity, bidirectional communication, trust, norms of information exchange) have their own merits in explaining the marketing-sales interface cooperation/conflict, the more unique and subtle factor (e.g., mindset differences) that is

inherently associated with marketing-sales interface and leads to the marketing-sales cooperation/conflict has yet to be extensively explored.

Recently, there are a small but growing number of research that start to emphasize the uniqueness of marketing-sales interface, focusing on certain specific characteristics that are more salient but very important in driving marketing-sales cooperation/conflict in specific (e.g., the thought-world differences in Homburg, Jensen's (2007) paper). As such, this section will first review the literature that focuses on the generic factor leading to the marketing-sales cooperation/conflict. Next, it will look at the extant research that concentrates on those factors that are unique and inherently associated with marketing-sales interface in causing the marketing-sales cooperation/conflict. This section will support my contention and the contributions of this research that there is a need to

- a. empirically address those factors that are unique and inherently associated with marketing-sales interface in causing the marketing-sales cooperation/conflict;
- b. explore *both* the positive and negative aspects of the marketing-sales mindset differences;
- c. develop a comprehensive scale measuring marketing-sales mindset differences;
- d. collect data from both sides of marketing-sales dyads in the same business.

Literature Focusing on the Generic Factors Leading to the Marketing-Sales Cooperation/Conflict

Table 2-1 describes the summary of reviewed extant marketing-sales cooperation/conflict research in detail.

In their study of consumer grocery product firms, Strahle and his colleagues (1996) examined the degree of alignment between business level marketing strategies and functional level sales objectives and activities. They found discrepancies between marketing executives and

sales managers with regard to specific product strategies. When marketing executives specify hold, harvest, or divest product strategies, sales managers did not establish corresponding sales objectives that were consistent with those specified strategies. Subsequently, this could result in sales managers promoting products that marketing executives did not plan to support in the long run, while also providing inadequate support to the products that marketing executives intended to promote. Obviously, such misalignment between marketing and sales generates the marketing-sales conflict.

In the post-survey interviews, Strahle and his colleagues (1996) also investigated the possible reasons for the misalignment between marketing executives and sales managers. One of the primary reasons was the lack of goal congruency. They found that sales managers always aim at generating sales volume, which was incongruent with the goal of marketing executives when the marketing product strategies moved on to hold, harvest, or divest stages. As such, Strahle and his colleague's study focused on the inconsistent communications between marketing and sales and they suggested these inconsistent communications can be traced back to the differences in goals between marketing and sales. In sum, Strahle and his colleagues' (1996) research focused on the generic factors, such as goal incongruence and inconsistent communication, to explain the marketing-sales interface conflict. Their research didn't address those factors that are uniquely associated with the marketing-sales interface.

Dewsnap and Jobber (2002) employed a similar approach to explain the marketing-sales conflict in the fast moving consumer good (FMCG) companies. FMCG companies are often faced with powerful channel members as well as sophisticated end consumers. Drawing from the realistic group conflict theory, Dewsnap and Jobber pointed out that the goal conflict between brand-focused marketing personnel and channel-focused sales personnel is one of the major

reasons for the marketing-sales conflict in FMCG companies. Specifically, marketing personnel focus on product brands with the goal of meeting the needs of the end consumers. Conversely, sales personnel concentrate on the retail channels with the goal of satisfying the powerful channel members. Any discrepancy between these two sets of customers and their goals can create the potential tension between marketing and sales personnel, which in turn, leads to the marketing-sales conflict.

In another study on the same FMCG industry, Dewsnap and Jobber (2000) went beyond the single factor of goal conflict and advanced a comprehensive framework to explain the inter-group integration (the opposite of the conflict) between brand-focused marketing and channel-focused sales personnel. In this framework Dewsnap and Jobber (2000) considered other factors contributing to the inter-group integration, including employee participation, physical proximity, joint reward, and early involvement. Specifically, they proposed that the higher the degree of employee participation, joint reward, and involvement in the earlier stage of the joint project between marketing and sales, the closer the physical locations of marketing and sales functions, the greater the perceived level of integration between marketing and sales. Clearly, in both of Dewsnap and his colleagues' (2000, 2002) studies, they didn't go beyond the generic factors that could also found in other cross-functional interface research to explain the marketing-sales interface conflict and didn't consider those factors that are unique and inherently associated with marketing-sales interface in causing the marketing-sales conflict. In addition, both of their studies are conceptual in nature.

Rouzies and her colleagues (2005) proposed a comprehensive framework for explaining the marketing-sales conflict. In their conceptual paper, they suggested several sets of integrating mechanisms in developing the marketing-sales integration (just the opposite of the marketing-

sales conflict). These integrating mechanisms include various behavioral factors such as decentralization, communications, and job rotation. Specifically, they proposed that decentralization of marketing and sale functions has a positive effect on the degree of marketing-sales integration. In addition, they proposed an inverted-U shared relationship between communication and the degree of marketing-sales integration. Specifically, they pointed out that both formal and informal communications positively affect marketing-sales integration. However, information about strategic directions and regularly occurring information exchanges are best done through formal communications, whereas information about unstructured problems is best done through informal communications. Similarly, job rotation is also considered to have an inverted U-shaped relationship with the marketing-sales integration. The modest level of job rotation is intended to result in the highest level of marketing-sales integration. Rouzies and her colleagues' (2005) also raised the issue of mindset differences in their conceptual work but they did not empirically test their framework.

Dawes and Massey (2005) focused on the effect of communication on marketing-sales conflict and found that bidirectional communication has positive effects on the perceived relationship effectiveness between marketing and sales managers. In addition, they found that although the use of threat as a communication influence strategy increases a marketing manager's amount of manifest influence, it reduces the perceived relationship effectiveness between marketing and sales managers. However, they did not explore the underlying factor of mindset differences that potentially cause the communication failures.

Smith, Gopalakrishna, and Chatterjee (2006) didn't directly study the impact of organizational behaviors and inter-functional relationship on marketing-sales interface. Instead, they modeled the sales response to marketing communication efforts. Their study focus on the

timing and budget allocation of marketing communication in effectively generating sales leads, sales appointments, and sales closures. They found that there is a complicated interplay among the marketing communication efforts, delays in sales follow-up, and sales' efficiency. Their study stressed the importance of the internal collaboration between marketing communication and sales leads follow-up efforts but did not provide much guidance about how to create such collaboration.

At a more macro-level, Cespedes (1993) advanced several organizational level factors that can mitigate the conflict between marketing and sales managers. These organizational level factors involve several structural changes including setting up liaison units at the headquarters level to link marketing and sales activities, establishing multifunctional account teams, and altering existing career paths and training programs for both marketing and sales. Cespedes' (1993) research only extended the generic findings in other cross-functional interfaces to the marketing-sales interface. He didn't consider the marketing-sales mindset differences, the factor that is inherently associated with marketing-sales interface and potentially causes the marketing-sales conflict. .

Dawes and Massey (2001) conducted one of the few empirical studies that address the marketing-sales conflict. Using a sample of 200 firms from the United Kingdom and Australia, Dawes and Massey (2001) examined the perceived relationship effectiveness between marketing and sales managers. Focusing on the relational perspective, they found that trust has strong direct effects on perceived relationship effectiveness. In addition, they showed that it also has indirect effects on perceived relationship effectiveness via bidirectional communications between marketing and sales managers. While this study is one of the pioneering studies that empirically examined the marketing-sales interface conflict, it only addressed marketing-sales interface

conflict by extending the generic findings in other cross-functional interface research. The factors that lead to the marketing-sales interface conflict and also are inherently associated with the marketing-sales interface (i.e., mindset differences) was not explored.

Homburg, Jensen, and Krohmer (2008) developed a multidimensional model of marketing-sales interface. They identified five archetypes describing the marketing-sales interface: Ivory Tower, Brand-Focused Professionals, Sales Rules, Marketing-Driven Devil's Advocacy, and Sales-Driven Symbiosis. Their findings suggested that the most successful marketing-sales interface configurations are characterized by a strong structural linkage between marketing and sales and the high level of marketing knowledge in marketing. Basically, their study emphasized the importance of identifying the structural configurations in marketing-sales cooperation/conflict. It did not explicitly examine the actions that can be used to develop an effective interface.

Literature Focusing on the Marketing-Sales Interface Specific Factors Leading to the Marketing-Sales Cooperation/Conflict

Only two studies explicitly examined the marketing-sales cooperation/conflict by investigating the factors that are unique and inherently associated with the marketing-sales interface. In his interview with six industrial firms, Cespedes (1994) examined the interface coordination among product management (one major sub-function in industrial marketing department), sales, and customer services units. He found that the conflict between these units is partly due to the implicit disagreements about what constitutes "success" in performing marketing activities. Managers in each unit may agree that success is ultimately defined by "the customer." But these units that are jointly responsible for customer satisfaction perceive the customer differently. Using a cognitive concept of hierarchy of attention, Cespedes further explained that each unit differs in placing their priorities and allocates their attention along

different lines. Therefore, the resultant patterns of attention are inconsistent among these units. These inconsistencies lead each unit to perceive the customer differently, which ultimately drives the marketing-sales conflict. In conclusion, Cespedes (1994) explicitly considered the cognitive factors that are inherently associated with marketing-sales interface, but he did not develop measures of different marketing-sales mindsets or empirically test his theory. Also, Cespedes (1994) research only considered the negative aspect of those cognitive factors that are inherently associated with marketing-sales interface. He didn't explore the potential positive aspect of those cognitive factors that influence marketing-sales interface interaction.

Homburg and Jensen's (2007) study on the thought-world differences addressed the marketing-sales cooperation/conflict by considering the factors that are unique to the marketing-sales interface. Their scale of marketing-sales thought-world differences includes both the competence differences and the cognitive orientation differences between marketing and sales. They found the negative impact of the cognitive orientation differences on marketing-sales relationship quality. Note that their measure of the cognitive orientation differences between marketing and sales only includes customer (versus product) orientation and short-term (versus long-term) orientation. Realizing that their thought-world differences scale does not cover all dimensions of the cognitive orientation differences between marketing and sales, they called for future research to explore the comprehensive aspects of the cognitive orientation differences between marketing and sales and to validate their findings in the comprehensive scale. In sum, this study explicitly considers and measures the thought-world differences measure, a cognitive factor that uniquely characterize marketing-sales interface. However, a comprehensive set of mindset differences dimension was not fully developed in this study. Also, this study mostly focused on the negative aspect of the thought-world differences between marketing and sales,

although the positive side was implied. Additionally, their empirical test was largely on the data from the single side of marketing-sales dyads.

Two other papers did not explicitly address, but *imply*, the marketing-sales cooperation/conflict by considering the uniqueness of marketing-sales interface. In their conceptual paper, Rouzies and her colleagues (2005) suggested that a major impediment to coordinating the activities between marketing and sales is that marketing and sales personnel have different mindsets. Although not explicitly stated in their paper, these mindset differences were assumed to lead to potential conflict between marketing and sales and were not empirically tested.

Using a different concept of organizational subculture, Kotler, Rachham, and Krishnaswamy (2006) pointed out that the misalignment between marketing and sales is partially due to the culture conflict between marketing and sales. Marketing people are more analytical, data oriented, and projected focused, whereas salespeople are more relationship oriented and willing to talk to the existing and potential customers rather than playing with the number behind the office desk. This subculture conflict makes it hard for marketing and sales to work well together. While this study suggested some dimension of marketing-sales mindset differences in causing the marketing-sales conflict, it didn't develop a comprehensive set of mindset differences dimensions and only concentrate on the negative aspect of subculture differences between marketing and sales. Additionally, this study is also conceptual in nature.

Summary of Extant Marketing-Sales Conflict Research

Extant marketing-sales cooperation/conflict research has several characteristics. First, most of the studies are conceptual, normative and even anecdotal in nature. The only empirical paper examining the factors that are inherently associated with the marketing-sales interface in causing

the marketing-sales cooperation/conflict is Homburg and Jensen's (2007) study. Further empirical evidence is needed to understand the marketing-sales cooperation/conflict.

Second, only a limited number of extant marketing-sales interface research considers the factors that inherently characterize the marketing-sales interface in causing the marketing-sales cooperation/conflict. Among the existing twelve marketing-sales interface research, only four papers, two explicitly and two implicitly, addressed the marketing-sales conflict by investigating those marketing-sales interface specific factors, such as the thought-world differences (Homburg and Jensen 2007), mindset differences (Rouzies et al. 2006), subculture conflict (Kotler, Rachham, and Krishnaswamy 2006), and hierarchy of attention (Cespedes 1994). Moreover, among these four papers, only one (i.e., Homburg and Jensen 2007) has explicitly examined the content of the mindset differences between marketing and sales. Yet, as Homburg and Jensen (2007) pointed out, their measure only partially covers the wide range of the marketing-sales mindset differences. Future research is called for further study on this under-explored concept.

Third, almost all of the existing marketing-sales interface research has focused on the negative impact of the marketing-sales mindset differences on marketing-sales integration. No research has explicitly addressed the positive impact of the marketing-sales mindset differences. Note that Homburg and Jensen's (2007) study result implies that there is some positive impact of marketing-sales thought-world differences on firm performance. However, they did not explicitly investigate underlying process of this positive aspect, thus failing to show the mechanism how both positive and negative aspects of the marketing-sales mindset differences affect the marketing-sales interface.

Last, all of the past marketing-sales interface studies only collected information from the single side of the marketing-sales dyads. Future research need to build its solid evidence based upon the response from the both side of the marketing-sales dyads.

Based upon above review, my dissertation will address these gaps and further the research in marketing-sales interface by: (1) investigating both positive and negative aspects of marketing-sales mindset differences; (2) examining the underlying process of both positive and negative impact of marketing-sales mindset differences, thus providing suggestions in how to manage the marketing-sales mindset differences; (3) exploring the comprehensive dimensions of marketing-sales mindset differences to help understand the content and underlying structure of mindset differences between marketing and sales; and (4) testing the evidence of marketing-sales mindset difference using data from match pairs of marketing-sales dyads.

Table 2-1. Summary of extant marketing-sales conflict research

Paper	Types	Major account for conflict	Positive/negative impact focus	Construct developed for mindset differences	Dyadic data
Cespedes (1993)	Conceptual	Liaison unit, multifunctional team, career oath, and training program	Negative	No	No
Cespedes (1994)	Conceptual	Hierarchy of attention	Negative	No	No
Strahle, Spiro, and Actio (1996)	Conceptual	Goal congruence	Negative	No	No
Dewsnap and Jobber (2000)	Conceptual	Employee participation, joint reward, and early involvement	Negative	No	No
Dewsnap and Jobber (2002)	Conceptual	Goal congruence	Negative	No	No
Dawes and Massey (2001)	Empirical	Bidirectional communication and trust	Negative	No	No
Dawes and Massey (2005)	Conceptual	Bidirectional communication	Negative	No	No
Homburg and Jensen (2007)	Empirical	Thought-world differences	Negative and positive (implied)	Yes (but not comprehensive)	No
Homburg, Jensen, and Krohmer (2008)	Empirical	Structural configuration	Negative	No	No
Kotler, Rachham, and Krishnaswamy (2006)	Conceptual	Subculture differences	Negative	No	No
Rouzies et. al (2005)	Conceptual	Decentralization, communication, job rotation, and mindset differences	Negative	No	No
Smith, Gopalakrishna, and Chatterjee (2006)	Empirical	Timing, and budget of communication	Negative	No	No

CHAPTER 3 CONCEPTUAL FRAMEWORK

A framework of the dual-process model of marketing-sales mindset differences is presented in Figure 3-1 and Figure 3-2. Figure 3-1 depicts the general conceptual framework and Figure 3-2 shows the detail conceptual framework of the dual-process model of marketing-sales mindset differences.

As depicted by Figure 3-1, two types of marketing-sales mindset differences (actual and perceived mindset differences) are investigated. Actual marketing-sales mindset differences are proposed to affect the perceived marketing-sales mindset differences. The left hand-side of the general conceptual framework presents the antecedents of actual marketing-sales mindset differences. Actual marketing-sales mindset differences are affected by the cross-functional working experiences, training, and socialization for the marketing and sales employees. Perceived marketing-sales mindset differences affect both the relationship conflict between the marketing and sales functions and the perceived novelty of the information provided by the employees in the counterpart functions.

Two underlying processes of the impact of marketing-sales mindset differences are considered. The first process is called the social categorization process (indicated by the dot-line rectangle). Under the social categorization process, perceived marketing-sales mindset differences arise when marketing or sales employees categorize themselves in their own functional area and emphasize the differences between their function and the other function. This social categorization leads to the increased conflict between marketing and sales. This social categorization process is moderated by the level of marketing and sales employees' organizational identification, that is, the organizational identification reduces the social categorization effect.

The second process is called the information processing process (indicated by the dash-line rectangle). Under this process, perceived marketing-sales mindset differences lead the marketing and sales employees to feel that people from the other function have unique perspectives and novel information that can provide the basis for innovative solutions. This process is moderated by the level of the cross-functional learning that exploits the differences in perspectives from people in the other function.

The right hand-side of the general conceptual framework shows the consequence of the marketing-sales mindset differences, where relationship conflict positively influences and perceived information novelty positively affects the behavioral cooperation between marketing and sales, which subsequently affects the firm performance.

Figure 3-2 expands the conceptual framework shown in the Figure 3-1. The major differences between these two figures are that: (1) Figure 3-2 also provides the source of data (indicated by the letters in the parentheses) collected for each of the variables shown in the figure; and (2) Figure 3-2 separates sales and marketing's responses in each of the proposed processes. The following hypotheses development will base upon the detail conceptual framework depicted in Figure 3-2.

Focal Construct: Marketing-Sales Mindset Differences

Marketing-sales mindset differences refer to the different perspectives on issues and approaches for addressing problems between marketing and sales functions (Rouzies et al. 2005; Ancona and Caldwell 1992). Homburg and Jensen (2007) used a similar concept of thought-world differences to describe the mindset differences between marketing and sales. Their concept of thought-world differences is broader in that it includes both orientation and competence differences between marketing and sales. The marketing-sales mindset differences

concept in this dissertation concentrates only on the orientation differences dimension of the thought-world differences concept described in Homburg and Jensen (2007) paper.

An extensive review of prior marketing-sales mindset difference literature (i.e., Cespedes 1992, 1994, 1995; Rouzies et al. 2005; Homburg and Jensen 2007) indicates that marketing-sales mindset differences have several sub-dimensions. Rouzies and her colleagues' (2005) conceptual paper suggested six dimensions of marketing-sales mindset differences. These six dimensions include customer versus product orientation, personal relationship versus analysis orientation, continuous daily activity versus sporadic projects orientation, field versus office orientation, results and process orientation, and short-term versus long-term orientation. In Homburg and Jensen's (2007) thought-world differences study, they described the marketing-sales mindset differences using two sub-dimensions, customer versus product orientation and short-term versus long-term orientation dimension. Recognizing that their concept of thought-world difference didn't cover the comprehensive aspects of marketing-sales mindset differences, Homburg and Jensen (2007) further discussed the marketing-sales mindset differences in the limitation section and recommended more mindset differences dimensions including quantitative versus qualitative orientation, analytical versus intuitive orientation, ability to deal with structured versus unstructured problems, high versus low emotional arousal, positive versus negative outlook, and expressive versus non-expressive attitude. The Table 3-1 summarizes the descriptions of marketing-sales mindset dimension in the extant literature.

Despite of the conceptual discussion, prior literature did not distinguish two types of marketing-sales mindset differences, that is, the actual and the perceived mindset differences.

Actual and Perceived Mindset Differences

Actual mindset differences refer to the differences between marketing people's perception of their own mindsets and salespeople's perception of their own mindsets. Whereas, perceived

mindset differences refer to the differences between marketing/sales people's perceptions of their own and their perceptions of their counterpart function's mindsets.

The distinction between actual and perceived mindset differences is made because prior literature shows that it is the perception of differences, not necessarily the actual differences themselves, that leads to the subsequent attitudes and behaviors (Riordan 2000; Turner et al. 1987). For instance, in performance appraisal research, Pulakos and Wexley (1983) indicate that perceived similarity/dissimilarity is a more effective predictor of subordinate performance evaluations than actual similarity/dissimilarity. Also, Cable and Judge (1997) found that actual similarity has relatively weaker effect than perceived similarity on job applicant selection decisions, because comparing to perceived similarity's direct influence, actual similarity only has a relative distal influence on the attitudinal and behavioral outcomes. Harrison and his colleagues further (2002) suggest that if differences are to be meaningful, they must be perceived. Based on these above arguments, the first hypotheses reiterate this premise.

Hypothesis 1a: Actual marketing-sales mindset differences are positively related to the marketing people's perceived marketing-sales mindset differences.

Hypothesis 1b: Actual marketing-sales mindset differences are positively related to the salespeople's perceived marketing-sales mindset differences.

Antecedents of Marketing-Sales Mindset Differences

The three factors examined in this research that affect the degree of actual marketing-sales mindset differences are percentage of marketing and sales employees with cross-functional working experiences in both marketing and sales, percentage of marketing and sales employees with cross-functional training in both marketing and sales, and the nature of the organizational socialization tactics.

Cross-Functional Working Experience and Training, and Actual Marketing-Sales Mindset Differences

Upper echelons theory (Hambrick and Mason 1984) suggests that employees' functional background affects how they understand, interpret, and comprehend their surrounding business environment. Employee's functional training, for instance, serves as a cognitive filter to direct their perceptions of the outside world in accordance with their functional background. Similarly, selective perception theory (Dearborn and Simon 1958) suggests that employees' functional working experiences selectively channel their perceptions of the surrounding working environment. For example, Beyer and her colleagues (1997) found that even when facing the same events, managers tended to narrow their attention to the information related to the areas where they have working experiences.

Thus, it is expected that employees from two different functional areas will understand, interpret, and comprehend the same business environment differently, if they only have working experience and training in their own functional area. It is also expected that employees from two different functional areas will understand, interpret, and comprehend the same business environment similarly, if they have working experience and training from not only their own but also their counterpart's functional areas. In other word, employees with cross-functional working experience and training from both their own and counterpart's functional areas are more likely to arrive at the similar environment judgments and reach consensus with colleagues in their counterpart's function, because their cross-functional working experience and training background allows them to understand, interpret, and comprehend the outside information consistent with not only their own but also their counterpart's functional areas. In the long run, employees with cross-functional background are more likely to develop similar mindsets with their colleagues in the counterpart functional area. Operationally, it is expected that when an

organization recruits high percentage of marketing and sales employees with cross-functional working experience in both marketing and sales areas, and when an organization invests much resources to train its marketing and sales employees in both marketing and sales areas and maintain a high percentage of cross-functional training marketing and sales employees, marketing and sales employees in this organization are more likely to develop similar business orientations and belief systems, and less likely to have high level of mindset differences between each other. Thus,

Hypothesis 2a: Percentage of employees in marketing and sales functions who have working experiences in both marketing and sales areas is negatively related to the actual marketing-sales mindset differences.

Hypothesis 2b: Percentage of employees in marketing and sales functions who have cross-functional training in both marketing and sales areas is negatively related to the marketing-sales mindset differences.

Organizational Socialization Tactics and Actual Marketing-Sales Mindset Differences

Organizational socialization refers to the process by which new employees make their transition from organizational outsiders to insiders. Literature in organizational socialization has developed through several stages. Van Maanen and Schein's (1979) pioneering work conceptualizes six organizational socialization tactics: collective-individual, formal-informal, sequential-fixed, variable-random, serial-disjunctive and investiture-divestiture. Jones (1986) subsequently groups these six socialization tactics into three broader factors: context, content, and social aspects of organizational socialization tactics. Considering the sizable level of inter-correlations between the socialization tactics factors found in Jones' (1986) works, some scholars have recommended that organizational socialization tactics can be further arranged on a single continuum ranging from institutionalized to individualized (e.g., Bauer et al., 1998).

Institutionalized socialization tactics refer to a systematic, structured, and planned set of program where organizations group new employees together and put them through a common set of learning experiences. Individualized socialization tactics reflect a relative absence of a structured socialization program where organizations place new employees alone in their jobs to “sink or swim” and let them to develop their own approaches to their roles and situations in the new organization.

Compared to individualized socialization tactics, institutionalized socialization tactics encourages new employees to accept the preset organizational values and norms, ensuring that new employees receive a common message about the organizational values and how they should perceive, interpret, and respond to different situations (Van Maanen and Schein 1979). As such, in organizations where the institutionalized socialization tactics are adopted, new employees from different functions are more likely to interpret and respond to the same business environment in the similar ways, arrive at the common business environment judgments in the short run, and in the long run, reach consensus in their values and internal belief systems about their business environment. Applying this logic to the current marketing-sales mindset differences research setting, it is expected that marketing and sales people are less likely to have different mindsets when their organizations adopt the institutionalized socialization tactics, as compared to those whose organizations adopt the individualized socialization tactics. Therefore,

Hypothesis 2c: Institutionalized socialization tactics is negatively related to the actual marketing-sales mindset differences, such that the high level of institutionalized socialization tactics the firm uses, the lower level of actual marketing-sales mindset differences the firm will have.

Processes of the Marketing-Sales Mindset Differences Impact

Dual-Process Model of Marketing-Sales Mindset Differences

Research in work group diversity provides two distinctive perspectives toward the impact of inter-group differences on subsequent inter-group attitudes and behaviors (van Knippenberg, De Dreu, and Homan 2004; van Knippenberg and Schippers 2007). The social categorization perspective suggests that a social categorization process involves in the inter-group integration, where the differences between groups form the basis for categorizing “self” and “others” between members from different groups. The result of this social categorization process may be that people tend to favor ingroup members over outgroup members, to be more attracted by ingroup members than by outgroup members, and to be more willing to cooperate with ingroup members than outgroup members (Tajfel and Turner 1986). The social categorization perspective concentrates on the relational aspect of inter-group integration and emphasizes the negative effect of inter-group differences.

The information processing perspective, however, focuses on the informational aspect of inter-group integration and highlights the positive effect of inter-group differences. It suggests that an information processing process involves in the inter-group integration, where the differences between groups are rather viewed as a pool of diverse information, knowledge, skills, and capabilities contributed by different groups. Integrating this pool of diverse resources may result in more creative problem-solving approaches, more comprehensive decision making, and superior performance.

Extending these two perspectives, I propose a dual-process model of marketing-sales mindset differences. In this model, two processes are proposed to simultaneously involve in the effect of marketing-sales mindset differences on their inter-group integration, where the social categorization process highlights the impact of marketing-sales mindset differences on their

relational integration, and the information processing process emphasizes the effect of marketing-sales mindset differences on their informational integration. The detail of this dual-process model is described as follows.

Social Categorization Process: Perceived Mindset Differences and Relationship Conflict

Self-categorization theory (Turner et al. 1987) provides the theoretical foundation that elaborates the proposed social categorization process, where the marketing-sales mindset differences negatively influence the relationship between marketing and sales, resulting in potential relationship conflict between these two functions. According to self-categorization theory, marketing-sales mindset differences increase group distinctiveness between marketing and sales through the cognitive processes of meta-contrast and comparative fit. This increased group distinctiveness heightens the prominence of group boundaries between marketing and sales, and also raises the level of group differentiation between these two functions. Because highly differentiated groups usually have different standards for guiding behaviors (Rokeach 1968), members from one function will find greater difficulty in predicting the behaviors of the members from the other function. Also, because the highly differentiated groups usually have different ways to interpret the same situation events (Rokeach 1968), inter-group communication between these highly differentiated groups becomes more difficult. Therefore, due to the low predictability and poor communication, cross-functional cooperation between the differentiated marketing and sales functions is less likely to achieve and the relationship conflict between marketing and sales is more likely to occur.

Several other theories support the prediction that perceived mindset differences are positively related to the relationship conflict between marketing and sales. Similarity-attractions theory (e.g., Byrne 1971) suggests that while perceived similarity between group members (i.e., marketing and sales people) evokes attraction and liking, perceived dissimilarity produces

divisive tensions and disliking (Tziner 1986). Research in this paradigm finds that disliked dissimilar group members are evaluated more negatively and elicit less cooperation and more relational conflict (Krauss 1966), whereas liked similar group members are expected to generate more cooperation. In a similar vein, belief congruence theory (e.g., Bryne, 1971) provides the same prediction. Belief congruence theory investigates the effects of similarity (or dissimilarity) on relations between members from different groups. Research in this framework finds that perceived dissimilarity between own beliefs and those of an outgroup member is positively related to inter-group discrimination (Insko, Nacoste, and Moe 1983). This inter-group discrimination, thus, creates potential inter-group conflict.

In sum, because marketing-sales mindset differences creates both cognitive (i.e., heightened group boundaries, low predictability, and poor communication) and affective (i.e., disliking, unattractive, and inter-group discrimination) barriers between marketing and sales, marketing-sales mindset differences is proposed to be positively related to the relationship conflict between marketing and sales. Thus, two following hypotheses regarding this social categorization process of marketing-sales mindset differences are described as,

Hypothesis 3a: Marketing people's perceived marketing-sales mindset differences are positively related to their perceived relationship conflict with sales.

Hypothesis 3b: Salespeople's perceived marketing-sales mindset differences are positively related to their perceived relationship conflict with marketing.

Social Categorization Process: Moderating Effect of Organizational Identification

Van Knippenberg and his colleague (2004) suggest that the extent to which the differences (e.g., mindset differences) engender the social categorization process is contingent upon several factors. One important contingent factor is cognitive accessibility. Cognitive accessibility refers to how easily the social categorization process implied by the differences (e.g., mindset

differences) is cognitively activated. The existence of the cognitive accessibility implies that the inter-group differences don't necessarily trigger the social categorization process. If certain environment variables suppress the social categorization process, that is, deactivating the cognitive accessibility of the inter-group differences, the negative impact of the inter-group differences on inter-group relationship will not be able to realize. In the current marketing-sales mindset differences research setting, one such potential suppressing variable is the role of organizational identification.

Organizational identification refers to the extent to which organization members are committed to and identified with their organization in terms of the common organizational values, norms, and cultures. Gaertner and his colleague's (1993) common in-group identify model suggests that by building up a high level of organization identification, former ingroup and outgroup members can be readily re-categorized from former functional identity to a new common superordinate identity (e.g., from marketing or sales functional identity to a common organizational identity). In that way, the former functional identity becomes less accessible and the new common organizational identity becomes more accessible. As such, the negative impact of mindset differences on marketing-sales relationship is less likely to occur, because the presence of the organizational identity suppresses the formal functional identity created by the mindset differences between marketing and sales, motivating the marketing and sales people to work together in accordance with the common organizational values rather than their former functional values. In other word, under the high level of organizational identification, the marketing-sales mindset differences is less cognitively accessible and thus, less likely to affect the relationship conflict between marketing and sales. Thus,

Hypothesis 4a: Organizational identification moderates the effect of perceived marketing-sales mindset differences on relationship conflict between marketing and sales. Specifically, under high level of organizational identification, marketing people's perceived marketing-sales mindset differences will be less likely to be positively related to their perceived relationship conflict with sales.

Hypothesis 4b: Organizational identification moderates the effect of perceived marketing-sales mindset differences on relationship conflict between marketing and sales. Specifically, under high level of organizational identification, salespeople's perceived marketing-sales mindset differences will be less likely to be positively related to their perceived relationship conflict with marketing.

Information Processing Process: Perceived Mindset Differences and Perceived Information Novelty

In contrast to the social categorization process, the information processing process emphasizes the positive effect of inter-group differences. Research in work group diversity and top management team (TMT) provides the theoretical foundation that elaborates this process (Van Knippenberg, De Dreu, and Homan 2004; Simons, Pelled, and Smith 1999). It starts with the notion that the differences from other group introduce a new set of information, knowledge, skills, and capabilities to the original group. In addition, the differences from the other group also bring new perspectives and opinions to the original group. Members from both groups will be more likely to perceive the novel information and ideas, when they are exposed to the diverse resources and perspectives from the other groups. The addition of new resources and perspectives also allow both groups to generate innovative and creative approaches when the diverse information and perspectives are effectively integrated. In the current marketing-sales mindset differences research setting, because the different mindsets from the other function

introduce new information, values and perspectives about how to deal with the same business environment, it is expected that marketing and sales people are more likely to perceived the novelty of the information sent from the other functions when they are exposed to the diverse information, values, and perspectives introduced by the different mindsets from the other function. Thus,

Hypothesis 5a: Marketing people's perceived marketing-sales mindset differences are positively related to their perceived novelty of information sent by sales.

Hypothesis 5b: Salespeople's perceived marketing-sales mindset differences are positively related to their perceived novelty of information sent by marketing.

Information Processing Process: Moderating Effect of Cross-Functional Learning

Van Knippenberg and his colleague (2004) suggest that the extent to which the inter-group differences (e.g., mindset differences) bring the positive effect to inter-group informational integration depends on one important contingency, that is, the elaboration of diverse information and perspectives from the other group. When exposed to the diverse information and perspectives from other groups, members may not able to perceive the novelty of the added information and perspectives, thus reaping the expected information benefit, if they do not actively engage in learning, elaborating, and integrating the new information and perspectives from the other groups. In the current marketing-sales mindset differences research setting, it is expected that marketing and sales people with different mindsets will not necessarily perceive the novelty of information sent from the other function, if the level of the cross-functional learning from the other function is low.

Hypothesis 6a: Cross-functional learning moderates the effect of perceived marketing-sales mindset differences on perceived information novelty. Specifically, under low level of

cross-functional learning, marketing people's perceived marketing-sales mindset differences will be less likely to be positively related to their perceived novelty of information sent by sales.

Hypothesis 6b: Cross-functional learning moderates the effect of perceived marketing-sales mindset differences on perceived information novelty. Specifically, under low level of cross-functional learning, salespeople's perceived marketing-sales mindset differences will be less likely to be positively related to their perceived novelty of information sent by marketing.

Consequences of Marketing-Sales Mindset Differences

Relationship Conflict, Perceived Information Novelty, and Behavioral Cooperation

In the inter-group relationship research setting, relationship conflict refers to the perception of animosities and incompatibility among members from different groups and typically includes tension, annoyance, and frustration among these members. Relationship conflict is expected to be negatively related to behavioral cooperation between marketing and sales. Literature in group conflict provides several arguments supporting this prediction (Jehn 1995, Pelled 1995). First, relationship conflict makes marketing and sales people experience frustration, strain, and uneasiness with others in the counterpart function. This negative affective reaction typically results in psychological and physical withdrawal from the cross-functional interaction, and thus, inhibiting the potential behavioral cooperation between these two functions. Second, the affective friction resulting from the relationship conflict makes members from marketing and sales less receptive to the ideas and information from the other function, reducing their potential ability to assess new information provided by the other function and thus, reducing the quality of cooperation between these two functions. Third, the time and energy that should be devoted to the cross-functional cooperation is wasted to discuss and resolve the relationship conflict between marketing and sales, largely limiting the resource needed for effective cooperation between these two functions. As such,

Hypothesis 7a: Marketing people perceived relationship conflict is negatively related to the behavioral cooperation between marketing and sales.

Hypothesis 7b: Salespeople perceived relationship conflict is negatively related to the behavioral cooperation between marketing and sales.

Prior research in market intelligence suggests that perceived information quality is positively associated with the use of this information (Deshpande and Zaltman 1982; Menon and Vradarajan 1992; Maltz and Kohli 1996). Perceived information quality refers to the extent to which the information received from the sender as being accurate, relevant, and novel (Deshpande and Zaltman 1982; Montgomery and Weinberg 1979). When members from one function perceive that the information sent by the other function is highly novel, they are highly motivated to use and incorporate this novel information in their work. The better decision making quality and superior performance resulting from this information incorporation will motivate the information receiver to work with the information sender, resulting in a high level of behavioral cooperation between each other. Thus, it is expected that when marketing and sales people perceive high novelty of the information sent by the other function, they will be more likely to use the novel information and are motivated to cooperate with each other. As such,

Hypothesis 8a: Marketing people's perceived novelty of information sent from salespeople is positively related to the behavioral cooperation between marketing and sales.

Hypothesis 8b: Salespeople's perceived novelty of information sent from marketing people is positively related to the behavioral cooperation between marketing and sales.

Behavioral Cooperation and Firm Performance

Research in cross-functional integration suggests that when different functions work closely together, firms will be able effectively integrate the diverse internal functional competence residing in different functions. This function integration will help firms develop

unique competitive advantages over their competitors and obtain superior performance. Thus, it is expected that,

Hypothesis 9: Behavioral cooperation is positively related to the firm performance.

Table 3-1. Marketing-sales mindset differences dimension discussed in prior literature

Dimensions of marketing-sales mindset differences

Rouziés et al. (2005)

Customer versus product

Personal relationship versus analysis

Continuous daily activity versus sporadic projects

Field versus office

Results versus process

Short-term versus long-term orientation

Homburg and Jensen (2007)

Customer versus product orientation

Short-term versus long term orientation

Quantitative versus qualitative orientation

Analytical versus intuitive orientation

Ability to deal with structured versus unstructured problems

Emotional orientations (high versus low arousal)

Positive versus negative outlook

Expressive versus non-expressive attitude

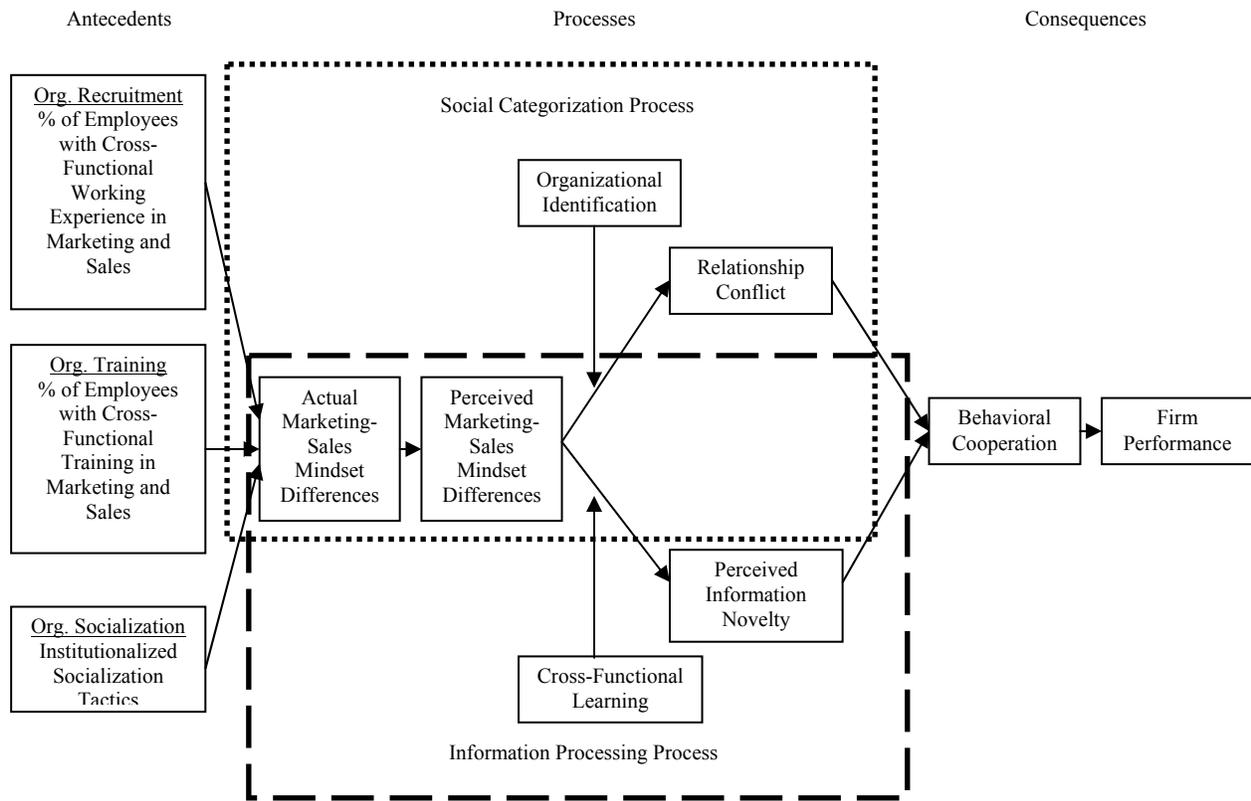
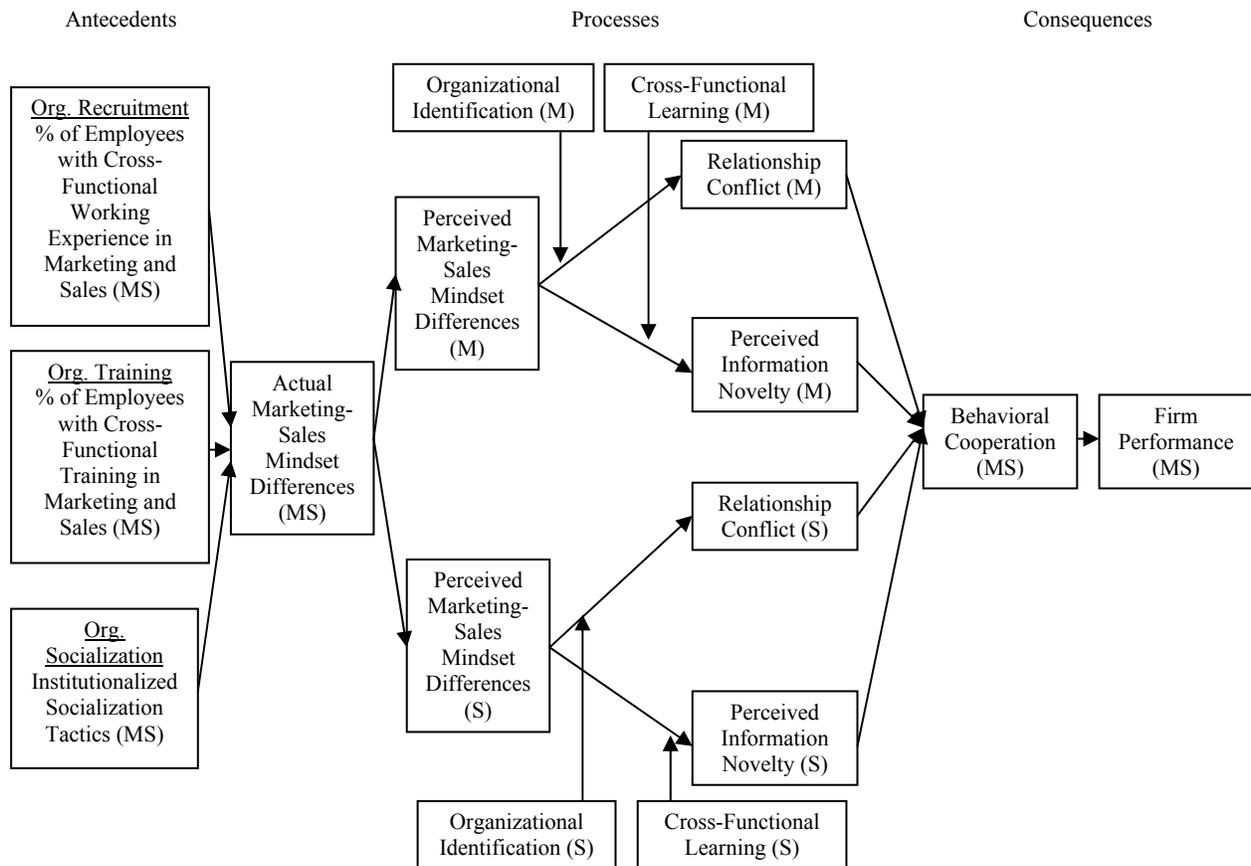


Figure 3-1. General conceptual framework of the dual-process model of marketing-sales mindset differences



Note: The letter(s) in the parentheses indicates the sources of the data collected for each of the variables beside the specific parentheses in the framework. Specifically, the letter “M” in the parentheses indicates that the variable is reported by the marketing respondents. The letter “S” in the parentheses indicates that the variable is reported by the sales respondents. And the letter “MS” in the parentheses indicates that the variable combines both marketing and sales people’s responses.

Figure 3-2. Detail conceptual framework of the dual-process model of marketing-sales mindset differences

CHAPTER 4 METHODS

Overview

Two studies were conducted for this dissertation. The first study (the initial study) is used to develop and pretest scales to assess the mindsets of marketing and sales people. The purpose for the second study (the main study) is to use the measures developed in the first study to test the entire conceptual framework of the dual-process model of marketing-sales mindset differences presented by Figure 3-2.

Initial Study: Developing and Pre-testing the Scale of Marketing and Sales Mindsets

To assess the marketing-sales mindset differences, I first developed a new scale of marketing and sales mindsets. Following O'Reilly and his colleagues' (1991) approach, I developed a value profile including a set of value statements that ideographically characterize the mindsets of both marketing and sales. This value profile was then pre-tested by an online survey with 290 senior marketing and sales managers. Based upon the developed value profile, participating marketing and sales managers were asked to rate the extent to which each of the values statements in the value profile characterizes their marketing and sales people. Several steps involving in this scale development process are described as follows.

Step 1: Describing the Mindsets of Marketing and Sales

To develop a list of potential mindset differences, an extensive review of academic and practical literature on marketing and sales relationships and mindset differences, value congruence, and organizational culture and subculture (Cespedes 1992, 1994, 1995; Dawes and Massey 2001, 2005; Dewsnap and Jobber 2002; Hardy 1987; Lorge 1999; O'Reilly, Chatman, and Caldwell 1991; Rokeach 1968; Rouzies et al. 2005; Schultz 2003; Strahle, Spiro, and Acito 1996) was conducted. In addition to the literature review, telephone interviews with eight senior

marketing and sales managers (four from marketing and four from sales) were conducted. Each of the eight managers was asked to describe the typical marketing and sales people in general (not necessarily the marketing and sales people from their own companies) using a set of short statements (words). The literature review and telephone interview, together with the discussion with academic scholars in the related research areas, arrive at an initial pool of 86 value statements that characterize marketing and sales people in general.

This initial pool of 86 value statements that describe the marketing and sales mindsets were then narrowed by using the following recommended criteria suggested by O'Reilly and his colleagues (1991): (1) generality – a value statement should be relevant to any type of companies in the current research context, regardless of size, industry, and composition; (2) readability – the value statements should be easily understandable to facilitate their commonly shared meanings; and (3) non-redundancy – the value statements should have enough distinct meanings so that they cannot be replaced by one another. This process results in a narrowed value profile, consisting of 60 value statements that describe marketing and sales mindsets. (See Table 4-1 for detail)

Step 2: Pre-testing the Value Profile Describing the Mindsets of Marketing and Sales

This narrowed value profile with 60 value statements that describe marketing and sales mindsets was then pre-tested by an online survey of senior marketing and sales managers in B-to-B businesses. I obtained a random sample of senior marketing and sales managers from a commercial list provider. The sample was stratified by industry type to ensure that this sample covers a wide range of industries. The final stratified sample consists of 3000 senior marketing and sales managers (1500 for marketing and 1500 for sales). These managers were then contacted by a soliciting email. This email includes a cover letter describing the nature of this study and an online survey URL link directing to the pretest survey. Of 3000 senior marketing

and sales managers contacted, 290 marketing and sales managers (54% of marketing and 46% of sales) finally completed this online pretest survey (a 9.67% response rate).

In this online pretest survey, respondents were asked to: “Rate the extent to which each of the following words characterizes the marketing (sales) people in your firm/SBU”. Based upon each of the 60 value statements in the narrowed value profile, respondents were asked to rate respectively the marketing and sales groups in their firms/SBUs. They were also asked to provide value statements that are not included but important to characterize marketing and sales people in general.

Based on the respondents’ reported rating scores of each of the 60 value statements, an exploratory factor analysis with varimax rotation was conducted. Since this factor analysis combines both marketing and sales data, I conducted separated exploratory factor analysis for marketing and sales data individually to ensure the similar factor structure between marketing and sales data before combining the data. I estimated the factor structures of both marketing and sales data and found similar structure between marketing and sales data. I thus combined the marketing and sales responses and conducted the exploratory factor analysis for combined data to develop the final marketing and sales mindset measure. Consistent with prior research (e.g., O’Reilly, Chatman, and Caldwell 1991; Spiro and Weitz 1990), items with factor loading lower than .40 or with cross-loadings higher than .40 are dropped.

The second criterion to select the appropriate value statements is the requirement of commensurate value measurement (Kristof 1996). Commensurate measurement refers to describing both marketing and sales mindsets with the same value content structures and dimensions. Commensurate measurement is often recommended for assessing congruence (or difference) because it ensures mutual relevance of the characteristics under investigation (e.g.,

Caplan 1987; Edward 1991; French, Rogers, and Cobb 1974). To achieve the commensurate value measurement, I compared the content and structure of marketing data with those of sales. I only remained those value statements that both appear in marketing and sales data under the similar dimensions.

The third criterion to select the appropriate value statements that describing marketing and sales mindset is the added value statements recommended by both marketing and sales respondents. Remind that in the online pretest survey, both marketing and sales respondents were asked to suggest value statements that are not included in the provided list but important in describing marketing and sales mindsets. Seven statements are recommended by both marketing and sales respondents and thus added to the final value profile.

As such, the final value profile that describes marketing and sales mindsets constitutes 36 value statements (including seven added value statements that are suggested to be important but not included in the prior value profile. (See Table 4-2 for detail). These 36 value statements will be used to assess the marketing-sales mindset differences in the main study. The detail of marketing-sales mindset differences assessment will be explained in the following section.

Main Study: Testing the Entire Conceptual Framework

Sample and Data Collection Overview

The sample of senior marketing and sales executives who participated into this main study was obtained from the following procedure. The American Marketing Association (AMA) and the Institute of Study for Business Markets (ISBM) at Penn State University were contacted and agree to provide access to their membership company lists. A soliciting email/letter with a cover letter describing the nature of the study, the incentive of participation, the researcher's contact information, and a URL link directing to a short initial online survey was sent to the potential participating marketing and sales professionals through AMA and ISBM. AMA and ISBM

members who received the soliciting email/letter and were interested in participating in this study were then asked to login on the initial online survey through the provided URL link and complete the short initial online survey. In this short initial online survey, respondents were asked to provide their names, titles, company names, contact information including their email addresses and work phone numbers. Four hundred and fourteen marketing and sales executives (including 366 from AMA and 51 from ISBM) completed this short initial online survey.

Each of the initial online survey respondents was then called individually by the researcher via their provided work phone numbers. In each phone call, the researcher typically spent about 10-20 minutes talking with individual initial survey respondent. Several major points were emphasized during this phone call: (1) highlighting the nature of this study and the participation incentive for an executive benchmark report upon participants' completion of both marketing and sales surveys; (2) ensuring that there are separate marketing and sales functions in the initial survey respondents' firms/SBUs; (3) asking each of the initial survey respondents to identify an appropriate senior marketing executive and an appropriate senior sales manager from the same firm/SBU in their companies. These initial survey respondents were also asked to agree on distributing a marketing survey to the identified marketing executive and a sales survey to the identified sales executive in the same firm/SBU. These two identified executives should not be the same person, ensuring that the marketing and the sale surveys are completed by different people. Also, these two identified executives should work in their current firm/SBU for at least one year, long enough for them to familiar with the interaction between marketing and sales in their current firm/SBU. During the phone conversation, some of the initial survey respondents were found to be qualified for completing both marketing and sales surveys. Under this situation, these respondents were only allowed to complete one side of the surveys (either marketing or

sales survey), and then asked to distribute the other side of the surveys to another qualified executive in the counterpart function to complete. Three hundred and seventy-three initial survey respondents (330 from AMA and 43 from ISBM) identified their qualified marketing and sales executives in the same firm/SBU and agreed to distribute the marketing and sales surveys to their identified marketing and sales executives.

Thus, 373 pairs of marketing and sales surveys were distributed by either mail or email with PDF format attachment. One hundred and twenty-two marketing executives returned their completed marketing surveys, and 113 sales managers returned their completed sales surveys. Among these returned surveys, 88 pairs of marketing and sales surveys are matched (including 76 completed pairs from AMA sample and 12 completed pairs from ISBM sample. Thus, the total response rate is 23.60% (with 23.03% response rate for AMA sample, and 27.90% response rate for ISBM sample).

Among 88 pairs of completed marketing and sales surveys, 23.86% of responses are from the consumer packaging goods/electronics industry, 21.60% from the machinery/capital equipment industry, 14.77% from the technology/software/consulting industry, 13.64% from the chemical/pharmaceutical industry, 10.23% from the financial/insurance services industry, 6.82% from the non-profit institution industry, and 9.08% from the other industries. Among the 176 respondents who have matched responses from the counterpart function in the same firm/SBU, the average length of working experience in their current company is 8.33 years (7.24 years for marketing respondents and 9.42 years for sales respondents). The test of the conceptual framework of the dual-process model of marketing-sales mindset differences (depicted by Figure 3-2) in the next chapter is basing upon these 88 pairs of completed responses.

I tested the conceptual model depicted by Figure 3-2 using these 88 matched pairs of marketing and sales surveys from senior marketing executive and a senior sales executive from the same firm or strategic business units (SBUs). In the marketing survey, the marketing executives were asked to evaluate the extent to which each of the 36 value statements that describe marketing and sales mindsets (developed in the initial study, see Table 4-2 for detail) characterizes their own marketing groups in their firms/SBUs. Meanwhile, they were also asked to evaluate their counterpart sales groups from the same firm/SBU along the identical 36 value statements. Similarly, in the sales survey, the sales executives in the same firm/SBU were also asked to do the same evaluation for their own sales groups as well as their counterpart marketing groups. The marketing and sales executives' rating scores of these 36 value statements on both marketing and sales groups were then used to assess the actual and perceived marketing-sales (the detail of the difference score assessment will be discussed in the measure section below). In both marketing and sales surveys, marketing and sales executives were also asked to provide information regarding the demographic background of their marketing and sales groups, their organizational socialization tactics, level of perceived relationship conflict between marketing and sales in their firms/SBUs, level of perceived organizational identification, their perceived novelty of information sent by the counterpart function, the level of cross-functional learning between marketing and sales, the level of behavioral cooperation between marketing and sales, and their firm performance.

Measures

All the scales in the Figure 3-2 are described as follows. Appendix lists the details of all the scales except the calculated scales of actual and perceived marketing-sales mindset differences.

Percentage of Employees with Cross-Functional Working Experience in Marketing and Sales. I adapt Chattopadhyay and his colleagues' (2004) scale to measure the percentage of employees with cross-functional working experience in marketing and sales. Specifically, the marketing respondents were asked to answer the question: "What percentage of marketing employees has previously worked in sales area?" In the meantime, the sales respondents from the same firm/SBU were asked to answer the question: "What percentage of sales employees has previously worked in marketing area?" The average score of these two answers is then used to measure the percentage of employees with cross-functional working experience in marketing and sales.

Percentage of Employees with Cross-Functional Training in Marketing and Sales. Similarly, I adapt Chattopadhyay and his colleagues' (2004) scale to measure the percentage of employees with cross-functional training in marketing and sales. Specifically, the marketing respondents were asked to answer the question: "What percentage of marketing employees has some training or education in sales area?" In the meantime, the sales respondents from the same firm/SBU were asked to answer the question: "What percentage of sales employees has some training or education in marketing area?" The average score of these two answers is then used to measure the percentage of employees with cross-functional training in marketing and sales.

Institutionalized Socialization Tactics. Adapting from the previous organizational socialization studies (e.g., Kim, Cable, and Kim 2005; Cable and Parson 2001; Jones 1986), I include four items to measure the institutionalized socialization tactics scale. Both marketing and sales respondents from the same firm/SBU were asked to evaluate the extent to which they agree or disagree with each of the four items based upon a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). One item was dropped, due to the low reliability score for sales'

response. The remaining three items are then used to measure the institutionalized socialization tactics. A sample item is, “Our company/division puts all of the new recruits through the same set of learning experiences, regardless of their functional areas.” The reliability of institutionalized socialization tactics for marketing and sales are .79 and .80 respectively. The marketing and sales’ scores of institutionalized socialization tactics are then averaged to measure the level of institutionalized socialization tactics for the participating firm/SBU.

Actual and Perceived Marketing-Sales Mindset Differences. The rating scores of marketing and sales mindsets are used to assess marketing-sales mindset differences. Remind that in the both marketing and sales surveys in the main study, marketing and sales respondents were asked to evaluate the extent to which each of the 36 value statements characterizes both their own functional groups and their counterpart functional groups in the same firms/SBUs. The actual marketing-sales mindset differences are assessed by comparing marketing people’s self-evaluated their own mindsets with salespeople’s self-evaluated their own mindsets. Whereas, perceived marketing-sales mindset differences are assessed by comparing marketing (sales)’s self-evaluated their own mindsets with marketing (sales)’s evaluated sales (marketing)’ mindsets.

Kristof (1996) suggested two major measures to assess difference scores based upon the rating scores: (1) squared differences (D^2) between marketing and sales scores of the same value statement; (2) profile correlation which correlates marketing and sales scores of the same value statements. Both measures have their advantages in assessing difference scores. Squared differences measure eliminates the potential problem of negative differences and gives more weight to larger absolute differences cases. The profile correlation measure, on the other hand, provides information about the extent to which the overall pattern of values is similar (or

dissimilar). That is, on each consecutive value statements, as one score goes up, then down, then up, so does the counterpart's scores, regardless of the absolute level of the scores. As long as the pattern of highs and lows is similar (or dissimilar), then the profile correlation will be high (or low).

Consistent with theoretical conceptualization (e.g., Chatman 1989; Kristof 1996) and as recommended and used in prior research (e.g., O'Reilly, Chatman, and Caldwell 1991; Cable and Judge 1997), the profile correlation measure were used to assess the marketing-sales mindset differences scores. Specifically, the actual marketing-sales mindset differences scores were calculated by correlating marketing respondents' evaluation of their own mindsets with sales respondents' evaluation of their own mindsets. The resulting set of correlation scores indicates the similarity between actual marketing and sales mindset. Thus, the actual marketing-sales mindset differences scores are just negative to the obtained correlation scores.

As for the perceived marketing-sales mindset differences scales, the marketing's perceived marketing-sales mindset differences scores were calculated by correlating marketing respondents' evaluation of their own mindsets with their evaluation of the mindsets of sales in the same firms/SBUs. Similarly, the negative of the obtained correlation scores indicate the marketing's perceived marketing-sales mindset differences.

In a similar vein, the sales' perceived marketing-sales mindset differences scores were calculated by correlating sales respondents' evaluation of their own mindsets with their evaluation of the mindsets of marketing in the same firms/SBUs. Again, the negative of the obtained correlation scores indicate the sales perceived marketing-sales mindset differences.

Relationship Conflict. Adapted from Jehn's (1995) and Pelled and her colleagues' (1999) works, a five-item scale is developed to measure the level of relationship conflict between

marketing and sales. Specifically, marketing respondents reported marketing's perceived relationship conflict with sales, and sales respondents in the same firm/SBU reported sales' perceived relationship conflict with marketing on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item is, "There are lots of personal frictions between individuals from each of the functional areas (marketing and sales)." The reliability of marketing's perceived relationship conflict is .93, same as the reliability score for sales' perceived relationship conflict.

Organizational Identification. Based upon Fisher and his colleagues' (1997) study, a six-item scale is developed to measure the level of organizational identification in the participating firm/SBU. Specifically, marketing respondents reported marketing's perceived organizational identification in their firm/SBU, and sales respondents reported sales' perceived organizational identification in the same firm/SBU on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item is, "Marketing people (salespeople) in our functional area feel emotionally attached to the entire company." The reliability for marketing's perceived organizational identification is .95. The reliability score for sales' perceived organizational identification is .90.

Perceived Information Novelty. A five-item scale of perceived information novelty is developed from the works by Moenaert and Souder (1990), Maltz and Kohli (1996), and Simons and his colleagues (1999). Marketing respondents reported marketing's perceived novelty of information sent by sales; and sales respondents in the same firm/SBU reported sales' perceived novelty of information sent by marketing on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). A sample item is, "The information sent by sales (marketing) often provides

us with novel perspectives.” The reliability of marketing’s perceived information novelty is .85. And the reliability of sales’ perceived information novelty is .87.

Cross-Functional Learning. Adapted from Van der Vergt and Van de Vliert’s (2005) study, a three-item scale of cross-functional learning is developed. Specifically, marketing respondents reported their perceived level of cross-functional learning between marketing and sales, and sales respondents in the same firm/SBU reported their perceived level of cross-functional learning between marketing and sales on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Due to the low reliability of marketing’s perceived cross-functional learning, one item was dropped from the original three-item scale. The new reliability of marketing’s perceived cross-functional learning is .61, and the new reliability score for sales’ perceived cross-functional learning is .76. A sample item is, “Marketing and sales freely challenge the assumptions underlying each other’s ideas and perspectives in order to improve performance.

Behavioral Cooperation. To fit the marketing-sale cooperation setting, the behavioral cooperation scale is specially created for this study. Specifically, a thirteen-item scale covering various aspects of marketing-sales cooperation is developed. Marketing and sales respondents were respectively asked to evaluate the level of support in thirteen aspects provided by the counterpart function in the same firm/SBU along a 7-point scale ranging from 1 (poor) to 7 (excellent). Their responses were then averaged to measure the level of behavioral cooperation in their firm/SBU. A sample item is, “Following up leads generated by marketing (Generating high quality sales leads).” The reliability of marketing’s reported behavioral cooperation is .93, and the reliability of sales’ reported behavioral cooperation is .90.

Firm Performance. The firm performance scale includes sixteen items, ranging from market share growth, sale growth, profit growth, account loss, turnover, innovativeness, new product success, return on sales, to customer satisfaction. Adapted from Moorman and Rust's (1999) study, both marketing and sales respondents from the same firm/SBU were asked to rate their firm/SBU's performance as compared to their major competitors along the sixteen dimensions. The reliability of marketing's reported firm performance is .89, and the reliability of sales' reported firm performance is .90. Marketing and sales responses are then averaged to measure the level of performance of their firm/SBU.

Control variables. Several control variables are added based upon the prior research. Specially, five control variables (i.e., goal congruence, market dynamics, complexity of selling task, selling situation-new buy, status equality) are added when considering the social categorization process of marketing-sales mindset differences. Song and his colleagues' (2000) study evidences that goal congruence is an important factor influencing the cross-functional relationship. Maltz and Kohli's (1996) work suggests another important context variable, market dynamics, that affects the cross-functional relationship. Dynamic market creates more uncertainties that require high level of coordination between marketing and sales. This high level coordination requirement raises potential relationship conflict between marketing and sales. John and Weitz's (1990) research suggests other two context variables, the complexity of selling task and the selling situation-new buy, that can potentially influence relationship between marketing and sales. When the selling task is more complex, or the product/service is rather a new purchase situation for buy, marketing and sales need more efforts to coordination. This extra coordination requirement thus increases potential relationship conflict between marketing and sales. Status equality between marketing and sales also influence the level of relationship conflict between

marketing and sales. Unequal status between marketing and sales is more likely to result in high level of relationship conflict between these two functions (Song, Xie, and Dyer 2000).

Three control variables are considered when examining the relationship between behavioral cooperation and firm performance. These three control variables are market dynamics, complexity of selling task, and selling situation-new buy. Firms generally need extra efforts to obtain desired performance, when the market is dynamic, selling task is complicated, or the purchase situation is new to their customers.

Table 4-1. Narrowed value profile of marketing and sales mindsets (60 items)

Value statement	Value statement
Flexible	Demanding
Adaptive	Take individual responsibility
Stable	Have high expectations for performance
Predictable	Offer praise for good performance
Innovative	Create conflicts
Quick to take advantage of opportunities	Confront conflict directly
Willing to experiment	Friendly
Risk taking	Fit in
Careful	Collaborative
Independent	Enthusiastic
Rule-oriented	Hard working
Analytical	Not constrained by many rules
Detail-oriented	Being distinctive/different from others
Precise	Socially responsible
Team-oriented	Result-oriented
Share information freely	Have a clear guiding philosophy
Emphasize a unique culture for functional area	Competitive
People-oriented	Organized
Respect for individuals	Political
Tolerant	Planner
Informal	Implementer
Easy going	Doer
Energetic	Data-driven
Supportive	Outcome-oriented
Aggressive	Process-oriented
Decisive	Bureaucratic
Action-oriented	Diplomatic
Take initiative	Creative
Reflective	Short-term oriented
Achievement-oriented	Long-term oriented

Table 4-2. Final value profile of marketing and sales mindsets (36 items)

Value statement
People-oriented
Friendly
Respect for individuals
Supportive
Collaborative
Relationship-oriented*
Result-oriented
Achievement-oriented
Outcome-oriented
Competitive
Aggressive
Action-oriented
Analytical
Detail-oriented
Precise
Organized
Process-oriented
Data-driven
Innovative
Creative
Willingness to experiment
Risk Taking
Adaptive
Flexible
Bureaucratic
Political
Authoritative*
Diplomatic
Administrative*
Rule-oriented
Long-term oriented
Seeking immediate benefit*
Planning for future*
Farsighted*
Willingness to sacrifice for the future*
Short-term oriented

Note: * -- Denotes that value statements are important but were not included in the narrowed value profile. These value statements were added to the final value profile in consistent with the recommendation by both marketing and sales respondents in the online pretest survey.

CHAPTER 5 DATA ANALYSES AND RESULTS

Multiple regressions were used to analyze the structural model presented by Figure 3-2. Before analyzing the structural model, measurement model test using LISREL were conducted to test the convergent and discriminant validity of the measures in the model. Meanwhile, before the measurement and structural model tests, reliability for all the measures was also checked (See Appendix for the reliability of all related scales). Table 5-1 provides the means, standard deviations and correlations for the measures.

Measurement Model Estimation

Construct Validity

Because some of the measures were newly created and some others were adapted from the previous studies, I conducted a confirmatory factor analysis (CFA) to assess the construct validity of the measures used. Due to the small sample size to number of items ratio, this confirmatory factor analysis includes measures from the two major processes (the social categorization and information processing processes) in the conceptual framework in Figure 3-2. Specifically, the items from the scales of perceived marketing-sales mindset differences, relationship conflict, perceived information novelty, and the two moderating variables of organizational identification and cross-functional learning for both marketing and sales responses were included in the CFA. The CFA showed good fit of the models to the data. The Root Mean Square Error of Approximation (RMSEA) index is .08, an indicative of reasonable model fit (Browne and Cudeck 1993). Also, the Comparative Fit Index (CFI) and the Non-Normed Fit Index (NNFI) are .85 and .87 respectively, very close to the normal cut-off point value of .90 (Bagozzi and Yi 1988). Combined together, these indices indicate a reasonable overall fit of this

model to the data and show an acceptable convergent and discriminant validity of the measures in the model.

Common Method Variance

Note that while the data in the main study is dyadic data in nature, the data for the social categorization and information process processes parts in the conceptual framework were collected using survey measures from a single source (either from marketing or from sales). As such, several steps were taken to address potential concerns about common method bias (Podsakoff et al. 2003). Procedural remedies to avoid these biases included protecting respondent confidentiality, reducing item ambiguity, separating items for marketing and sales mindset and outcome variables (i.e., relationship conflict, and perceived information novelty) (about two survey pages apart). Moreover, several statistical remedies were also undertaken. First, Harman's one-factor test (Podsakoff and Organ 1986) was conducted. Specifically, several separate exploratory factor analyses (EFAs) were conducted using principal component analysis and varimax rotations for all independent and dependent variables in both the social categorization and information processing processes in the model. No single major factor emerges to account for a majority of the variances explained by the models (among the most extreme situation among the four EFAs, the first factor accounts for only 18 percent of variance explained by the model), providing preliminary evidence that no substantial common method bias exists in the data. Further, a partial correlation adjustment test suggested by Lindell and Whitney (2001) to control for common method variance was also conducted. Lindell and Whitney (2001) state that a variable that is theoretically unrelated to at least one other variable (preferably the dependent variable) in the study can be used as a marker variable in a partial correlation adjustment test. The item about the last year's total compensation of the respondent

was used as the marker variable (The item has non-significant correlations with all variables in the investigated model, thus suggesting its appropriateness to serve as a marker variable). A review of each of the partial correlation matrices indicates that all significant zero-order correlations remain significant after the partial correlation adjustment, which further confirms that common method bias is not a serious problem in this study.

Structural Model Estimation

I used multiple regression analysis to test the proposed hypotheses. The results are shown in Table 5-2 and Table 5-3.

Hypothesis 1a and 1b propose that actual marketing-sales mindset differences are positively related to both marketing people and salespeople's perceived marketing-sales mindset differences respectively. The results are reported in Table 5-2. Consistent with both hypotheses, actual marketing-sales mindset differences are positively related to both perceived marketing-sales mindset differences ($\beta_{\text{marketing}} = .49, p < .01$; $\beta_{\text{sales}} = .32, p < .01$). Therefore, Hypothesis 1a and 1b are supported.

Hypothesis 2a proposes that percentage of marketing and sales employees with cross-functional working experience in both marketing and sales is negatively related to the actual marketing-sales mindset difference. Regression results are reported in Table 5-2. While the direction of the regression coefficient is consistent with expectation, the regression coefficient is not significant ($\beta = -.10, n.s.$). Thus, Hypothesis 2a is not supported.

Hypothesis 2b proposes that percentage of marketing and sales employees with cross-functional training in both marketing and sales is negatively related to the actual marketing-sales mindset difference. Supporting this hypothesis, the regression coefficient (shown in Table 5-2) is negative and significant ($\beta = -.29, p < .05$). Thus, Hypothesis 2b is supported.

Hypothesis 2c proposes that institutionalized socialization tactics is negatively related to the actual marketing-sales mindset differences. As seen in Table 5-2, institutionalized socialization tactics is positively related to conflict. As seen in Table 5-2, institutionalized socialization tactics is negatively related to the actual marketing-sales mindset differences, but this relationship doesn't show the significance ($\beta = -.06, n.s.$). As such, Hypothesis 2c is not supported.

Hypothesis 3a proposes that marketing people's perceived marketing-sales mindset differences are positively related to their reported relationship conflict between marketing and sales. As presented by Table 5-3, marketing people's perceived marketing-sales mindset differences is positively but insignificantly related to relationship conflict ($\beta = .19, n.s.$). Thus, this hypothesis is not supported.

Hypothesis 3b proposes that salespeople's perceived marketing-sales mindset differences are positively related to their reported relationship conflict between marketing and sales. Consistent with the hypothesis, Table 5-3 shows that salespeople's perceived marketing-sales mindset differences is positively and significantly related to the relationship conflict ($\beta = .28, p < .01$). Thus, Hypothesis 3b is supported.

Hypothesis 4a proposes the organizational identification moderates the effect of marketing people's perceived marketing-sales mindset differences on their reported relationship conflict between marketing and sales. Inconsistent with the expectation, the interaction term shown in Table 5-3 is not significant ($\beta = -.10, n.s.$). Therefore, Hypothesis 4a is not supported.

Hypothesis 4b proposes the organizational identification also moderates the effect of salespeople's perceived marketing-sales mindset differences on their reported relationship conflict between marketing and sales. Consistent with the hypothesis, the interaction term shown in Table 5-3 is significant ($\beta = -.24, p < .01$). Therefore, Hypothesis 4b is supported.

Hypothesis 5a proposes that marketing people's perceived marketing-sales mindset differences are positively related to their perceived novelty of information sent by the sales. As shown by Table 5-3, the corresponding regression coefficient is insignificant and negative ($\beta = -.12, n.s.$). Thus, Hypothesis 5a is not supported.

Hypothesis 5b proposes that salespeople's perceived marketing-sales mindset differences are positively related to their perceived novelty of information sent by the marketing. Contrary to the hypothesis, this relationship (presented by Table 5-3) shows to be negative and insignificant ($\beta = -.10, n.s.$). Therefore, Hypothesis 5b is not supported.

Hypothesis 6a proposes that cross-functional learning moderates the effect of marketing's perceived marketing-sales mindset differences on their perceived novelty of information sent by the sales. Consistent with the hypothesis, the proposed the interaction term (shown in Table 5-3) is significant ($\beta = .31, p < .01$). Thus, Hypothesis 6a is supported.

Hypothesis 6b proposes that cross-functional learning moderates the effect of salespeople's perceived marketing-sales mindset differences on their perceived novelty of information sent by the marketing. Supporting this hypothesis, the corresponding interaction term is positive and significant ($\beta = .26, p < .01$). As such, Hypothesis 6b is supported.

Hypothesis 7a proposes that marketing people's perceived relationship conflict with sales is negatively related to the behavioral cooperation between these two functions. The regression results show in Table 5-2. Partially supporting the hypothesis, the regression coefficient is negatively but marginally significant ($\beta = -.14, p < .1$). Thus, Hypothesis 7a is partially supported.

Hypothesis 7b proposes that salespeople's perceived relationship conflict with marketing is negatively related to their behavioral cooperation with marketing. As seen in Table 5-2,

salespeople' perceived relationship conflict is negatively and significantly related to the behavioral cooperation between marketing and sales ($\beta = -.20, p < .05$). Therefore, Hypothesis 7b is supported.

Hypothesis 8a proposes that marketing people's perceived information novelty is positively related to their behavioral cooperation with sales. Consistent with the hypothesis, marketing people's perceived information novelty is positively and significantly related to behavioral cooperation between marketing and sales ($\beta = .37, p < .01$) (shown in Table 5-2). Consequently, Hypothesis 8a is supported.

Hypothesis 8b proposes that salespeople's perceived information novelty is positively related to the behavioral cooperation between marketing and sales. Again, in consistent with the expectation, this relationship (see in Table 5-2) is shown to be significant and positive ($\beta = .36, p < .01$). Thus, Hypothesis 8b is supported.

Hypothesis 9 proposes that behavioral cooperation is positively related to firm performance. This hypothesis receives the support. As indicated by Table 5-2, behavioral cooperation is positively and significantly related to firm performance ($\beta = .37, p < .01$)

Table 5-4 summarizes the results of hypothesis testing.

Elaboration of Moderation Effects in the Dual-Process Model

This section further elaborates the two hypothesized moderating effects using the detail graphs. Note that Hypothesis 4a and Hypothesis 4b propose the moderating effect of organizational identification on the relationship between perceived marketing-sales mindset differences and relationship conflict. Specifically, these two hypotheses propose that under high level of organizational identification, perceived marketing-sales mindset differences are less likely to be positively related to the relationship conflict between marketing and sales. Figure 5-1 and Figure 5-2 show the details of this moderating interaction effect. Figure 5-1 presents the

details interaction graph for the marketing data and Figure 5-2 for the sales data. As presented by these two graphs, while the moderating effect of organizational identification in the marketing data is not significant, both graphs clearly show that the slope indicating the positive relationship between perceived marketing-sales mindset differences and relationship conflict (the negative aspect of marketing-sales mindset differences) is becoming flatter under the high level of organizational identification as compared to the low level of organizational identification. It means that organizational identification helps to mitigate the negative effect of mindset differences on marketing-sales relationship. Also, the steeper slope of the low organization identification lines in both figures indicates that the lack of organizational identification building will worsen the negative effect of marketing-sales mindset differences on their relationship.

Figure 5-3 and Figure 5-4 elaborate the details of moderating effect of cross-functional learning. Figure 5-3 shows the marketing data and Figure 5-4 presents the sales data. Note that Hypothesis 6a and Hypothesis 6b propose the moderating effect of cross-functional learning on the relationship between perceived marketing-sales mindset differences and perceived information novelty (the positive aspect of marketing-sales mindset differences). Specifically, these two hypotheses propose that under low level of cross-functional learning, perceived marketing-sales mindset differences will be less likely to be positively related to the perceived information novelty. Supporting both hypotheses, both figures show that under low level of cross-functional learning, perceived marketing-sales mindset differences are not only less likely to be positively related to the perceived information novelty, they are also turning to be negatively related to perceived information novelty. A further investigation of both figures finds that the positive relationship between perceived marketing-sales mindset differences and perceived information novelty only exists under the high level of cross-functional learning

situation. Therefore, the investigation of both figures concludes that the positive effect of marketing-sales mindset differences on perceived information novelty is not universal. This positive effect exists only when firms advocate high level of cross-functional learning. In addition, both figures also show that the positive effect of perceived marketing-sales mindset differences on information novelty might turn to be negative when the level of cross-functional learning between marketing and sales is getting lower.

Table 5-1. Means, standard deviations, and intercorrelations among variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	% of Employees with cross functional working experience in marketing and sales	18.66	16.13															
2	% of Employees with cross functional training in marketing and sales	37.95	24.82	.39*														
3	Institutionalized socialization tactics	3.08	1.12	-.04	.17													
4	Actual marketing-sales mindset differences	-.22	.28	-.21	-.35*	-.13												
5	Perceived marketing-sales mindset differences (marketing)	-.22	.38	-.20	-.17	-.16	.48*											
6	Perceived marketing-sales mindset differences (sales)	-.22	.38	-.01	-.20	.09	.32*	-.13										
7	Relationship conflict (marketing)	2.62	1.36	-.24*	-.25*	.06	.03	.28*	-.02									
8	Organizational identification (marketing)	5.00	1.30	-.14	-.10	.00	.04	-.33*	.01	-.20								
9	Relationship conflict (sales)	2.58	1.19	.04	-.38*	-.10	.25*	.06	.36*	.09	.12							
10	Organizational identification (sales)	5.12	1.04	-.13	.15	.06	-.13	-.14	-.09	-.13	.13	-.22*						
11	Perceived information novelty (marketing)	4.36	.94	-.06	.33*	.20	-.16	-.22*	.04	-.25*	.20	-.23*	.21					
12	Cross-functional learning (marketing)	4.69	1.07	.13	.25*	.19	-.02	-.19	.19	-.45*	.13	-.05	-.08	.27*				
13	Perceived information novelty (sales)	4.38	1.02	-.09	.16	.25*	-.03	.04	-.08	.03	-.04	-.39*	.04	.07	.24*			
14	Cross-functional learning (sales)	4.59	1.17	-.06	.21	.09	-.06	-.07	-.02	-.09	.02	-.05	.46*	.20	.07	.16		
15	Behavioral cooperation	3.96	.88	.16	.40*	.37*	-.18	-.28*	-.13	-.24*	.09	-.43*	.08	.47*	.42*	.46*	.15	
16	Firm performance	4.68	.69	-.18	.05	.19	-.01	-.08	.01	-.08	.37*	-.02	.41*	.34*	.16	.17	.13	.37*

N=88; two-tail test; * p<.05

Table 5-2. Regression analyses for antecedents and consequences of marketing-sales mindset differences

Dependent variable	Actual marketing-sales mindset differences		Perceived marketing-sales mindset differences (marketing)		Perceived marketing-sales mindset differences (sales)		Behavioral cooperation		Firm Performance		
	β	Se	β	Se	β	Se	β	Se	β	Se	
Controls											
Market dynamics										-.07	.10
Complexity of selling task										.17	.11
Selling situation-new buy										-.08	.12
Antecedents											
% of Employees with cross functional working experience in marketing and sales	-.10	.11									
% of Employees with cross functional training in marketing and sales	-.29*	.12									
Institutionalized socialization tactics	-.06	.11									
Focal variables											
Actual marketing-sales mindset differences			.49**	.10	.32**	.10					
Consequences											
Relationship conflict (marketing)										-.14 [†]	.08
Relationship conflict (sales)										-.20*	.09
Perceived information novelty (marketing)										.37**	.09
Perceived information novelty (sales)										.36**	.09
Behavioral cooperation										.37**	.10
Full Model F		3.92*		25.83**		9.44**		17.61**			3.98**
Adjusted R ²		.10		.23		.09		.43			.12

Note: [†] $p < .10$, * $p < .05$, ** $p < .01$

Table 5-3. Regression analyses for dual-process of marketing-sales mindset differences

Dependent variable	Relationship conflict (marketing)		Relationship Conflict (sales)		Perceived information novelty (marketing)		Perceived information novelty (sales)	
	β	Se	β	Se	β	Se	β	Se
Controls								
Status equality (marketing)	.02	.11						
Market dynamics (marketing)	.02	.11						
Complexity of selling task (marketing)	.03	.12						
Selling situation-new buy (marketing)	.04	.12						
Goal congruence (marketing)	-.35**	.11						
Status equality (sales)			-.04	.09				
Market dynamics (sales)			.09	.09				
Complexity of selling task (sales)			-.03	.09				
Selling situation-new buy (sales)			-.01	.09				
Goal congruence (sales)			-.51**	.09				
Task routineness (marketing)					.08	.10		
Task routineness (sales)							.20	.11
Moderating variables								
Organizational identification (marketing)	.00	.14						
Organizational identification (sales)			-.19*	.09				
Cross-functional training (marketing)					.30**	.10		
Cross-functional training (sales)							.21 [†]	.12
Independent variables								
Perceived marketing-sales mindset differences (marketing)	.19	.11			-.12	.10		
Perceived marketing-sales mindset differences (sales)			.28**	.09			-.10	.11
Interaction variables								
Perceived marketing-sales mindset differences (marketing) *organizational identification (marketing)	-.10	.11						
Perceived marketing-sales mindset differences (sales) *organizational identification (sales)			-.24**	.09				
Perceived marketing-sales mindset differences (marketing) *cross-functional training (marketing)					.31**	.11		
Perceived marketing-sales mindset differences (sales) *cross-functional training (sales)							.26*	.12
Full Model F		2.72*		8.06**		4.73*		2.70*
Adjusted R ²		.14		.41		.15		.08

Note: [†] $p < .10$, * $p < .05$, ** $p < .01$

Table 5-4. Summary of hypothesis testing

Hypothesis	Support status
<i>Focal variables</i>	
H1a: Actual mindset differences → perceived mindset differences (marketing)	Supported
H1b: Actual mindset differences → perceived mindset differences (sales)	Supported
<i>Antecedents</i>	
H2a: Percentage of employees with cross-functional working experience in both marketing and sales → actual mindset differences	Not supported
H2b: Percentage of employees with cross-functional training in both marketing and sales → actual mindset differences	Supported
H2c: Institutionalized socialization tactics → actual mindset differences	Not supported
<i>Social categorization process</i>	
H3a: Perceived mindset differences (marketing) → relationship conflict (marketing)	Not supported
H3b: Perceived mindset differences (sales) → relationship conflict (sales)	Supported
H4a: Moderating effect of organizational identification (marketing)	Not supported
H4b: Moderating effect of organizational identification (sales)	Supported
<i>Information processing process</i>	
H5a: Perceived mindset differences (marketing) → perceived information novelty (marketing)	Not supported
H5b: Perceived mindset differences (sales) → perceived information novelty (sales)	Not supported
H6a: Moderating effect of cross-functional learning (marketing)	Supported
H6b: Moderating effect of cross-functional learning (sales)	Supported
<i>Consequences</i>	
H7a: Relationship conflict (marketing) → behavioral cooperation	Partially supported
H7b: Relationship conflict (sales) → behavioral cooperation	Supported
H8a: Perceived information novelty (marketing) → behavioral cooperation	Supported
H8b: Perceived information novelty (sales) → behavioral cooperation	Supported
H9: Behavioral cooperation → firm performance	Supported

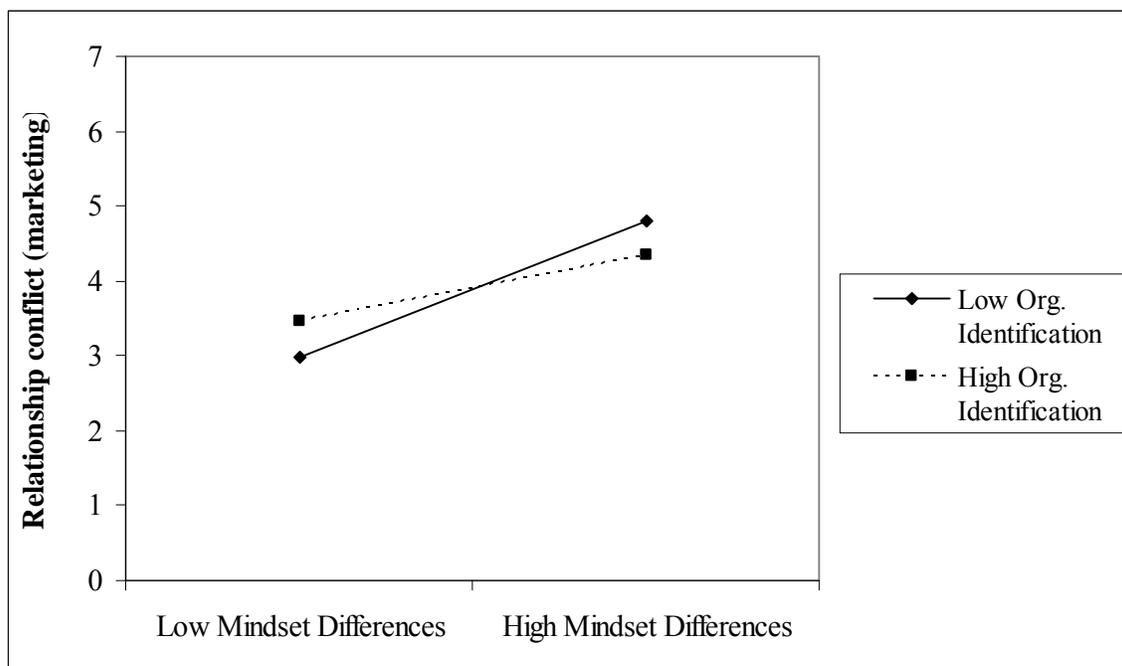


Figure 5-1. Interaction graph for the moderating effect of organizational identification (marketing data)

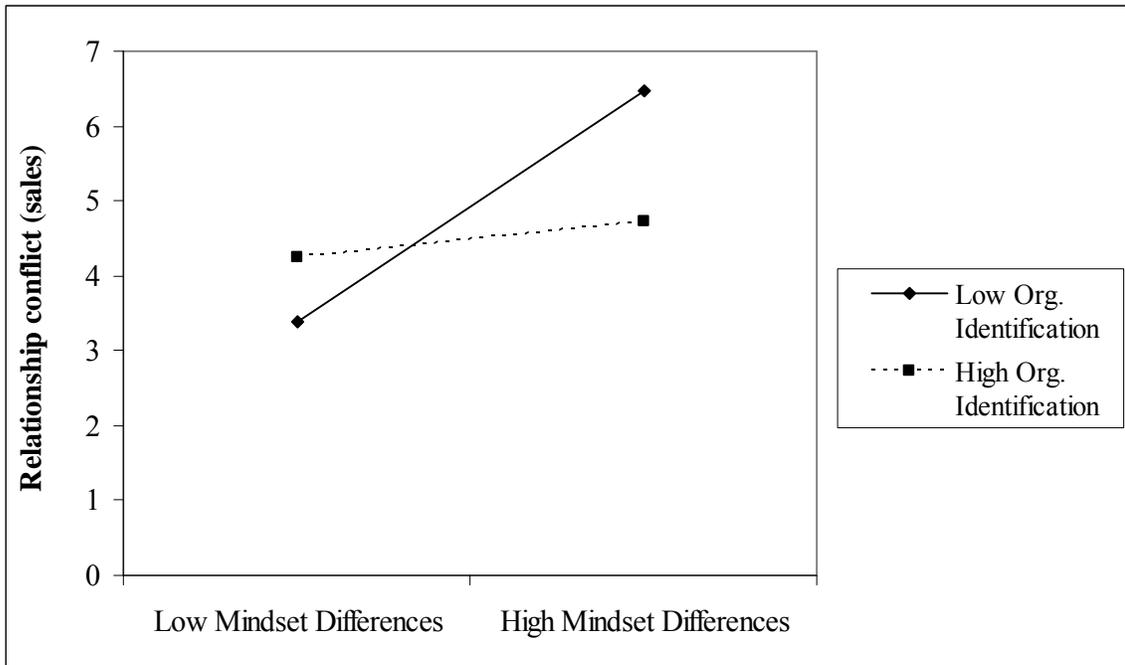


Figure 5-2. Interaction graph for the moderating effect of organizational identification (sales data)

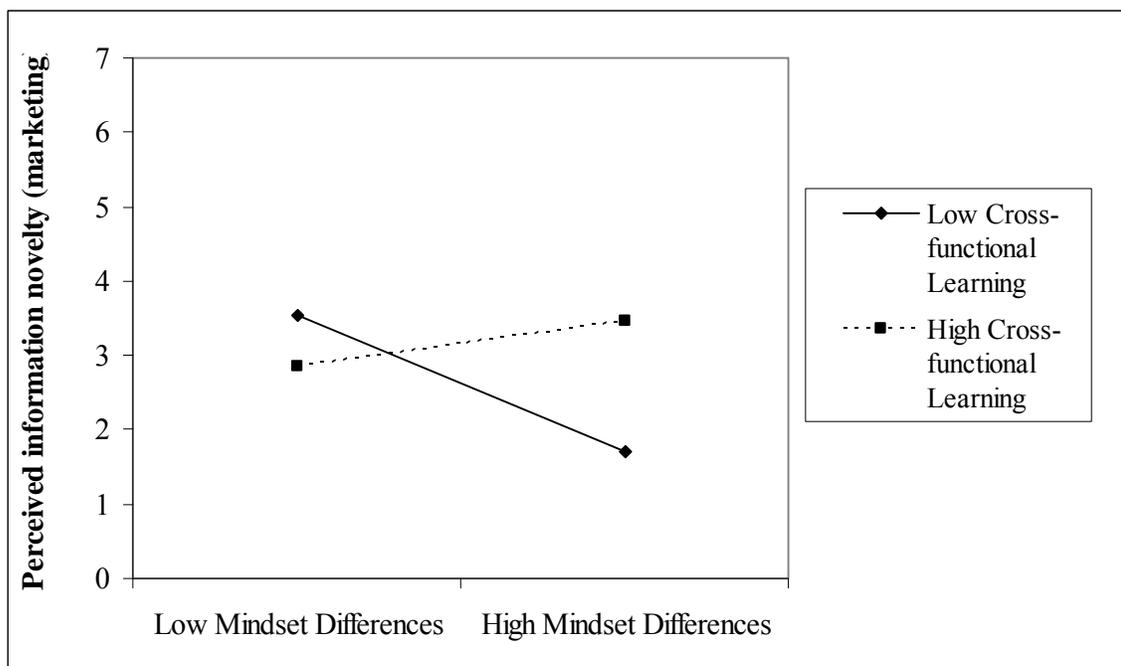


Figure 5-3. Interaction graph for the moderating effect of cross-functional learning (marketing data)

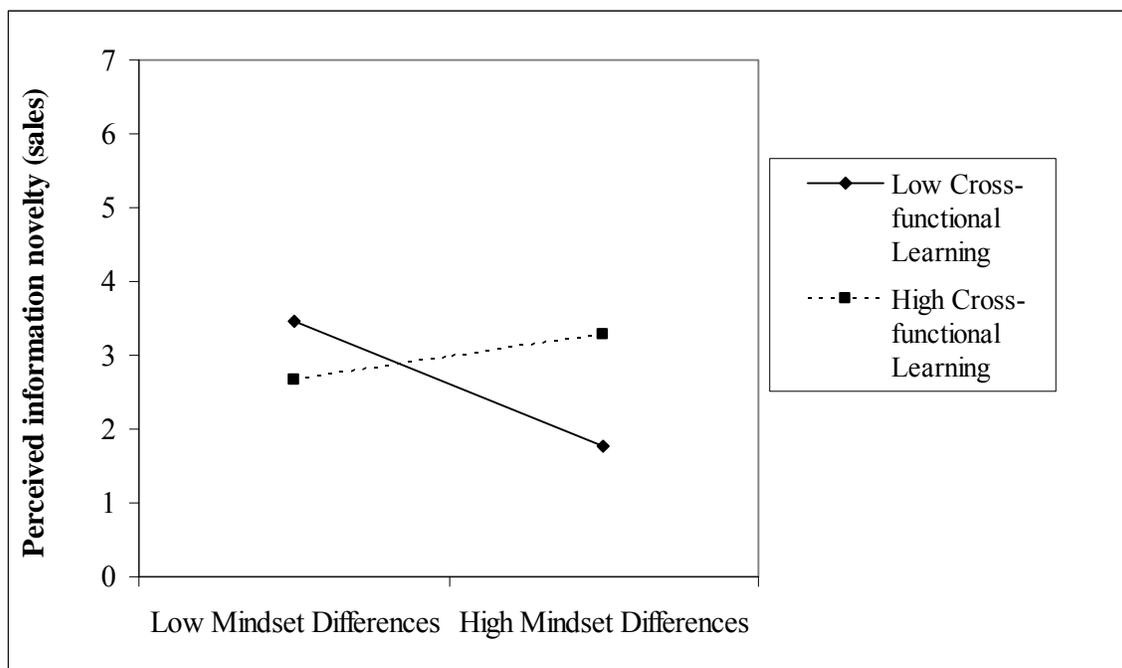


Figure 5-4. Interaction graph for the moderating effect of cross-functional learning (sales data)

CHAPTER 6 DISCUSSION AND FUTURE RESEARCH

This research empirically investigates the role of mindset differences in marketing-sales integration. Specifically, this research proposes a dual-process model (i.e., social categorization process and information processing process) of marketing-sales mindset differences and explores both the negative and positive sides of marketing-sales mindset differences. It suggests that marketing-sales mindset differences not only trigger relational tension in their relational exchange; they also bring informational benefits to their information exchange.

This research also explores the factors affecting the marketing-sales mindset differences and the factors moderating the effect of the marketing-sales mindset differences on their relational and informational exchanges. The empirical results show that by recruiting more employees with cross-functional training in both marketing and sales, firms can lower the level of marketing-sales mindset differences in their company. Also, the empirical results indicate that by building high level of organizational identification, firms can mitigate the negative effect of marketing-sales mindset differences on their relational exchange. In addition, by advocating high level of cross-functional learning between marketing and sales, firms can also secure the benefit of marketing-sales mindset differences to their informational exchange.

Besides the dual-process model, this research also develops a new scale including a comprehensive set of value profile that describes the unique characteristics of marketing and sales mindsets. This new scale was used to measure the marketing-sales mindset differences, the focal construct in this dissertation.

Theoretical Implications

This dissertation provides the following two contributions to the literature in marketing-sales cooperation/conflict.

First, this dissertation is first empirical research using dyadic data from both marketing sales sides in the same business to investigate the role of mindset differences in marketing-sales integration. Also, this dissertation also develops and empirically validates a new scale of marketing and sales mindsets used to assess marketing-sales mindset differences. Echoing Homburg and Jensen's (2007) call, this new scale of marketing-sales mindsets covers comprehensive aspects of marketing and sales' thought-worlds and consists of a comprehensive value profile that characterizes the mindset of marketing and sales. Based upon this new scale, marketing-sales mindset differences were calculated and used to investigate its impact on marketing-sales relational and informational exchange. To the researcher's best knowledge, it is the first study that develops such comprehensive set of value profile adequately measuring the marketing-sales mindsets.

Second, this dissertation is the first study that explicitly examines both the negative and positive effect of marketing-sales mindset differences. Prior research has largely focused on the negative effect of marketing-sales mindset differences on their relational exchange. This dissertation also investigates the positive effect of marketing-sales mindset differences and integrates both positive and negative sides of mindset differences in the dual-process model of marketing-sales mindset differences. Specifically, on the positive side, it proposes an information processing process where marketing-sales mindset differences bring informational benefits to their informational exchange. On the negative side, it proposes a social categorization process where marketing-sales mindset differences trigger the relational tension between marketing and sales. In addition, this dissertation also proposes factors moderating these two underlying processes. In specific, organizational identification is proposed to moderate the social categorization process and mitigate the negative effect of mindset differences on marketing-sales

relational exchange. And cross-functional learning is proposed to moderate the information processing process and facilitate the positive effect of mindset differences on perceived quality of information exchanged between marketing and sales.

The empirical results in this dissertation generally support this dual-process model of marketing-sales mindset differences. Perceived marketing-sales mindset differences are found to be positively related to the relationship conflict between marketing and sales for the sales data. Also, both the marketing and sales data show that perceived marketing-sales mindset differences are positively related to their perceived novelty of information sent the counterpart functions when the level of cross-functional learning between marketing and sales is high.

This dual-process model of marketing-sales mindset differences contributes to the marketing-sales interface literature in general and marketing-sales mindset differences in specific in that it moves from a single negative view of mindset differences in marketing-sales integration and incorporates both the negative and positive view of mindset differences in marketing-sales integration.

Managerial Implications

This dissertation also suggests several approaches to mitigate the negative effects of marketing-sales mindset differences and also to explore the potential benefits of marketing-sales mindset differences.

Specifically, this dissertation suggests the moderating effect of organizational identification on the social categorization process of the marketing-sales mindset difference. This moderating effect implies that by building strong organizational identification, firms can mitigate the relational tension between marketing and sales. Also, this dissertation suggests the moderating effect of cross-functional learning on the information processing process of the marketing-sales mindset differences. This moderating effect implies that in order to explore the

benefits of marketing-sales mindset differences on their information exchange, firms have to advocate a high level of cross-functional learning between marketing and sales. Combining together, firms are able to realize that mindset differences between marketing and sales functions are not always a cost. If they manage the mindset differences correctly (i.e., by building up strong organizational identification and promoting high level of cross-functional learning), firms actually can avoid the negative impact and at the same time, reap the potential benefits brought by the different mindsets in their marketing and sales functions.

Additionally, this dissertation also provides approach for firms to mitigate the mindset differences at the very beginning stage. The investigation of the antecedent of marketing-sales mindset differences shows that the percentage of employees with cross-functional training both marketing and sales is negatively related to marketing-sales mindset differences. This finding implies that firms can strategically use their human resources management policy when recruiting their new marketing and sales employees. If firms are confident about their capabilities in building strong organizational identification and cross-functional learning, they can intentionally recruit more marketing and sale employees without cross-functional training background, hoping that the cross-functional learning among differentiated mindsets employees arrives in more innovative business approaches. However, if firms realize that they do not have such capabilities at the current stage, they'd better recruit more marketing and sales employees with cross-functional training background in order to avoid the potential relational conflicts associated with differentiated mindsets employees.

Limitations

There are several limitations in this dissertation. First, two of the expected antecedents of marketing-sales mindset differences, the percentage of the employees with cross-functional working experience in both marketing and sales and the institutionalized socialization tactics, do

not show the significant results in the empirical investigation. A possible reason for the first insignificant antecedent is that the cross-functional working experience might not necessarily change the employee's original mindsets or allow them to accommodate other's differentiated mindsets. It might be possible that working experience in other functions further strengthens the employees' original mindsets, thus further amplifying the differences with other functions. A possible reason for the second insignificant antecedent is that the effect of institutionalized organizational socialization between new employees might not strong enough to compensate the effect when the newcomers interact with colleagues from their own functions and adopt the existing functional mindsets. Also, the adapted institutionalized socialization tactics scale in this dissertation is a short scale. It might not capture the full meaning of institutionalized socialization tactics as compared to the full scale in the original literature (e.g., Jones 1986).

Second, in the empirical investigation of the social categorization process of the dual-process model, the main effect of perceived marketing-sales mindset differences on relationship conflict and the moderating effect of organizational identification are only significant for the sales data, but not the marketing's data. It might be possible that the pressure to meet the periodical sales quota makes salespeople more alert to the relationship friction with the marketing people in the same company. For marketing people, since their compensation doesn't directly link to the concrete market performance in most situations, they might not be sensitive to the relationship quality with sales when obtaining their compensation in the company.

Third, in the empirical examination of the information process of the dual-process model, the main effect of the perceived marketing-sales mindset differences on perceived information novelty is significant only under the high cross-functional learning situation. Under low level of cross-functional learning between marketing-sales, the expected positive main effect of

perceived marketing-sales mindset differences on perceived information novelty disappears. A possible explanation is that the positive effect of marketing-sales mindset differences is not a nature process. The potential benefit of marketing-sales mindset differences can only be realized by the proactive activities, such as the cross-functional learning.

Fourth, while this dissertation investigates the impact of marketing-sales mindset differences on their relationship conflict, it doesn't examine how marketing-sales mindset differences also affect their task conflict. Jehn's (1995) research suggested that there are at least two types of conflict, relationship and task conflict, involving in intergroup interaction. In addition, relationship conflict and task conflict are suggested to have differential antecedents and consequence in the intergroup interaction process. The future research on marketing-sales mindset differences may also consider including the task conflict variable and investigate its relationship with mindset differences in marketing-sales interaction.

Fifth, although this dissertation suggests the directional effect of mindset differences on marketing-sales relationship conflict, this cross-section study cannot exclude the potential reverse causal relationship in that severe relationship conflict between marketing and sales will further widen the mindset gaps between these two functions. In any model in which causality is suggested, longitudinal studies provide stronger inferences. Thus, the model developed and tested in this study could benefit from future a longitudinal design.

In the methodological part, there are also some limitations in this paper. First, since the independent and dependent variables in the social categorization process and information processing process were both assessed using responses by the same person to a questionnaire, a potential for a bias towards significance due to common method variance exists. I attempted to

minimize this problem by the aforementioned stringent data collection procedures, careful survey design including a marker variable, as well as a series of statistical examinations.

Second, although our theory suggests the directional effects of mindset differences on marketing-sales relationship conflict, the cross-sectional study in this dissertation cannot exclude the reverse causal relationship in that high relationship conflict between marketing and sales people will further widen the mindset gaps between marketing and sales people. In any model in which causality is suggested, longitudinal studies provide stronger inferences. Thus, the model developed and tested in this study could benefit from a longitudinal design.

Third, the variables in the antecedent and consequence parts of the conceptual framework in Figure 3-2 combine both marketing and sales responses in the same firm/SBU. While this combination is basing upon the high reliability score between marketing and sales responses in the same firm/SBU, advanced investigation (i.e., interclass correlation analysis, Shrout and Fleiss 1979) can be conducted to ensure the validity of this data combination

Fourth, in the initial study that pretests the newly developed scale of marketing and sales mindsets, the marketing and sales responses on their own mindsets and their perceived mindsets are combined to the exploratory factor analysis. This combination assumes that the underlying structure of marketing's mindsets and that of the sales mindsets are identical. Rather than assuming the identical underlying structure, additional structure equivalence analysis should be conducted. A brief version of such structure equivalence analysis was conducted in the post analysis. This brief analysis involves two separate exploratory factor analyses for marketing's own mindsets evaluation data and sales own mindset evaluation data respectively. A comparison between the results of these two factor analyses exhibits the similar structure dimension between marketing and sales data, indicating the general validity in data combination.

Fifth, mindset differences scores were calculated using the rating score of marketing and sales mindset evaluation. Other researchers (e.g., Kristof 1996; Cable and Judge 1997) suggests that the ranking score is better than the rating score in assess the congruence/differences scores. While ranking score has its own merit, Edwards (2001) argues that the rating score can also adequately assess the congruence/differences scores. In addition, rating score also has its advantage in mitigating the burden of survey respondents in making the evaluation.

Sixth, this dissertation uses profile correlation method (Cable and Judge 1997, O'Reilly, Chatman, and Caldwell 1991) to assess the differences between marketing and sales mindsets. While profile correlation method has its unique advantages in assessing differences scores (Kristof 1996), it also has some potential disadvantages, such as conceptual ambiguity, discarding information, insensitivity to the sources of profile differences, and overly restrictive constraints on the coefficients (Edwards 1993). Future research can also consider applying the polynomial regression method suggested by Edwards (1993).

Seventh, sample size is not large enough. Currently, this dissertation only includes 88 pairs of completed marketing and sales data. Further data collection is needed to expand the sample size and is expected to avoid problems associated with small sample size.

Directions for Further Research

Future research might consider other moderating factors that affect the social categorization and information processing process of the marketing-sales mindset differences. For instances, organizational learning orientation might moderate the information processing process in that under high level of learning orientation, perceived mindset differences will be more likely to be positively related to perceived information novelty. Also, the nature of information communicated between marketing and sales and media of communication might also moderate the social categorization process. For example, when communicated information

is more tacit and the communication media is less lean in nature, perceived marketing-sales mindset differences will be more likely to be positively related to relationship conflict between marketing and sales.

Future research could also investigate the joint effects of mindset differences and other cross-functional integration mechanisms (e.g., goal congruence) on marketing-sales cooperation/conflict. A potential hypothesis could be that goal congruence will moderate the negative effect of mindset differences on cooperation. When marketing and sales people in specific company highly agree on the goals in joint tasks, they can still achieve high level of cooperation and performance even they have different mindsets.

Another direction for future research is to extend the concept of mindset differences in other research contexts. For example, future research can examine the effect of channel member mindset differences on the channel relationship. Also, future research can extend to the Merger & Acquisition (M&A) research context and investigate the effect of mindset differences between CEOs in both merger and acquisition companies on the success of the M&A activities. A recent success M&A between Google and YouTube provides a vivid practical example that instead of the financial offer involving in the M&A, the mindset similarity between the leaders in both merger and acquisition companies is a key driving factor predicting the success of M&A.

APPENDIX
MEASUREMENT SCALE

Antecedent Variables

Percentage of Employees with Cross-Functional Working Experience in Marketing and Sales (adapted from Chattopadhyay, George, and Lawrence 2004)

1. What percentage of marketing employees has previously worked in sales area?
(%)____ (answered by marketing respondent)
2. What percentage of sales employees has previously worked in marketing area?
(%)____ (answered by sales respondent)

Percentage of Employees with Cross-Functional Training in Marketing and Sales (adapted from Chattopadhyay, George, and Lawrence 2004)

1. What percentage of marketing employees has some training or education in sales area
(%) ____ (answered by marketing respondent)
2. What percentage of sales employees has some training or education in marketing area
(%) ____ (answered by sales respondent)

Institutionalized Socialization Tactics^a (adapted from Kim, Cable, and Kim 2005; Cable and Parson 2001; Jones 1996)

1. Our company/division puts all of the new recruits through the same set of learning experiences, regardless of their functional areas.
2. Once recruited, all of the new employees extensively involve with each other in common, job related training activities, regardless of their functional areas.
3. *For most of the new recruits in our functional area, their trainings have been carried out apart from the newcomers in other functional areas. (R)^b*
4. There is a sense of “being in the same boat” amongst all of the new recruits across different functional areas in our company/division.

(Reliability: Cronbach’s $\alpha_{\text{marketing}} = .79$; Cronbach’s $\alpha_{\text{sales}} = .80$)

Process Variables

Relationship Conflict^a (adapted from Jehn 1995; Pelled, Eisenhard, and Xin 1999)

1. There are lots of personal frictions between individuals from each of the functional areas (marketing and sales).
2. There is lots of tension between individuals from each of the functional areas (marketing and sales).
3. There are lots of personality clashes evident between individuals from each of the functional areas (marketing and sales).
4. Individuals from each of the functional areas (marketing and sales) often involve emotional conflict.
5. There are lots of jealousy and rivalry between individuals from each of the functional areas (marketing and sales).

(Reliability: Cronbach’s $\alpha_{\text{marketing}} = .93$; Cronbach’s $\alpha_{\text{sales}} = .93$)

Organizational Identification^a (adapted from Cadogan et al. 2005; Fisher, Maltz, and Jawarski 1997)

Marketing people (salespeople) in our functional area ...

1. feel emotionally attached to the entire company.
2. feel a strong sense of belonging to the entire company.
3. feel as if the problems in the entire company are their own.
4. feel like part of the family of the entire company.
5. feel strong tie to the entire company.
6. feel they have a personal stake in the success of the entire company.

(Reliability: Cronbach's $\alpha_{\text{marketing}} = .95$; Cronbach's $\alpha_{\text{sales}} = .90$)

Perceived Information Novelty^a (adapted from Moenaert and Souder 1990; Maltz and Kohli 1996; Simons, Pelled, and Smith 1999)

1. The information sent by sales (marketing) often provides us with novel perspectives.
2. The information sent by sales (marketing) often includes something new to us.
3. The information sent by sales (marketing) often provides us with alternative perspectives.
4. The information sent by sales (marketing) often complements to what we already had.
5. The information sent by sales (marketing) often includes diverse evaluation criteria.

(Reliability: Cronbach's $\alpha_{\text{marketing}} = .85$; Cronbach's $\alpha_{\text{sales}} = .87$)

Cross-Functional Learning^a (adapted from Van der Vegt and Van de Vliert 2005)

1. Marketing and sales freely challenge the assumptions underlying each other's ideas and perspectives in order to improve performance.
2. *Marketing and sales criticize each other's work in order to improve performance.*^b
3. Marketing and sales freely utilize different opinions from the other party in order to obtain the optimal performance.

(Reliability: Cronbach's $\alpha_{\text{marketing}} = .61$; Cronbach's $\alpha_{\text{sales}} = .76$)

Consequence Variables

Behavioral Cooperation (created for this study)

Please evaluate the support that sales (marketing) provides for marketing (sales) in the following areas: (1=poor; 4=average; 7=excellent)

1. Following up leads generated by marketing. (Generating high quality sales leads.)
2. Accurately articulating the corporate brand band value proposition. (Creating strong brand reputation that makes it easier to sell our product/services.)
3. Involving marketing in sales calls. (Making calls with salespeople.)
4. Improving marketing's understanding of customer needs. (Improving product knowledge of salespeople.)
5. Providing useful information to help marketing better target key accounts. (Identifying accounts to target.)
6. Effectively using collateral materials developed by marketing. (Providing effective collateral materials.)
7. Informing marketing about the changing customer needs. (Informing sales about products/services in development.)
8. Supporting new product launches (Facilitating new product/services in development).
9. Providing useful information about competitors. (Providing useful information about competitors.)

10. Providing useful information about the changing market conditions. (Providing useful information about the changing market conditions.)
 11. Providing background information about key accounts. (Providing background information about key accounts.)
 12. Using tools developed by marketing to help sell product/service. (Developing tools to help sell product/services.)
 13. Providing information about competitors' best marketing practices. (Providing information about competitors' best selling practices.)
- (Reliability: Cronbach's $\alpha_{\text{marketing}} = .93$; Cronbach's $\alpha_{\text{sales}} = .90$)

Firm Performance (adapted from Luo, Slotegraaf, and Xing 2006; Moorman and Rust 1999; Narver and Slater 1990)

Compared with the major competitors, how is your company/division performing on: (1=worse; 4=on par; 7=better)

1. sales growth
2. market share growth
3. profit growth
4. account loss
5. reduction in selling cost
6. turnover
7. number of new product/service launched
8. speed of new product/service launched
9. new product/service success
10. innovativeness of new product/service
11. innovativeness of go-to-market strategy
12. ROI (Return On Investment)
13. ROS (Return On Sales)
14. customer loyalty
15. customer satisfaction
16. customer retention

(Reliability: Cronbach's $\alpha_{\text{marketing}} = .89$; Cronbach's $\alpha_{\text{sales}} = .90$)

Control Variables

Goal Congruence^a (adapted from Jap 1999; Jap and Anderson 2003; Song, Xie, and Dyer 2000)

1. Marketing and sales share the same goals.
2. Marketing and sales have the compatible goals.
3. The goals are different between marketing and sales. (R)

(Reliability: Cronbach's $\alpha_{\text{marketing}} = .79$; Cronbach's $\alpha_{\text{sales}} = .77$)

Status Equality^a (Created for this study)

1. Marketing and sales have equal status in our company/division.
2. Marketing and sales can equally influence our company/division's decision.
3. Marketing and sales have the equal level of position in top management's minds.

(Reliability: Cronbach's $\alpha_{\text{marketing}} = .86$; Cronbach's $\alpha_{\text{sales}} = .88$)

Market Dynamics^a (adapted from Maltz and Kohli 1996)

1. Our customers' preferences for product features change very fast.
 2. Our customers require very specialized care and services.
 3. Our customers' needs are very different, requiring different types of product, brands, services, knowledge, and skills to deal with.
 4. Our competitors' products and models change very frequently.
 5. Our competitors' selling strategies changes very often.
 6. Our competitors' promoting/advertising strategies changes very often.
- (Reliability: Cronbach's $\alpha_{\text{marketing}} = .80$; Cronbach's $\alpha_{\text{sales}} = .77$)

Complexity of Selling Task^a (adapted from Anderson, Chu, and Weitz 1987; John and Weitz 1989)

1. Most of our customers made their purchase decisions with our company/division very quickly. (R)
2. Generally, a number of people are involved in our customers' purchase decision.
3. Most of our customers need a lot of information before deciding to purchase from our company/division.
4. Most of our customers consider their purchase decision with our company/division to be routine. (R)

(Reliability: Cronbach's $\alpha_{\text{marketing}} = .74$; Cronbach's $\alpha_{\text{sales}} = .64$)

Selling Situation—New Buy^a (adapted from Anderson, Chu, and Weitz 1987; John and Weitz 1989)

1. Most of our customers' purchase decisions with our company/division evolve a long time period.
2. Most of our customers have limited knowledge about what features of our company/division's products are needed to solve their problems.
3. Most of our customers have no prior experience in how to deal with the produces purchased from our company/division.
4. Our company's products are still a new purchase for most of our customers.

(Reliability: Cronbach's $\alpha_{\text{marketing}} = .77$; Cronbach's $\alpha_{\text{sales}} = .63$)

Task Routineness (adapted from Pelled, Eisenhardt, and Xin 1999)

1. The joint tasks between marketing and sales are very routine.

R: Denotes reverse coded

^a: Scale: 1=Strongly Disagree; 4=Neutral; 7=Strongly Agree

^b: Dropped due to low reliability

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BIOGRAPHICAL SKETCH

Jun Xu is a PhD candidate in marketing at the University of Florida. He graduated from East China University of Science and Technology in China for his bachelor degree in Management and Fudan University in China for his master degree in Management. His current major research interests include selling effectiveness, marketing-sales relationship, internal selling, and inter-organizational relationship and innovation. His doctoral dissertation proposal on marketing-sales integration was given several awards by American Marketing Association (AMA) Sales SIG and the Institute for the Study of Business Markets (ISBM). He already had several papers published at the Journal of Marketing, the International Journal of Research in Marketing, and the Journal of Vocational Behavior.