Expecting Marketing Activities and New Product Launch Execution to Be Different in the U.S. and China: An Empirical Study

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Most new product studies focus on early steps in the process, trying to speed the process steps to market launch, or trying to control costs via staging and other efficiency actions to increase operations efficiency. Few studies examine the impact of commercialization and launch activities of marketers, the effects of marketing activities on launch execution and timing, and the impact of marketing and launch activities on new product performance. Launch activities are critical in the long term, since they influence the firm's cash flow for the next five years, the average cash flow generating life of a successful innovative product. Our model explores the effects of marketing and launch activity execution, launch timing, and nature of the product on performance, considering also the SBU's level of cross-functional integration and market orientation, and levels of channel cooperation. We empirically test the model using new product managers from the U.S. and China, and generate insights into cross cultural differences in marketing conduct, observe the robustness of our model, and provide contextual variations sufficient to reduce frame and sampling biases that haunt the study of innovation success.

INTRODUCTION

There are significant payoffs to successful launch execution. First, launch costs and risks are substantial, indeed launch can easily cost more than R&D, engineering, and development costs combined (Urban and Hauser, 1993; Hultink et al., 1997; Guiltinan, 1999). The launch stage is strategically important as, as that point, the management of the new product effort changes from development to commercialization (Crawford and Di Benedetto, 2008). Finally, proper launch execution increases the reputational value of the firm in the distribution channel, boosts sales force and distribution channel employee morale, may provide a pioneering advantage to the firm, and ultimately positively affects the firm's value (Bowersox et al., 1995, 1999). Interestingly, the

academic literature on launch strategy, and specific launch issues such as lean launch strategy or launch timing has been slow in developing (Calantone and Montoya-Weiss, 1994). The majority of the literature on launch strategy has emerged within only the last ten years (e.g., Hultink and Robben, 1995; Hultink et al., 1997, 1998, 1999, 2000; Guiltinan, 1999; Di Benedetto, 1999; Thoelke et al., 2001; DeBruyne et al., 2002; Lee and O'Connor, 2003; Langerak et al., 2004; Calantone et al., 2005; Calantone and Di Benedetto, 2007).

Few, if any, research studies have examined how the launch process differs across national boundaries. One should expect that different cultural or business environments do not do science and technological development all that differently. However, cooperation between supply partners, coordination of distribution channels, prominence and effectiveness of promotion and advertising activities, and many other marketing differences across cultural and business environments could be highly influential at the time of launch. Additionally, levels of environmental hostility may vary markedly from one business environment to another. The economic bets made by innovating firms are extremely high; although the underlying technology may be similar, differences in environmental hostility, effectiveness of marketing activities, and the interactions among these, would impinge on the firm seeking to execute a multi-country launch successfully. All of the abovementioned launch studies were conducted in North America and Western Europe; the antecedents to a successful launch remain understudied in big emerging markets or underdeveloped/developing economies, where the business environment is substant-ially different from that found in the West. The best empirical testing ground to assess suitable, successful launch practices would be a comparison between a fully developed market and a quite different one such as China, in which cultural and business environment, government policy, stage of economic development, and industrial strategy, are all quite different.

China is, so far, quite understudied in many aspects of new product research. Despite the recent economic reforms and its emergence in the global economy, relatively little research on new products has yet been conducted in China (e.g. Parry and Song, 1994; Song and Parry, 1994; Di Benedetto, Calantone and Zhang, 2003; Di Benedetto and Song, 2003; De Sarbo et al., 2005; Di Benedetto et al., 2008). Furthermore, few of these studies explicitly consider the importance of proper execution of launch activity in China. Greater understanding of the new product development process (including launch) in China is needed, given the relative size of the Chinese economy as measured by the International Monetary Fund, and the reforms underway since the 1980s to stimulate innovation and growth in Chinese business. Indeed, China and the United States are two of the three largest economies in the world as measured by purchasing power parity (the other being the European Union) (www.cia.gov/cia/publications/factbook, 2001). China represents close to one-fourth of the world's population, and its trade surplus with the U.S. (well over $100 billion) surpasses that of Japan (*biz.thestar.com*, Jan. 20, 2006). China is generally considered one of the most important Big Emerging Markets that will dominate the global economy in the coming decades.

Our research objective is to carry out a macro-level comparison between a developed and a rapidly developing business market (respectively, U.S. and China). In this study, we propose a new product performance model, in which the execution and timing of launch activities, as well as the execution of marketing activities, directly impact new product performance. Our theoretical model makes a contribution to the literature, because we explicitly model the role of launch execution and launch timing, which are important components of a successful launch but whose specific effects on performance have remained understudied in the literature. We also include internal and external antecedents of launch execution and timing, such as cross-

functional integration, market orientation, level of channel cooperation, and other key marketing activities. While the literature suggests that all of these are related to a successful launch, the specific ways in which these affect launch timing and execution of launch activities is not understood. We derive a set of hypotheses from our theoretical model and empirically validate our model by testing our hypotheses in both countries. Based on differences between the U.S. and Chinese cultural and business environments, we derive additional hypotheses concerning the relative importance of the antecedents of new product performance across the two countries. Our model is based on broad theory comparing developed to developing economies, which helps us to generalize our findings and draw theoretical contributions and managerial insights appropriate to other business environments.

To accomplish our research objective, we gather data from 183 new product products developed by U.S. firms, and an additional 261 new product projects developed in China. In general, we find strong support in both the U.S. and China for the research hypotheses derived from our hypotheses. Specifically, we find that the business unit's level of resources and skills, the amount of cross-functional integration, and the level of market orientation positively affect the execution of marketing and launch activities and the extent of channel cooperation (directly or indirectly); and new product performance is positively affected by the execution of the marketing and launch activities, business unit resources, and launch timing. We also find and discuss several significant cross-national differences, as well as similarities, in importance of antecedents to new product performance. Our findings have managerial importance as well as theoretical significance, and we discuss the managerial implications in the concluding section.

CONCEPTUAL DEVELOPMENT

In our theoretical model, we hypothesize that the timing and quality of execution of launch both directly impact the performance of the new product, as does the product's level of innovativeness. We also hypothesize direct relationships between the quality of execution of marketing activities, and the extent of channel cooperation, on new product performance. We are also interested in exploring the factors that impact quality of launch execution and launch timing. These antecedent factors include the level of cross-functional integration, the firm's resources and market orientation, and the extent of channel cooperation. Figure 1 illustrates the hypothesized relationships among all of these variables. The following paragraphs explain and develop each of these relationships more fully.

Cross-Functional Integration
Cross-functional integration can be defined as unity of effort across the functional areas involved in NPD (marketing, R&D, manufacturing, and so on) (Song and Parry, 1997b). Cross-functional team implementation in NPD increases knowledge sharing among functional areas and avoids "functional silo" product development (Gupta, Raj and Wilemon, 1986; Gupta, 1988; Griffin, 1992; Towner, 1994; Olson, Walker, and Ruekert, 1995; Dyer, 1996; Sherman, Souder and Jenssen, 2000, Atuahene-Gima and Evangelista, 2000; Troy et al., 2008). Effective cross-functional teaming is critical to meeting new product performance metrics such as shorter time to market, higher quality, and greater financial success (Griffin and Hauser, 1992, 1993; Norton, Parry, and Song, 1994; Song and Parry, 1996; Ruekert and Walker, 1987a,b; Ayers, Dahlstrom and Skinner, 1997; Swink, 2002).

The benefits of integration are derived from improved information gathering and transmission, and ultimately improved proficiency of both marketing activities and launch activities (Ruekert and Walker, 1987a,b; Song and Parry, 1997a,b). With respect to launch, Integrating distribution and logistics in the new product process leads to synergies across functional areas, increases flexibility in the supply chain, ultimately leading to improvements in launch effectiveness and efficiency, and boosting the firm's ability to meet customer requirements (Bowersox et al., 1995, 1999; Calantone et al., 2005; Calantone and Di Benedetto, 2011). We hypothesize:

H1a: A higher level of cross-functional integration positively affects the quality of the launch execution.

H1b: A higher level of cross-functional integration positively affects the quality of execution of marketing activities.

FIGURE 1
RESOURCE-BASED DRIVERS OF SUCCESSFUL PRODUCT LAUNCH
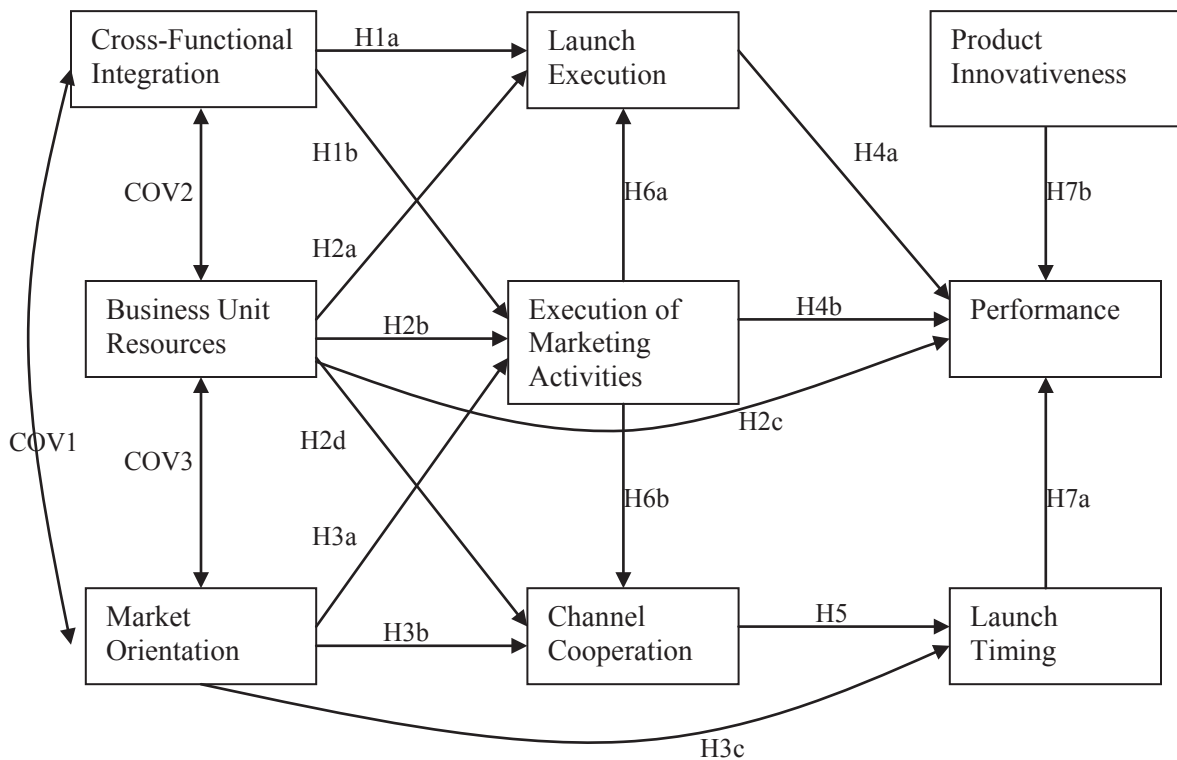
Cross-National Hypotheses:
H8a: The effect in H3c is *lower* in China.
H8b: The effect in H5 is *higher* in China.
H8c: The effect in H3a is *lower* in China.
H8d: The effects in H1b and H2b are *higher* in China.
H8e: The effects in H2c, H4a, H4b, H7a are *lower* in China.
H8f: The effects in H7a and H7b are *higher* in China.

Business Unit Resources

Many studies of new product performance view the business unit's level of marketing and technical resources as an antecedent of product success (Cooper, 1979a, b, 1983; Cooper and Kleinschmidt, 1987, 1993; Calantone and Di Benedetto, 1988; Parry and Song, 1994; Montoya-Weiss and Calantone, 1994; Calantone, Schmidt and Song, 1996; Song and Parry, 1996, 1997a). The relationship between resources and ultimate success has often been modeled indirectly. Having a higher level of resources allows a business unit to carry out specific activities pertaining to the marketing and the launch of the product more proficiently; proficiency in carrying out these tasks is positively related to product success (Calantone and Di Benedetto, 1988; Song and Parry, 1997a,b; Gatignon and Xuereb, 1997; Moorman and Slotegraaf, 1999). We hypothesize the following direct effects:

> *H2a: A higher level of business unit resources positively affects the quality of the launch execution.*

> *H2b: A higher level of business unit resources positively affects the quality of execution of marketing activities.*

Much research supports the hypothesis that the levels of skills and resources positively affect product performance. A meta-analysis of the NPD literature found that product marketing and technology capabilities are very important factors underlying new product success (Montoya-Weiss and Calantone, 1994), a finding supported by later research (e.g., Song, 1997a,b; Gatignon and Xuereb, 1997; Moorman and Slotegraaf, 1999; Guiltinan, 1999). The strategic factor market literature (e.g., Barney, 1986) notes that a business unit can strategically make investments in skills and resources (such as through acquisition) that provide sustainable competitive advantage since they can be difficult for competitors to acquire or imitate. These skills and resources ultimately generate above-average economic performance, further suggesting a direct link between the possession of skills and resources and ultimate performance levels. We propose:

> *H2c: A higher level of business unit resources positively affects the performance of the launched product.*

Some channel research has explored the effect of resource dependency on channel member behavior and channel efficiency (Gassenheimer and Calantone, 1994; Gassenheimer et al., 1995). The embeddedness literature suggests that strong ties between a manufacturer and its distributors will lead to an open exchange of information, more innovative new products, and ultimately, improved performance (Morgan and Hunt, 1994; Rowley, Behrens and Karckhardt, 2000; Bonner and Walker, 2004). A mutually beneficial relationship exists between manufacturer and distributor. The manufacturer can gain several advantages by cooperating with distributors, since the latter knows customer needs best (Kalwani and Narayandas, 1995); similarly, the distributor is dependent on the manufacturer's ability to continuously improve product offerings and better satisfy the customer (Rowley, Behrens and Karckhardt, 2000; Bonner and Walker, 2004). Certainly, manufacturers will be able to gain competitive advantage through their ability to provide economic support to their distributors (Gassenheimer and Calantone, 1994). The more resources the manufacturer has, the greater the economic dependence of the distributors on the manufacturer, and the more compliant the distributors' behavior

will be. We hypothesize that the level of channel cooperation achieved will be related to the business unit's resource level:

H2d: A higher level of business unit resources positively affects the level of channel cooperation.

Market Orientation

Market orientation is defined as the organizationwide generation and dissemination of market information and intelligence regarding customer needs and wants, and organizational responsiveness to such information (Jaworski and Kohli, 1993; Kohli and Jaworski, 1990; Narver and Slater, 1990; Narver, Slater and MacLachlan, 2004). In terms of product development and launch, a market orientation can be manifested in many ways: frequent meetings with customers, interdepartmental meetings to discuss competitive strategies or market trends, periodic checking of product development to keep it in line with customer needs, taking corrective action when customers are unhappy with service quality, and so on. A higher market orientation is related to greater knowledge about the marketplace and about competition, which allows firms to execute their marketing activities better and thus have better success at launch (Deshpande et al., 1993). Further, as market orientation increases, a greater level of cooperation with external channel partners is stimulated, which increases the channel members' willingness to cooperate at launch. Finally, a firm with greater knowledge about the competitive environment and the marketplace is likely to have a better sense of the "right time" for market launch, so we expect a relationship between market orientation and launch timing. In sum, we hypothesize:

H3a: A higher level of market orientation positively affects the quality of execution of marketing activities.

H3b: A higher level of market orientation positively affects the level of channel cooperation.

H3c: A higher level of market orientation positively affects the timing of the launch.

Execution of Marketing and Launch Activities

An early empirical study, Project SAPPHO, found that the most critical determinants of product success included understanding users' needs and the magnitude of the marketing efforts (Rothwell, 1972). The execution of marketing activities (such as selecting customers for product use testing, conducting test marketing, training the sales force, and developing and testing the advertising) increases a product's competitive advantage as viewed by the customer, ultimately increasing the level of success attained by the product (Cooper, 1979a, 1983; Calantone and Di Benedetto, 1988; Cooper and Kleinschmidt, 1987; Song and Parry, 1994, 1996, 1997a, b).

In addition, product launch activities (such as providing service and technical support to the customer, having appropriate pricing, advertising, and distribution at launch, having adequate product availability) also determine of the product's performance level (Cooper, 1979a, 1983; Maidique and Zirger, 1984; Cooper and Kleinschmidt, 1987, 1990; Calantone and Di Benedetto 1988; Song and Parry, 1994, 1997b).

There is a small but growing literature on the importance of the launch stage (for a review, see Calantone and Di Benedetto, 2007). The launch stage is often the most expensive stage in product development by far (Urban and Hauser, 1993; Guiltinan, 1999; Langerak, Hultink and Robben, 2004); and effective launch activity execution is a significant precursor of market performance (Calantone and Di Benedetto, 2007; Cooper, 1979; Cooper and Kleinschmidt, 1990; Parry and Song, 1994). Poor execution of product launch can result in marketplace failure, even if other stages in the product development process are carried out well (Montoya-Weiss and Calantone, 1994). Many firms emphasize executing a "lean" launch, characterized by small commitments of resources, slow manufacturing ramp-up, and low commitment of inventory (Calantone et al., 2005). Lean launch activities can lead to significant cost efficiencies and time-to-market improvements, resulting in improved product performance (Bowersox et al., 1995, 1999).

Carrying out marketing activities well provides the firm with a better understanding of the marketing efforts required at the time of launch as well as target customers' responses to price levels, resulting in better tactical launch decisions such as improved timing (Calantone and Di Benedetto, 1988, 2007; Hultink and Robben, 1999; Langerak, Hultink and Robben, 2004). The product development literature shows that effective execution of launch activities is related to superior market performance (Calantone and Cooper, 1979; Cooper and Kleinschmidt, 1990; Parry and Song, 1994; Guiltinan, 1999; Calantone and Di Benedetto, 2007, 2011).
We hypothesize:

> *H4a: A higher quality of launch execution positively affects the performance of the launched product.*

> *H4b: A higher quality of marketing activity execution positively affects the performance of the launched product.*

Channel Cooperation

Tight cooperation among channel members permits more efficient sharing of information. Cooperation results in a state of "mindfulness," meaning that there is a shared understanding of goals and constraints among all participants (Bowersox, Stank and Daugherty, 1999; Petersen, Handfield and Ragatz, 2003). Cooperation also increases synergy: the result of NPD is more satisfactory than what would have been accomplished by any one of the participants individually (Jassawalla and Sashittal, 1998; Song, Montoya-Weiss and Schmidt, 1997). These factors, taken together, allow for better, more responsive product development. That is, tighter ties among channel members help them respond more rapidly to customer needs and bring products to market more quickly. The ability to execute a flexible, lean launch, and to extract the benefits mentioned above (cost efficiencies, and accelerated time to market), will be dependent on the firm's ability to coordinate and cooperate with its supplier partners (Bowersox et al., 1995, 1999).

There is limited academic research specifically on launch timing (for an exception, see Calantone and Di Benedetto, 2011), but the product pioneering literature suggests that delaying a launch is detrimental to long-term market share (Robinson and Fornell, 1985; Robinson, 1988; Lambkin, 1988; Karakaya and Stahl, 1989; Kerin, Varadarajan, and Peterson, 1992; Song, Di Benedetto, and Zhao, 1999; Robinson and Chiang, 2002). It is also possible that a launch can be too early, at a point when marketplace information is still missing or it is still unclear which

technology will be most appropriate for the market (Calantone and Di Benedetto, 2011). This is conceptually similar to the management concept of the strategic window (Abell, 1978), which suggests that there is an optimal time to capitalize on a marketplace opportunity. We therefore hypothesize:

H5: A higher level of channel cooperation positively affects the timing of the launch.

Marketing Competitiveness

If the firm proficiently assesses market potential, carries out good test marketing, and performs other marketing activities well, it will have a better idea of the intensity of promotion and distribution that will be required at launch, and will ultimately conduct its launch activities better. It will also have a better idea of its target customers' likely responses to differing price levels, and can set prices accordingly (Calantone and Di Benedetto, 1988). In short, better marketing information will allow the firm to make better tactical launch decisions (Hultink et al., 1997; Hultink and Robben, 1999). Furthermore, excellence at executing marketing activities increases the level of cooperation of channel members, since the assistance they receive from the manufacturer (in the form of marketing support) helps them to achieve lean-launch efficiency targets and also attain levels of distribution desired by the manufacturing firm. Thus, we propose two hypotheses:

H6a: A higher quality of marketing activity execution positively affects the quality of the launch execution.

H6b: A higher quality of marketing activity execution positively affects the level of channel cooperation.

Performance

Launch timing is a critical variable determining ultimate product success, and there appears to be a close relationship between product performance, launch timing, value delivered to customer, and likelihood of success (Cooper and Kleinschmidt, 1990; Zirger and Maidique, 1990; Lilien and Yoon, 1990; Parry and Song, 1994; Guiltinan, 1999). In the NewProd empirical study, 13 percent of the product failures occurred because a similar and better product was launched by a competitor at the same time; if the product had been launched earlier it may have had a chance to become established and ultimately succeed (Calantone and Cooper, 1979).

As mentioned earlier, it is possible for the launch timing to be too late or too early, both with potentially detrimental effects on performance. There are many anecdotal examples of firms that delayed too long in launching a product, only to be beaten to the market by competitors (Crawford and Di Benedetto 2008, p. 445).

At the same time, firms are often under pressure to accelerate time to market (Millson, Raj and Wilemon, 1992) and may ultimately launch too early without fully understanding the risks involved (Crawford, 1992). In a recent launch study, evidence was found that an "optimal" launch time exists, and it is influenced by the objectives of several stakeholders: top management, customers and consumers, and distribution channel members (Calantone and Di Benedetto, 2011). We hypothesize:

H7a: Better launch timing positively affects the performance of the launched product.

The empirical literature has not yielded consistent results regarding the relationship between the product's degree of innovativeness and its performance. The Project NewProd studies have produced equivocal results (see, e.g., Cooper, 1979a; Kleinschmidt and Cooper, 1991): highly innovative products outperform incremental products on some measures of success, while the reverse was true for other measures of success. These authors noted that there are two ways to view the relationship between innovativeness and performance: (1) highly innovative products have higher performance because they create greater opportunity for competitive advantage; (2) less innovative products have higher performance because they carry less risks and uncertainties. They speculated that there might be a U-shaped relationship between innovativeness and performance (i.e., moderately innovative products will be outperformed by both highly innovative and incremental products. Some later empirical evidence suggests, however, that highly innovative products outperform all others on one specific performance variable: whether the product meets the firm's profit objectives (Song and Montoya-Weiss, 1998). Therefore, consistent with this later work, we hypothesize:

H7b: A higher level of product innovativeness positively affects the performance of the launched product.

Cross-Cultural Hypotheses
While we expect this model of new product performance to be generalizable across various countries, we expect differences in the relative importance of the various factors leading to new product performance, due to differences in the cultural and business environments. By gathering data from both the U.S. and China, we are able to develop and test hypotheses concerning the differences between a large, fully-developed, free-market economy and a large, rapidly-developing, centrally-planned economy.

China is an important and unique business environment and a rapidly-emerging global market economy. It is traditionally a centrally-planned economy, and in an attempt to boost global competitiveness, central planning has been focusing on stimulating new product development, particularly in high-tech industries (Gadiesh, Leung and Vestring, 2007; Li and Zhang, 2007; Luo, 2003; Mu, Peng and MacLachlan, 2009). Chinese as well as foreign firms view China's enormous market potential and have sought to increase efficiency and effectiveness of new product launch there (Atuahene-Gima, Slater and Olson, 2005). Nevertheless, despite great advances in its global presence, China is still characterized by a volatile business environment, and a lack of market institutions that support product innovation. During times of great economic transformation, this lack of market institutions can hamper innovative activities (Luo, 2003). In addition, many Chinese firms are still state-owned, and there is significant government involvement in investment and hiring (Henley and Nyaw, 1986), and governmental reforms have focused on technology and innovation stimulation (Schermerhorn and Nyaw, 1992; Jefferson, Rawski and Zheng, 1992). In a centrally-planned economy, other things being equal, we would expect that marketing and launch activities designed to increase a new product's competitiveness in free market competition would be relatively less critical to its performance. Factors such as greater cooperation through the distribution channel or greater cross-functional

integration would be relatively more important to marketing and launch execution and, ultimately, to new product performance. We hypothesize:

H8a: The effect of market orientation on launch timing will be lower in China than in the U.S.

H8b: The effect of channel cooperation on launch timing will be higher in China than in the U.S.

H8c: The effect of market orientation on execution of marketing activities will be lower in China than in the U.S.

H8d: The effect of (i) cross-functional integration and (ii) business unit resources on execution of marketing activities will be higher in China than in the U.S.

H8e: The effect of (i) business unit resources, (ii) launch execution, (iii) execution of marketing activities, and (iv) launch timing on new product performance will be lower in China than in the U.S.

H8f: The effect of product innovativeness and launch timing on performance will be higher in China than in the U.S.

METHODOLOGY AND DATA COLLECTION

A retrospective methodology was employed in this study, as had been successfully done in several previous studies of NPD and product launch (Cooper, 1979a,b, 1983; Cooper and Kleinschmidt, 1987; Calantone and Di Benedetto, 1988; Calantone et al., 1996). A mail survey instrument was developed for data collection, based on the NPD literature. Respondents were requested to select one of their company's most recent new product launches (i.e., launched no more than five years ago) which was "characteristic" of their firm at the time of launch and for which they would be able to provide detailed information. Except for the performance measures, each of these was measured on 0 to 10 Likert-type scales.

The model was tested in the U.S. with a sample of product managers derived from the Product Development & Management Association member database. The model was also tested using a second sample derived from a study in China, using mailing lists obtained from four Chinese industry ministries. Gathering data in both business environments allows us to carry out the macro-level comparison between developed and developing business markets, which is a stated research objective, and also permits us to assess the robustness and generalizability of the theoretical model outside the North American environment.

The following sections detail the instrument development process and the data collection in the U.S. and China.

Instrument Development and Validation Process

To ensure that we had a survey instrument that provided valid, reliable measures of the constructs under study (Churchill, 1979), we used a two-step process to develop the instrument. This was particularly important since scales previously validated in other studies were not

available for some of the constructs (for example, timing of launch).

In the first step, we identified relevant scales from the marketing and related literature wherever possible to build an initial pool of scale items. We grouped scale items derived in this way into constructs. To the initial pool, we added new items wherever it was felt that the domain of the construct had not been sufficiently covered by the identified items (Mintu, Calantone & Gassenheimer, 1994). For example, few items pertaining to launch timing or channel cooperation were available, so new items were added (the Appendix indicates which scales were developed for the specific purposes of this study).

In the second step, we assessed the construct validity of the scales being developed, and corrected ambiguous or confusing scale items, by pretesting the questionnaire. The pretest sample included 50 individuals, who were all practicing managers participating either in a university executive training program or in an evening MBA program. Participants were asked to fill out the questionnaire, and then in the debriefing they were asked if they felt all the questions were clear and that the scale items represented the desired constructs adequately and captured the appropriate "shades of meaning." Only minor corrections and adjustments needed to be made to the questionnaire based on the feedback from the pretest. The appendix provides a list of the final measure measurement items and the response format employed in the questionnaire.

Construct Measures

Market orientation was measured using a 14-item scale developed by Narver and Slater (1990) and also used by Song and Parry (1997a). This scale includes a set of questions regarding the extent of formal and informal meetings regarding customer needs, competitive strategies, and the dissemination of customer satisfaction information.

The level of cross-functional integration was measured using a six-item work group structure scale that explored the involvement of cross-functional teams in strategic decisions and the presence of liaison personnel and/or task forces to facilitate interdepartmental collaboration (Bowersox et al., 1995).

The next three constructs (business unit resources and skills, execution of marketing activities, and execution of launch activities) were measured using scales derived from the Project Newprod studies of Cooper (Cooper,1979a; Cooper and Kleinschmidt, 1987). A seven-item scale measured the marketing, R&D, and manufacturing skills and resources present in the business unit. The marketing activities scale contained fifteen items measuring the quality of execution of tasks such as customer selection, in-use testing, test marketing, planning the product launch, studying customer feedback, and planning the sales force, advertising, and distribution activities. Finally, the seven-item launch activities scale assessed the quality of execution of the selling effort, advertising, product availability and distribution, pricing, and technical support at the time of launch.

The nature of the product (new-to-the-world product, new product or line to the company, addition to an existing line, or modification of existing product) was measured using a single-item scale used by Cooper and Kleinschmidt (1987).

We developed new scale items to measure launch timing and channel cooperation. These were pretested on a sample of about two dozen students in executive MBA programs for clarity. The seven-item launch timing scale required the respondent to assess the timing of the launch relative to business unit goals, competition, and customers, as well as the overall launch timing. The channel cooperation scale contained five items, and assessed the level of cooperation and

coordination attained in the channel, the speed of deployment of the product into the channel, the timeliness of channel promotion, and the timeliness of the launch.

Ten measures of perceived new product performance were gathered. Recent literature has suggested that a unidimensional performance scale is an oversimplification (Griffin and Page, 1993; Hultink and Robbin, 1995). Measuring only profitability, for example, may be a misleading indicator of the product's success, relative to the objectives specified by the firm. Therefore, the following measures of success were used: perceived overall profitability, and perceived profitability, sales and market share relative to the business unit's other new product launches, to competing products on the market, and to the business unit's objectives for the product launch. Each of these was measured on a Likert-type scale of –5 to + 5 (scale items appear in Appendix).

U.S. Data Collection

The U.S. survey was mailed to a list of corporate managers whose principal responsibility was new product commercialization. This sampling frame was chosen because these individuals were felt to be representative of the most knowledgeable managers active in new product management and commercialization. A follow-up call and second mailing were used to boost response rates. A key informant method was used for data collection: this method has been frequently used in new product research (Song and Parry, 1997a,b; Cooper and Kleinschmidt, 1987; Calantone, Schmidt and Song, 1996). All respondents were experienced practicing managers in new product management, and were the most knowledgeable source of information on the product's launch and commercialization (Phillips, 1981). The sample included practitioners from firms producing consumer goods as well as business-to-business goods and services. A total of 1005 questionnaires were sent, of which 183 usable questionnaires were returned; this represents a response rate of 18.2%.

Most respondents held either Manager, Assistant Manager, or Director positions. About 6% of the respondents held Planning, Corporate Planning, or Strategic Planning positions within their firms; the remainder of the sample was roughly evenly split across Technology, Marketing, New Product Development, and Other Management. These demographics (by functional area and job title/level) are very representative of the overall sampling frame characteristics. Additionally, for evidence of reliability, the sample was split into two halves (early and late respondents), and, with only one exception, no significant differences were found between halves of the sample obtained on any of the scale items. The two halves were not different in terms of any of the performance measures used. We therefore conclude that the earlier and later respondents are not significantly different from each other in any way that would bias our results. This finding can also be used to infer a non-threatening level of non-response.

China Data Collection

We explicitly sought to avoid applying an American bias or shade to the research. It is important to ascertain the "comparability" of data collected in different cultural contexts (Douglas and Craig, 1983), thus the research was designed with the intent of establishing equivalent measures for the study of the Chinese NPD process.

To make sure the translation was accurate and that the question meanings were not altered, we used a two parallel-translation/double-translation method to translate the questionnaire into Chinese (Douglas and Craig, 1983, Sekaran, 1983). Four Chinese professional translators assisted in preparing the Chinese questionnaire. Two people prepared independent Chinese

translations of the English-language questionnaire and the other two independently translated the Chinese translations back into English. A comparison of the resulting questionnaires revealed considerable consistency across translators. When disagreements could not be resolved, phrasing favored by a majority of the translators was selected. The appropriateness of the selected translation was further confirmed by consulting with 6 Chinese managers.

The final stage of measurement development consisted of two pretests of the resulting questionnaire. The first pretest was conducted by interviewing 9 Chinese graduates from a well-regarded U.S. business school and 11 Chinese executives who had been involved in more than 20 NPD projects in two Chinese firms. All were fluent in both English and Chinese. These respondents were asked to complete the questionnaire and raise questions as problems or ambiguities arose. After these interviews, the instrument was corrected and professionally drafted. The second pretest was conducted using all the team members of a recently introduced product in a Chinese firm. These respondents were asked to complete the questionnaire for a recently developed project. The final version of the questionnaire reflected a very few modifications, as suggested by participants in the pretests. The underlying purpose of these exhaustive steps is to insure equivalence to the greatest degree possible.

The sample frame consisted of mailing lists obtained from four Chinese ministries: Aerospace, Electric Machinery, Chemicals, and Electronics. After deleting enterprises with less than 11 employees, the list was reduced to 966 companies. In administering the survey, we followed the total design method for survey research (Dillman, 1993). The first mailing packet included a business card, a personalized letter to the contact of the company in Chinese, a questionnaire in Chinese, and a pre-addressed postage-paid return envelope. The package was sent to all 966 firms in China. Respondents were guaranteed confidentiality and offered an executive summary of the results. Following the procedure given by Dillman (1993), a followed up letter, a second wave of mailing with questionnaire, and a final follow-up letter were sent to non-respondents. In addition, a personal phone call was made to the non-responding firms two weeks after the fourth reminder letter.

Of the 966 questionnaires initially mailed, 42 were returned as undeliverable, yielding an adjusted sample size of 924. We obtained 261 usable responses, for an effective adjusted response rate of 28%. Of the 261 enterprises in our sample, 194 were state-owned enterprises, and 23 were joint ventures involving a state enterprise and a foreign partner.

To examine concerns about the validity and reliability of the information provided by respondents, two Chinese researchers conducted 27 randomly selected follow-up telephone interviews (30 were originally selected, but 3 managers declined to participate). We concluded that the information was reliable and valid because: (1) each questionnaire was completed by a project manager identified as a knowledgeable source regarding all aspects of the project's development (Phillips, 1981) and 25 of the 27 project leaders consulted with other managers or team members before completing the questionnaire.

RESULTS

We combined the U.S. and China data samples and conducted an exploratory factor analysis, in which we set the number of factors equal to the number of constructs. After promax rotation, almost all scale items mapped onto factors which were a priori consistent with the constructs (the few that did not map clearly onto a factor were eliminated). This was then repeated with the samples not pooled, and a clean set of items on factors obtained. The fact that all constructs fit

cleanly in both countries provides elementary, basic evidence of universal construct validity across the two countries. This was followed by more formal tests of construct and item equivalence.

The means and standard deviations for all factors for the combined sample, and all coefficient alpha statistics, are presented in Table 1. The path model of Figure 1 was run as a two-group model with the U.S. and China samples as the two groups. The overall model fit is excellent both for the exact fit test and alternate test criteria ($\chi^2 = 62.29$, $p < 0.055$; CFI = 0.990; RMSEA = 0.027). All coefficient alphas are higher than the accepted cutoff value of 0.70, presenting an alternate indicator of convergent validity and internal consistency. All standardized parameters for both the U.S. and China samples are presented in Table 2, together with the overall model fit statistics. A two group CFA was then performed to assess the presence of multiple forms of construct invariance across the two settings (Myers, Calantone, Page and Taylor, 2000). Excepting two items, all items loaded on correct factors and were invariant (equivalent lambdas and constructs) between countries; the two offending items were removed from further analyses. Furthermore, instrument invariance obtained, tested using the measurement error covariances (theta delta) in each country. Since invariance obtained at the item, construct and error levels, we proceeded to test next for common method bias.

TABLE 1
CONSTRUCTS AND COEFFICIENT ALPHAS*

Construct	Mean (Standard Deviation)	Coefficient α
Marketing Orientation (14 items)	6.48 (1.30)	0.861
Cross-Functional Integration (6 items)	5.75 (1.67)	0.817
Business Unit Resources and Skills (7 items)	5.61 (1.45)	0.841
Execution of Marketing Activities (15 items)	5.70 (1.41)	0.894
Channel Cooperation (5 items)	5.50 (1.81)	0.891
Launch Timing (7 items)	5.26 (2.02)	0.921
Launch Execution (7 items)	6.01 (1.49)	0.793
Performance of Launched Product (10 items)	1.22 (2.11)	0.957

* All constructs measured by multiple Likert-type items measured on 0-10 scales, except Performance measured on a +5 to -5 scale.

Common Method Bias

We used several procedures to empirically examine if common method bias obtained and threatened interpretation of our results. These were the Harmon one-factor test, questionnaire ordering, a confirmatory factor-analytic approach to Harman's one-factor test (McFarlin and

Sweeney, 1992; Sanchez and Brock, 1996), a variant of the Myers et al. (1999) test for instrumentation bias, testing common covariance between unhypothesized pairs of constructs, correlation between endogenous and exogenous errors, a full mediation test, and a moderation test.

TABLE 2
SUMMARY OF PARAMETERS AND TESTS ON TWO GROUP MODEL

Hypothesis	Path	U.S.	China	χ^2 Difference
H1a	Cross-Functional Integration – Launch Execution	0.118**	0.116**	--
H1b	Cross-Functional Integration – Marketing Execution	0.224**	0.226**	--
H2a	Business Unit Resources - Launch Execution	0.410**	0.404**	--
H2b	Business Unit Resources - Marketing Execution	0.252**	0.401**	DIFF
H2c	Business Unit Resources –Perform.	0.287**	0.090	DIFF
H2d	Business Unit Resources - Channel Cooperation	0.263**	0.261**	--
H3a	Market Orientation - Marketing Execution	0.408**	0.216**	DIFF
H3b	Market Orientation - Channel Cooperation	0.097**	0.097**	--
H3c	Market Orientation - Launch Timing	0.114**	0.113**	--
H4a	Launch Execution – Perform.	0.058	0.060	--
H4b	Marketing Execution – Perform.	0.242**	0.241**	--
H5	Channel Cooperation - Launch Timing	0.520**	0.748**	DIFF
H6a	Marketing Execution - Launch Execution	0.333**	0.326**	--
H6b	Marketing Execution - Channel Cooperation	0.341**	0.336**	--
--	COV (Cross-Functional Integration - Mkt Orientation)	0.485**	0.362**	--
--	COV (Business Unit Resources - Market Orientation)	0.333**	0.402**	--
--	COV (Business Unit Resources - Cross-Functional Integration)	0.291**	0.523**	--
H7a	Launch Timing – Performance	0.266**	0.270**	--
H7b	Product Innovativeness – Perform.	0.064*	0.064*	--

Overall Statistics: $\chi^2 = 62.29$; df = 45; p < 0.055; CFI = 0.990; RMSEA = 0.027; C.I. (RMSEA) 90% = (0.000, 0.043)
Note: All parameters are reported from a completely standardized solution.
**: Significantly different from zero at p < 0.05 (tested on raw parameters)
*: Significantly different from zero at p < 0.10 (tested on raw parameters)
"DIFF" indicates cases that equality constraint release between groups obtained a significant statistical improvement in the model fit as indicated by LM-test.

The rationale for the initial tests is that if common method bias poses a serious threat to the analysis and interpretation of the data, a single latent factor would account for all manifest variables (Podsakoff and Organ, 1986). A worse fit for the one-factor model would suggest that

common method variance does not pose a serious threat (Sanchez et al., 1995). The one-factor model two group CFA yielded a $\chi^2 = 4105.56$ with 416 degrees of freedom (compared with the $\chi^2 = 1344.77$ and df=398 for the measurement model). The fit is considerably worse for the unidimensional model than for the measurement model, suggesting that common method bias is not a serious threat in the study. Similarly, the one factor model derived using principal components analysis did not obtain (this latter 'test' is considered to be weaker, as suggested by Podsakoff et al. (2003)). Next, the Podsakoff et al. suggestion of testing a single common factor against the error structure of the CFA was applied, and a common factor did not obtain a passable fit; the CAIC difference was greater than 2600, which again suggested a multi-construct CFA.

The next two tests compared the fit of the overall CFA when the errors of the endogenous variable items were allowed to covary with those of the exogenous variable items. This test would obtain no significant difference from the original CFA χ^2 result, or a better fit (smaller χ^2) if a "commonness" of instrumentation result obtained from employing single source data. Such a result did not obtain, thus the Myers et al. (1999) demonstration of absence of any instrument bias is in evidence. This result is also consistent with the Podsakoff et al. suggestion of the instrumentation component of a common instrument being not detectable.

Finally, the presence of both strong and significant mediations (launch execution, channel cooperation and marketing activities) as well as significant moderation (country fixed effects) suggest logically that common method bias did not obtain since the presence of either effect argues that the single informants per firm reliably captured significant effects of the phenomena without bias. If bias obtained due to common method or instrument, it would persist through contingencies (moderation) and partial direct paths (mediation), neither which is observed in this study (Blalock, 1964, 1971). Next, we proceeded to test the structural hypotheses employing the PHI matrix from the invariant CFA results.

Results from U.S. Sample

We consider first the results from the U.S. sample. As shown in Table 2, strong support is found for almost all the hypotheses. Increased cross-functional integration is related to better execution of launch and marketing activities (path coefficients for H1a and 1b2 = 0.118 and 0.224, both significant at the 0.05 level). Greater business unit resources are related to improved execution of launch and marketing activities and also increased performance and channel cooperation (coeffs. for H2a and H3b = 0.410 and 0.252 respectively; coeffs. for H2c and H2d = 0.287 and 0.263 respectively; all significant at the 0.05 level). A greater market orientation is related to improved execution of marketing activities, increased channel cooperation, and better launch timing (coeffs. for H3a, H3b, and H3c = 0.408, 0.097, and 0.014 respectively, all significant at the 0.05 level). Better execution of marketing activities is related to improved performance, better execution of launch activities, and improved channel cooperation (coeffs. for H4b, H6a, and H6b = 0.242, 0.333, and 0.341 respectively, all significant at the 0.05 level). Better channel cooperation is related to improved launch timing (coeff. for H5 = 0.520, significant at the 0.05 level), and improved launch timing is related to improved performance (coeff. for H7a = 0.266, significant at the 0.05 level). Furthermore, there is a significant effect between increased product innovativeness and performance, though weaker (coeff. for H7b = 0.064, significant at the 0.10 level). No support was found for the hypothesized direct relationship between launch execution and performance (coeff. for H4a = 0.058, not significant).

Results from China Sample

Table 2 also includes the results obtained from the China sample. As indicated in Table 2, the model appears to be very generalizable to the Chinese setting. Since the results are very similar, we will focus our presentation here on the main differences between the two country samples. All the hypotheses supported in the U.S. sample are supported in the China sample as well, with only one exception: H2c was not supported. That is, no significant direct relationship was found between business unit resources and performance (path coeff. for H2c for the China sample = 0.090, not significant). In addition, cross-national differences were also estimated, by allowing the equality constraint between groups (nations) to be released and determining whether the model was significantly improved. These results are also shown in Table 2. As indicated, there are only four hypotheses for which a significant cross-national difference in parameter magnitude was found. One of these was H2c, as noted above (a significant relationship between business unit resources and performance was found only in the U.S.). The other three differences were found for H2b, H3a, and H5. The relationships between business unit resources and execution of marketing strategy, and between channel cooperation and launch timing, were stronger in China than in the U.S. (coeffs. for H2b and H5 for the China sample = 0.401 and 0.748 respectively; both significantly larger than the equivalent coefficient for the U.S. sample at the 0.05 level). Also, the relationship between market orientation and execution of marketing strategy was stronger in the U.S. than in China (coeff. for H3a for the China sample = 0.216, significantly smaller than the U.S. coefficient at the 0.05 level).

Cross-National Results

Table 2 indicates that there are many similarities between the Chinese and U.S. empirical results. The standardized coefficients are only significantly different for a few hypotheses as shown in Table 2. Several specific cross-national differences were hypothesized, and support was found for only some of these. Specifically, the effect of market orientation on launch timing was lower in China (H8a supported), the effect of channel cooperation on launch timing was higher in China (H8b supported), and the effect of market orientation on execution of marketing activities was lower in China (H8c supported). The effect of business unit resources on execution of marketing activities was found to be significantly higher in China, though a hypothesized difference in the effect of cross-functional integration on execution of marketing activities was not found (H8d partially supported). Surprisingly, of the several hypothesized cross-national differences in effects on performance, only one was found to be significant: the effect of business unit resources on performance was lower in China than in the U.S. (H8e partially supported; H8f not supported). Indeed, this was the only case where a significant relationship in the U.S. model was not found to be significant at all in China. In sum, while there are some cross-national differences which are consistent with hypotheses, we find evidence that many of the relation-ships found in the U.S. model are generalizable, even to a very different business and cultural environment such as China. We expand on these surprising similarities and differences in the discussion section.

THEORETICAL AND MANAGERIAL IMPLICATIONS, AND CONCLUSIONS

Many firms have begun to appreciate that product innovation is an important driver to sustained financial performance and competitive advantage. In an environment where cash-to-cash (time from initial investment to revenue generation) is an important performance metric, the firm must manage its NPD activities so that the launch is successful and not delayed. In the

development of new consumer or business products, the launch phase is often the most expensive (sometimes by a substantial amount), and strategic and tactical decisions made at the time of launch are of critical importance. Despite a large literature on the relative merits of being first to market, relatively little research attention has been aimed at understanding the constellation of decisions made at the time of launch, including launch timing, launch execution tactics, and resource allocation. Importantly, the effects of marketing activities, distribution channel support, market orientation, or cross-functional integration on launch have also not been fully taken into account. This lack represents an important gap in the literature, since marketing and related activities have direct impacts not only on innovation success rates, but also on the firm's revenue realization.

A further hindrance to our understanding of the launch phase in NPD is that most research studies have been conducted in a single geographic region, usually either North America or Europe, so there is little evidence of the empirical generalizability of the findings.

In this article, we have presented a model that integrates several key constructs leading to new product success. We specifically account for launch timing, launch execution, and marketing activities carried out at the time of launch, as well as other constructs shown in previous studies to have impact on success (cross-functional integration, market orientation, and channel cooperation). We attempt to find some evidence of empirical generalizability by testing the model using samples drawn from two very different business environments, the United States and China. Overall, we find substantial support for the integrative model: in both country samples, all the hypotheses are strongly supported (with only one exception in the U.S. and two exceptions in China). Our results add to the recently emerging literature on new product launch (e.g., Hultink et al., 1997, 2000; Di Benedetto, 1999; Calantone et al., 2005; Calantone and Di Benedetto, 2007), and suggest that further study of the importance of launch timing, and how to get the timing right for optimal new product performance, is warranted.

Despite the strong empirical support for the model, the fact that one of the hypothesized relationships (strong launch execution improves performance) was *not* significant merits further discussion. Recall that in this study, launch execution was defined in terms of the selling, advertising, promotional, and service technical support for the product at the time of launch, product availability and distribution, and price level at launch. As shown in Figure 1, four other direct effects on performance were found to be significant. Consistent with many previous studies (e.g., Cooper and Kleinschmidt,1987; Calantone and Di Benedetto, 1988; Song and Parry, 1997), type of new product, business unit resources, and execution of marketing activities are strongly linked to performance. While launch execution is not found to be significant in this study, launch timing is strongly significant. The findings presented here are of importance to practicing managers, as they suggest that the timing of the launch (in terms of business goals, and with respect to different shareholders including the competition, the customers, and top management) may be even more important to product success than the execution of the launch activities listed earlier. That is, management may execute the marketing programs at the time of launch well -- yet if the launch is mistimed with respect to one or more of the stakeholders, the ultimate performance of the product is thrown into question. The fact that launch timing, a previously underresearched component of the launch phase, proves so critical to performance (in both country samples) is intriguing, and suggests that timing is of great importance to managers and potentially a rich area for future research.

As noted above, the model appears to be generalizable to at least one different business and cultural environment, China. Again, however, minor differences in the U.S. and China results merit further discussion.

Only one cross-national hypothesis regarding antecedents to performance was supported: the effect of business unit resources on new product performance was lower in China (actually not significant in China) than in the U.S. This perhaps is not surprising, given the vast differences between the two business environments. A great number of Chinese firms are state-owned, and over the part thirty years or so, managerial reforms designed to stimulate technology, innovation, and competitiveness have been implemented in China (Schermerhorn and Nyaw, 1991; Jefferson, Rawski, and Zheng, 1992). Despite some decentralization in recent years, the Chinese government is still very involved in investment, hiring, and performance-target setting (Henley and Nyaw, 1986, Parry and Song, 1994). Thus, management of a small Chinese state-owned enterprise may be lacking in resources, but still be able to launch innovative new products successfully due to government support and investment. Although the direct relationship between resources and performance was not significant, the Chinese enterprise's resources were nevertheless found to affect marketing activity execution and channel cooperation, both of which indirectly affect performance (H2a, H2b and H2d all significant). The interrelationship between the Chinese state-owned enterprise, centralized government decision-making, and ultimate performance is therefore a complex one, provides valuable information to support managerial decision-making, and is worthy of further investigation especially during this transitional time in the Chinese business environment.

There were three other differences found between the two country samples, as shown in Table 2. The relationship between business unit resources and execution of marketing strategy was higher for the Chinese sample (H8d partially supported). Perhaps in a business environment in transition such as China, enterprises with fewer resources have more difficulty executing marketing strategy due to relative inexperience (i.e., marketing strategy decision-making may have only been decentralized to the enterprise level comparatively recently). The relationship between channel cooperation and launch timing was also stronger in China than in the U.S. (H8b supported). This may be evidence of relative inexperience or a structural competitive difference at the macro level. Chinese managers with little experience in making launch timing decisions on their own may be dependent on the expertise of their channel partners to help them time the launch. Finally, the relationship between market orientation and marketing strategy execution was stronger for the U.S (H8c supported). Having a market orientation was presumably less important in a centralized economy, and many Chinese enterprises may be only increasing their market orientation levels very recently. Hence, the positive effect of market orientation on strategy execution, while significant, may not be yet fully manifested in China. While some of these explanations may be conjectural, the differences between the fully developed U.S. business environment and the transitional, yet very fast developing Chinese business environment, and their effects on decision-making and investment in new products, nonetheless remain topics worthy of greater understanding and future research.

We recognize the limitations of our study. Response rates are less than ideal, yet there is no evidence that they are not representative of the populations of interest. The U.S. sample may be biased in favor of firms that prioritize product development as an important strategic component since the frame is members of a professional NPD organization. Another possible limitation is our reliance on a retrospective methodology and our use of single informant data. Although these methods are commonly used in NPD research studies, the retrospective methodology may result

in some halo effect bias since the true outcome of each project (success or failure) is known by the respondent. The single informant method may introduce bias if that individual is not the most knowledgeable person within the organization to complete the questionnaire (Phillips, 1981). We tried to minimize this bias by carefully selecting the respondents and also requesting the recipients to pass on the questionnaire if there was another person more qualified to respond. Further, several recent studies have found that the key informant method provides reliable and valid data on strategic decisions and performance at the senior management level (Kumar, Stern and Anderson, 1993; Zahra and Covin, 1993; Menon, Bharadwaj and Howell, 1996). The model gives every indication of being robust across the two very different business environments of the U.S. and China, yet caution suggests further studies may be required to ascertain the empirical generalizability of the model in other geographical locations.

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APPENDIX

SCALE ITEMS USED IN THIS STUDY

Note: Except where otherwise noted, the scale used was 0 = strongly disagree; 10 = strongly agree.

Type of New Product (Source: Cooper, 1979a; Cooper and Kleinschmidt, 1987)

Into which category did the product fit? (Check only one from the following list.)

___   An innovation: a totally new product to the world that opened up a brand new market (e.g., nylon)
___   A totally new product to the world, but one where there was an existing market, i.e., replaced other products, functional substitute (e.g., laser printer)
___   A totally new product to our company that offers new features to the market (existing market).
___   A new product line to our company (existing market and existing products sold by others).
___   A new item in an existing line.
___   A significant modification of an existing product.
___   A minor modification of an existing product.

Execution of Launch Activities (Source: Cooper, 1979a; Cooper and Kleinschmidt, 1987)

How would you rate the quality of each of the following elements *in the launch of this product?* (Scale: 0 = very poor; 10 = excellent.)

Selling effort, e.g. the right people, properly trained, etc.
Advertising.
Promotion (e.g., discounts, trade shows, events).
Service and technical support for the customer, e.g., right people, qualified, responsive.
Product availability: sufficient inventory available.
Product distribution: on-time delivery, quick response.
Pricing: appropriateness of pricing level(s).

Business Unit Resources and Skills (Source: Cooper, 1979a; Cooper and Kleinschmidt, 1987)

To what extent does each statement listed below correctly describe this selected market launch?

For the selected product launch,
...our marketing research skills and resources were more than adequate.
...our salesforce skills and resources were more than adequate.
...our distribution skills and resources were more than adequate.
...our advertising and promotion skills and resources were more than adequate.
...our R&D skills and resources were more than adequate.
...our engineering skills and resources were more than adequate.
...our manufacturing skills and resources were more than adequate.

Cross-Functional Integration (Source: Bowersox et al., 1995)

In assuring the compatibility among decisions made in one area (e.g., logistics) with those in other areas (e.g., marketing/sales), certain integrative mechanisms may or may not be used. Please indicate the extent to which the following are used in your selected product launch.

For the selected product launch,
...interdepartmental committees were set up to allow departments to engage in joint decision-making.
...task forces or temporary groups were set up to facilitate interdepartmental collaboration.
...liaison personnel existed whose specific job it was to coordinate the efforts of several departments.
...cross-functional teams made decisions concerning *manufacturing strategy*.
...cross-functional teams made decisions concerning *distribution or logistics strategy*.
...cross-functional teams made decisions concerning *marketing or sales strategy*.

Execution of Marketing Activities (Source: Cooper, 1979a; Cooper and Kleinschmidt, 1987)

Please indicate how well your business unit undertook each of these activities, *relative to how well you think it should have been done*. (Scale used: 0 = done very poorly or omitted; 10 = done excellently.)

Selecting customers for testing market acceptance.
Submitting products to customers for in-use testing.
Executing test marketing programs.
Interpreting the findings of the market testing.
Finalizing plans for manufacturing.
Finalizing plans for marketing.
Establishing overall direction of this product launch.
Delegating or contracting specialized research work to outside contractors.
Launching the product into the marketplace.
Studying feedback from customers regarding this product during launch.
Studying feedback from customers regarding this product after launch.
Training the salesforce.
Planning and testing the advertising for this product.
Executing the advertising strategy for this product (e.g., good copy placement, adequate number of insertions).
Managing distribution channel activities for this product.

Market Orientation (Source: Narver and Slater, 1990)

Market orientation is defined as the organizationwide generation of market and competitive intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organizationwide responsiveness to it. The following statements describe some characteristics of market orientation that may or may not apply to your business unit.

When developing this new product,
...our marketing people met with customers frequently to find out what products or services they
    needed.
...individuals from our manufacturing department interacted directly with customers to learn how
    to serve them better.
...several of our departments generated competitive intelligence independently.
...we periodically reviewed the likely effect of changes in our business environment (e.g.,
    regulation) on customers.
...a lot of informal "hall talk" in our business unit concerned our competitors' tactics or strategies.
...we had frequent interdepartmental meetings to discuss market trends and developments.
...marketing personnel in our business unit spent time discussing customers' future needs with
    other functional departments.
...data on customer satisfaction were disseminated at all levels in this business unit frequently.
...we tended to ignore changes in our customer's product or service needs for one reason or another.
    (Reversed)
...we periodically reviewed our product development efforts to ensure that they were in line with
    what customers want.
...if a major competitor had launched an intensive campaign targeted at our customers, we would
    have implemented a response immediately.
...we were quick to respond to significant changes in our competitors' pricing structures.
...if we found that customers were unhappy with the quality of our service, we would have taken
    corrective action immediately.
...if we found that customers would like us to modify a product or service, the departments
    involved would have made concerted efforts to do so.

Performance (Source: Cooper and Kleinschmidt, 1987; plus additional new items added)

New product performance can be measured in a number of ways. Please indicate, from what you
know today, how successful this market entry was or has been, using the following criteria.
(Scale used on first item: -5 = a great financial failure; +5 = a great financial success.)

How successful was this market entry from an *overall profitability* standpoint?
(Scale used on remaining nine items: -5 = far less; +5 = far exceeded.)

Relative to your business unit's other new product launches,
…how successful was this market entry in terms of *profits*?
…how successful was this market entry in terms of *sales*?
…how successful was this market entry in terms of *market share*?

Relative to competing product launches,
...how successful was this market entry in terms of *profits*?
...how successful was this market entry in terms of *sales*?
...how successful was this market entry in terms of *market share*?

Relative to your business unit's objectives for this product launch,
…how successful was this market entry in terms of *profits*?

…how successful was this market entry in terms of *sales*?
…how successful was this market entry in terms of *market share*?

Launch Timing (Scale developed and pretested in this study)

Please comment on the relative timing of the product's launch.

Relative to **our business unit's goals**, the timing of our launch was on target.
Relative to **our direct competition**, the timing of our launch was perfect.
From the point of view of our **major customers**, the timing of our launch was excellent.
The timing of our launch helped us achieve a competitive advantage.
The product went from development to launch with no delays.
The product was launched at the appropriate time.
Top management believed the timing of our market entry was excellent.

Channel Cooperation (Scale developed and pretested in this study)

Please state your level of agreement with each of the following.

From the distribution channel's point of view, the product was launched at the right time.
Channel cooperation was well developed ahead of time.
Channel coordination was accomplished as planned.
We achieved rapid deployment of our product into the distribution channel.
Channel/trade promotion was executed on time.