管理文獻評論試題　　　（限用答案本作答）

請就本試題所附之論文，回答以下問題：

1. 請說明本論文的貢獻及被刊登的理由。(本題佔 10 分)

2. 請在 100 字以內，書寫本論文之摘要。(本題佔 10 分)

3. 請評論本論文的抽樣方法及抽樣對象。(本題佔 10 分)

4. 請就本論文之假說(hypothesis)，逐項說明其所牽涉到的構念(construct)、操作性定義 (operational definition)及變數(variables)為何。(本題佔 30 分)

5. 請提出本論文之主要論點？及其邏輯推理的基本脈絡。同時根據你所提出之主要論點，基於你的學術專長，建構一個研究問題，然後提出應該如何針對此一問題進行研究，以達到符合學術論文之要求。(本題佔 40 分)

所附論文如下：

Kwaku Atuahene-Gima & Janet Y. Murray (2004), Antecedents and Outcomes of Marketing Strategy Comprehensiveness, *Journal of Marketing*, 46 (October), 33–46.

Kwaku Atuahene-Gima & Janet Y. Murray

Antecedents and Outcomes of Marketing Strategy Comprehensiveness

Comprehensiveness has long been recognized as a key feature of marketing strategy decision making. However, few studies have examined its antecedents and the conditions under which it influences performance. This study attempts to contribute to a better understanding of marketing strategy by investigating project-level antecedents and outcomes of marketing strategy comprehensiveness (MSC). Drawing on contingency and institutional theories perspectives, the authors develop and test the effects of output and process rewards, task conflict, and project members' intra- and extraindustry relationships on MSC. They find that whereas process reward and extraindustry relationships are positively related to MSC, task conflict (when combined with conflict avoidance) hinders its development. Furthermore, the results indicate that MSC has a more positive effect on performance when implementation speed is higher. Finally, the authors discover that technology and market uncertainties differentially moderate the relationship between MSC and performance; the former has a positive effect, and the latter has a negative effect. The authors also discuss the theoretical and practical implications of their findings.

For several years, marketing scholars have dedicated considerable efforts to understanding the process of marketing strategy development and implementation (Bonoma 1984; Burke 1984; Glazer and Weiss 1993; Menon, Bharadwaj, and Howell 1996; Menon et al. 1999; Noble and Mokwa 1999). A key feature of this process is marketing strategy comprehensiveness (MSC), defined as the extent to which project members are extensive and exhaustive in the search for market information, the generation of many alternative courses of action, the examination of multiple explanations, and the use of specific criteria in making decisions in marketing strategy development and implementation. Comprehensiveness reflects the structure, rigor, and thoroughness of information search and analysis in marketing strategy decision making (Menon et al. 1999). It forces managers into a hypothesis-testing mode (Eisenhardt 1989, p. 558), thereby creating new insights that ensure a better understanding of marketing strategy and an increase in managerial confidence in decision making (Day 1994). Therefore, comprehensiveness is a key component of a quality marketing strategy (Menon, Bharadwaj, and Howell 1996). Despite its importance, the antecedents and con-

ditions under which MSC influences performance have yet to be addressed in extant theoretical or empirical research. There is a good reason they should be: Increasingly, marketing managers go to great lengths and employ several techniques (e.g., consideration of obligatory alternatives, fishbowl reviews) (Menon et al. 1999) in an attempt to be comprehensive in making a marketing strategy.

The purpose of this study is to address this oversight. The first research gap concerns the variability in the extent to which firms develop comprehensive marketing strategies. Andrews and Smith (1996) study marketing strategy creativity at the individual level and find that the manager's risk-taking propensity, diversity of education, knowledge of the environment, intrinsic motivation, and interaction with others are key antecedents. Menon and colleagues (1999) find that innovative culture is positively related to MSC measured at the firm level. Although these studies acknowledge that most marketing strategies are formulated and implemented for specific products, they do not focus on the project level. Thus, knowledge of the internal and external determinants of MSC at the project level is limited.

A second research gap pertains to the relationship between MSC and performance. Several studies have examined the direct effects of strategy comprehensiveness on performance and the moderating role of environmental uncertainty at the firm level. However, empirical findings have been mixed on both fronts (e.g., Fredrickson 1984; Fredrickson and Mitchell 1984; Goll and Rasheed 1997; Priem, Rasheed, and Kotulic 1995). The mixed findings may stem from two causes. First, by using the firm as a unit of analysis, previous studies ignore the array of internal and external factors that may influence the effect of a *specific* strategic decision process on performance (Hough and White 2003). Second, previous studies examine environmental uncertainty as a unidimensional construct, thereby

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ignoring the different sources of uncertainty and their potential differential implications for the efficacy of strategy comprehensiveness.

Against this backdrop, in this study, we focus specifically on a project level in an attempt to contribute to the marketing literature in three ways. First, drawing on contingency theory, we offer explanations for some of the variance in MSC. A key argument in contingency theory is that a better understanding of the nature of organizational strategies is gained by examining its antecedents in the form of internal organizational and external environmental factors (Hofer 1975). Given that MSC involves complex information-processing tasks, we focus specifically on factors such as reward systems and task conflict, which affect the information-processing capacity of project members as internal determinants of MSC.

Second, we draw on institutional theory to explain that pressures for conformity may influence how internal factors such as task conflict affect MSC and how project members' external relationships act as means by which they acquire external market information in developing MSC. Empirical investigation of these issues is extremely important because most previous studies focus on which internal and environmental factors affect marketing strategies (e.g., Glazer and Weiss 1993) but pay little attention to the processes by which such factors influence managers in developing or adapting their strategies (Zeithaml, Varadarajan, and Zeithaml 1988, p. 40).

Third, we examine the conditions under which MSC influences performance, defined as the extent to which a product, which is the focus of a marketing strategy, has achieved planned sales, market share, and profit objectives. Contingency theory also informs this issue by arguing that firms that can adapt their strategies effectively to both internal and external factors are likely to perform better (Hofer 1975; Zeithaml, Varadarajan, and Zeithaml 1988). We argue that given the costs involved in achieving a high level of MSC and possible diminishing returns to its benefits, it is likely that a level of MSC that is either too low or too high may hurt performance, but a moderate level may be optimal. This implies that managerial ability to develop a level of MSC that is consistent with organizational resources may determine its success. We examine the nonlinear relationship between MSC and performance that is implied by this contingency argument.

Scholars have long recognized that strategy implementation plays a potentially important role in the linkage between a marketing strategy and performance (Bonoma 1984; Noble and Mokwa 1999). We contribute to this tradition by investigating the moderating effect of implementation speed. Finally, Song and Montoya-Weiss (2001, p. 61) argue that "uncertainty should be studied in relation to specific components of the environment in order to properly attribute its effects." Following this insight, we advance the literature by investigating two sources of environmental uncertainty (technology and market uncertainties) in an attempt to uncover their differential moderating effects between MSC and performance. Through this richer framework and empirical assessment, we attempt to respond to Menon and colleagues' (1999, p. 36) call for research that

"examines more complex models of antecedents and outcomes of [marketing strategy making]." Figure 1 presents the conceptual model.

Research Hypotheses

Internal Antecedents of MSC

Drawing on contingency theory (Hofer 1975) and extant marketing strategy research (Andrews and Smith 1996; Burke 1984; Menon et al. 1999), we identify internal conditions that influence effective information processing in strategy making as determinants of MSC. Market information for strategy making tends to contain tacit components that retard collective interpretation and information sharing. Even when market information is made explicit in a codified routine and communicated to project members, some of them may not understand it because they interpret and apply the knowledge in a different functional and experiential context. Consequently, market information collection, analysis, and interpretation in marketing strategy making for a specific product is a complex process that involves the understanding of multiple functions (Menon, Bharadwaj, and Howell 1996; Menon et al. 1999). For this reason, development of a comprehensive marketing strategy requires internal processes that focus project members' attention on and commitment to effective market information processing (Noble and Mokwa 1999). Two internal processes that are capable of engendering effective generation and sharing of market information in marketing strategy development are reward systems (Burke 1984; Jaworski and Kohli 1993; Ruekert and Walker 1987) and task conflict among project members (Menon, Bharadwaj, and Howell 1996). Noting the potential importance of the former, Menon and colleagues (1999, p. 35) call for further research to explore how output- and process-based reward systems influence marketing strategy development. We respond to their call in this study.

Output reward refers to a process of monitoring and compensating project members for achieving desired performance targets, such as meeting deadlines, budgets, and target market success (e.g., sales volume, market share). Output reward provides incentives and responsibilities for results, thereby ensuring that project members eschew politics and commit to the strategy-making process. Reduced politics occurs with an increased focus on the content and objectives of the market strategy, whereas commitment occurs with the collective efforts of project members directed toward diverse information collection and in-depth analysis of strategic options (Noble and Mokwa 1999). In addition, output reward shifts performance risk from the organization to the project members because environmental and company factors that may affect the outcome of the marketing strategy are beyond the project members' control (Oliver and Anderson 1994). A key means of attenuating the risks is to increase the quality of strategy with thorough information search and evaluation. By allowing autonomy over the means of achieving outcomes, output reward offers an incentive for project members to be comprehensive in attenuating performance risk (Atuahene-Gima and Li 2002).

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FIGURE 1
Antecedents and Outcomes of MSC
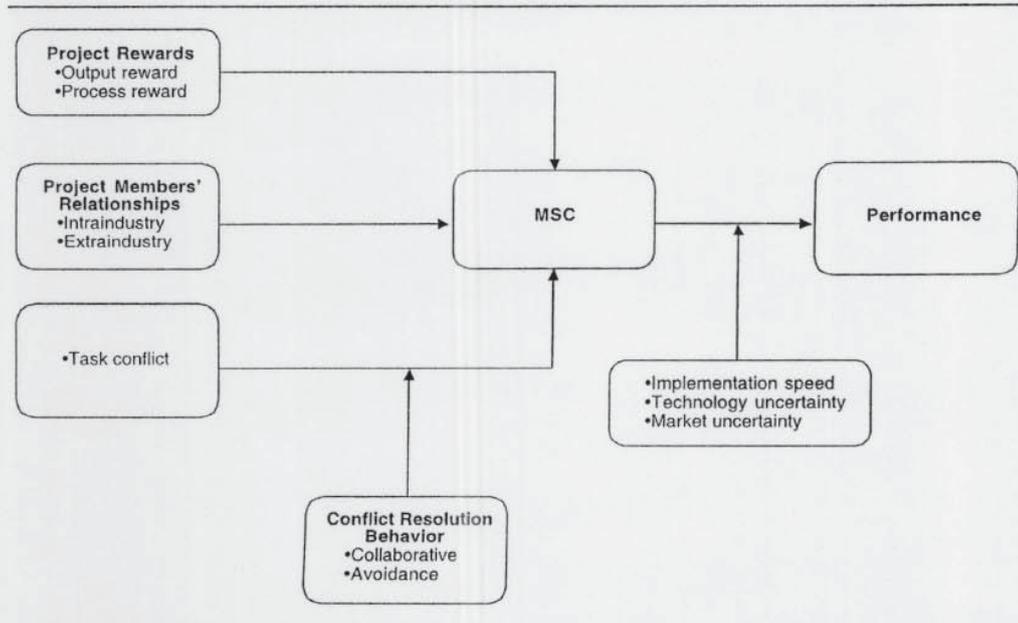
Process reward is a means of monitoring and compensating project members for completing specified procedures and activities that are critical to achieving desired objectives in marketing strategy development. A key objective of process reward is to ensure thorough market information search and analyses, particularly about customers and competitors at specific stages of the strategy-making process. When rewards are tied to the completion of such process activities, project members believe that they will be rewarded for the quality of their strategies. Thus, process reward increases members' propensity to find and discuss a wider range of marketing strategy options (Menon, Bharadwaj, and Howell 1996, p. 308). A characteristic of MSC is the diversity and extensiveness of search for alternative courses of action, which requires project members to explore beyond the firm's boundary. Because such exploration increases the risk of errors in strategy making, there must be some level of protection for project members. We argue that a process reward establishes a norm of risk sharing between the firm and project members, thereby encouraging them to be expansive and rigorous in marketing strategy making (Atuahene-Gima and Li 2002; Oliver and Anderson 1994). Therefore:

H_1: The greater the (a) output reward and (b) process reward, the greater is the MSC.

The task conflict construct refers to the debate and disagreements among group members about the content, goals, and processes of marketing strategy development (Jehn 1995). Task conflict is a key resource in group decision making because the vigorous debate and disagreements among project members encourage them to gather new data, to delve into issues more deeply, and to gain a more complete and expansive understanding of problems to develop alternative solutions (Jehn 1995; Ruekert and Walker 1987). Despite these benefits, task conflict can be misinterpreted as personal criticism or misconstrued as a challenge to the competence of the project members, particularly by people who are perceived as experts on the issues under discussion (Pelled, Eisenhardt, and Xin 1999). This may limit the expansive and barrier-breaking thinking that is required for comprehensiveness. Institutional theory argues that organizational culture and political processes tend to perpetuate conformity within a firm or group. This suggests that given the tacitness of knowledge and the perceived power of experts, pressures to conform to dominant views and interpretations may render task conflict ineffective in enhancing MSC. On balance, then, the effect of task conflict on MSC is unclear.

Consistent with contingency theory, we posit that the impact of task conflict on MSC may depend on the *conflict resolution strategy* adopted (Ruekert and Walker 1987). Although there are several conflict resolution methods, Song, Xie, and Dyer (2000) suggest that collaboration and avoidance are the ideal and worst types, respectively, and are the types most often adopted by marketing managers. In this study, we focus on collaboration and avoidance for the sake of parsimony. Collaborative conflict resolution refers

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to the extent to which project members confront conflicts by openly exploring areas of differences and commonality to find integrative solutions that are in the best interests of the strategy-making process. Collaborative conflict resolution is likely to enhance the positive effect of task conflict on MSC for two reasons. First, it reduces the uncertainties and misattribution associated with task conflict because it ensures that people understand the concerns and perspectives of others. This enables project members to concentrate on the content of discussions rather than on personality issues (Song, Xie, and Dyer 2000). Second, collaborative conflict resolution creates a sense of common dependence, thereby enhancing the willingness of project members to share information and to explore strategic options, which in turn enhances MSC.

Conflict avoidance refers to the extent to which project members avoid, ignore, or smooth over conflicts. Thus, conflict avoidance describes behaviors that minimize conflicts explicitly. Conflict avoidance reduces productive interactions among project members and therefore severely limits the timely collection and use of accurate and quality information (Song, Xie, and Dyer 2000). In addition, conflict avoidance inhibits open communication and exchange of quality information because project members focus less on the content of dissenting information and more on the intentions and motivations of the members who provide the information. Consequently, project members tend to pursue self-interested motives that limit the scope of exploration of market information and strategic options (Jehn 1995).

> H_2: Task conflict has a more positive effect on MSC when collaborative conflict resolution is higher than when it is lower.
>
> H_3: Task conflict has a more negative effect on MSC when conflict avoidance is higher than when it is lower.

External Antecedents of MSC

Contingency theory also recognizes the importance of external environmental determinants of firm strategy (Hofer 1975). Given their cognitive and resource limitations, decision makers tend to rely on external referents for information and insight into plausible strategic alternatives (Cyert and March 1963). In this respect, institutional theory implies that managers' external ties serve as conduits for information that shape managerial views about the environment and the strategic choices they make. The key idea of this theory is that firm strategies and practices are embedded in social relationships and may have a social meaning. Consequently, managers are affected by conformity and legitimacy pressures to adopt prevailing strategies (DiMaggio and Powell 1983; Meyer and Rowan 1977). In support of this theory, Geletkanycz and Hambrick (1997) find that managers' external relationships with other managers within and outside their industry influence their propensity to conform to prevailing organizational strategies. Given the increasing focus on MSC among marketing managers (Menon et al. 1999), this suggests that project members' ties with managers within and outside the firm's industry are antecedents of MSC.

Intraindustry relationships are project members' ties with managers in the same industry as the focal firm.

Through such relationships, project members gain more comprehensive knowledge of industry strategic norms and recipes and more insight into the nature and context of the marketing strategies of other firms. This allows for greater diversity of perspectives that enhance members' search and analysis of strategic alternatives. Extraindustry relationships are project members' ties with managers outside the focal industry. Extraindustry relationships provide project members with an even broader range of information about strategies of firms outside the focal industry (Geletkanycz and Hambrick 1997). Such relationships increase the strategic options considered for selection in marketing strategy making. Thus:

> H_4: The greater the (a) intraindustry relationships and (b) extraindustry relationships of the project members, the greater is the MSC.

Performance Effect of MSC

Nonlinear effect. A key argument in the extant literature is that strategy comprehensiveness enhances performance because by generating diverse information about the market environment and by identifying the strengths and weaknesses of several strategic options, the firm is in a better position to implement a strategy more effectively (Eisenhardt 1989, p. 558; Menon, Bharadwaj, and Howell 1996, p. 308; Menon et al. 1999, p. 26). Although there may be good reasons for this argument, there are also significant costs associated with MSC. Indeed, some scholars have argued that given the cognitive limitations and bounded rationality of decision makers, strategy comprehensiveness is nearly impossible because of the high cost and time-consuming processes of information acquisition and analysis (Bahaee 1992). These arguments imply that too much or too little MSC may diminish performance, thus suggesting that it has a positive effect on performance only at a moderate level. From a contingency theory perspective, this suggests that managers who are able to determine the level of MSC that reflects their cognitive and other internal resources will derive higher performance from MSC. Thus:

> H_5: There is an inverted U-shaped relationship between MSC and performance, such that at extremely high and low levels its effect on performance is negative, but at moderate levels its effect on performance is positive.

Moderating effect of implementation speed. Extant research argues that a marketing strategy is more likely to result in better performance when it is implemented successfully (Bonoma 1984; Noble and Mokwa 1999). Although strategy formulation cannot be completely disassociated from its implementation, such a conceptual distinction enables researchers to better identify the discrete, albeit overlapping, aspects of strategy making that in combination may affect performance (Eisenhardt 1989). A key aspect of successful strategy implementation is implementation speed, defined as the pace of activities between the time project members formulate a marketing strategy and the time they fully deploy it in the marketplace. Implementation speed captures the acceleration of the decision-making activities from their conception to their implementation. Implementation speed may enhance performance by itself

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because it implies an ability to deal with potential hindrances to the efficacy of a marketing strategy and to ensure first-to-market benefits for a product (Noble and Mokwa 1999). In addition to its potential direct effect on performance, we posit that implementation speed enhances the positive effect of MSC on performance. The logic is that the formulation of a comprehensive marketing strategy is inherently a slow process because it takes a lot of time to consider many alternatives; to obtain input from many sources; and to engage in extensive, in-depth analysis. Thus, MSC is likely to achieve positive performance effects if project members can implement it speedily. Speedy implementation enables the firm to tap quickly into the window of opportunities uncovered by the process of strategy making. For example, Eisenhardt (1989) finds that decision making in the most successful companies is simultaneously fast and comprehensive. In contrast, slow implementation may exacerbate the costs associated with being comprehensive, thereby diminishing the impact of MSC on performance.

H_6: The effect of MSC on performance is more positive when implementation speed is higher than when it is lower.

Moderating effect of technology and market sources of uncertainty. Technology uncertainty is the speed of change and instability of the technological environment. The conventional wisdom is that technology information is highly time sensitive; that is, it becomes obsolete quickly (Weiss and Heide 1993). Such information is believed to be of a dense variety, reflecting a high frequency of unexpected and novel changes, which thus makes it difficult for firms to respond with objective and formal procedures. Technology information is also perceived as highly equivocal, which means that it has multiple and ambiguous underlying meanings and causes that defy specific analysis and uniform interpretation (Daft and Macintosh 1981). In addition, technology uncertainty tends to disrupt the balance between project resource needs and available firm resources and skills. As Song and Montoya-Weiss (2001) find, technology uncertainty disrupts synergies among project members' resources and skills and synergies needed for effective strategy making. This suggests that with the existence of technology uncertainty, MSC is likely to diminish performance.

A counterargument is that whereas technological uncertainty is time sensitive, it is nevertheless amenable to effective comprehensive strategic processes because it leads managers to increase their information search efforts (Weiss and Heide 1993). For example, Bourgeois and Eisenhardt (1988) find that successful firms adapt to rapid technological changes by adopting a strategic decision process that involves comprehensive information search and thorough analysis of strategic alternatives. The key argument in their findings is that the perceived time sensitivity of technology information is low because the direction of technological change tends to be predictable. As Pavitt (1998) shows, technological change tends to progress along defined trajectories, such that firms can recognize and understand the directions of change. In this respect, Glazer and Weiss (1993, p. 510) also argue that "higher levels of interperiod change that are predictable may not be troublesome" in marketing strategy making. This suggests that MSC

becomes more important for performance when technology is uncertain, because project members can identify critical decision variables to allow for a more expansive and effective analysis of strategic options. These equivocal arguments suggest the following competing hypotheses:

H_{7a}: Marketing strategy comprehensiveness has a more positive effect on performance when technology uncertainty is higher than when it is lower.

H_{7b}: Marketing strategy comprehensiveness has a more negative effect on performance when technology uncertainty is higher than when it is lower.

Market uncertainty refers to the speed of change in competitor actions and customer needs and preferences (Jaworski and Kohli 1993). Market uncertainty involves significant pace of change, heterogeneity, and unpredictability of customer needs and competitor actions, all of which tend to curtail deliberate and expansive information search efforts and to defy precise and comprehensive analysis (Glazer and Weiss 1993). For this reason, project members require rapid and flexible strategic processes to enhance performance in such an environment. Yet MSC is time consuming and less flexible, which suggests that it is of little value to performance when market uncertainty is high, because strategic decisions quickly become irrelevant (Bahaee 1992, p. 210). In addition, firms typically collect customer and competitor information by analyzing customers' choice criteria and attribute comparisons of the firm's products with competitors' products (Day and Wensley 1988). Such practices tend to result in institutionalized analyses and responses in strategy making in highly uncertain market environments that diminish performance. In support of these arguments, Glazer and Weiss (1993) find that market information is highly time sensitive and is not conducive for obtaining effective MSC outcomes.

Although the preceding arguments are persuasive, there is a contrary viewpoint to them. Market uncertainty prompts firms to reach out to customers (Li and Calantone 1998), which leads to an enhanced understanding of emerging customer needs and competitor actions (Jaworski and Kohli 1993). This means that market information may be less equivocal to project members and therefore is amenable to specific analysis and interpretation. As Daft and Macintosh (1981, p. 208) argue, when information is analyzable, use of an objective analytical process in strategy making enhances performance because correct responses can usually be identified. In light of these divergent arguments, we posit the following competing hypotheses:

H_{8a}: Marketing strategy comprehensiveness has a more positive effect on performance when market uncertainty is higher than when it is lower.

H_{8b}: Marketing strategy comprehensiveness has a more negative effect on performance when market uncertainty is higher than when it is lower.

Method

Sample and Data Collection

We drew our sample from a mailing list of U.S. manufacturing firms that we obtained from Thomson Directory. We

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made telephones calls to identify project managers who met two selection criteria: (1) were involved in and (2) were knowledgeable about marketing strategy decision making for the most recent product introduced to market by the firm. We identified 393 company informants who met our selection criteria. We ensured that the informants were professionally interested, conscientious, and committed to providing accurate data by assuring them of confidentiality and by offering them a summary of the results. Subsequent to two follow-up reminders, we received 149 usable questionnaires, for a response rate of 38%. Of the sample, 70% of respondents worked in the high-technology industry: information technology, computers, and software (20%); electronics and electrical and scientific equipment (20%); pharmaceutical and biotechnology (12%); and automotive components (18%). The rest worked in the low-technology industries: food (8%); forest, paper, and building products (13%); and other (e.g., footwear, clothing) (9%). Following the work of Menon and colleagues (1999), we pooled the data because the analysis of variance test showed that the constructs did not differ significantly ($p > .10$) among the industry groupings. The average project size in the sample was 5.66 people (standard deviation [s.d.] = 3.95). The average market duration for the product (defined as the number of months the product has been offered for sale in the market) was 17.5 months (s.d. = 15.09). T-test analysis showed no significant differences ($p > .10$) in the study variables between early and late respondents, which suggests that nonresponse bias is not a major concern.

Previous studies (e.g., Li and Calantone 1998; Menon, Bharadwaj, and Howell 1996; Menon et al. 1999) have found that project managers in senior positions, such as chief executive officer, vice president, and marketing manager, are reliable sources of information about marketing strategies. Of our project manager informants, 55% listed their job titles as marketing manager, 9% as vice president of marketing, 11% as product manager, 17% as chief executive officer, and 8% as engineering manager. The average work experience of informants in their firms was 9.95 years. Their degree of involvement and knowledge about the marketing strategy on a ten-point scale (see Conant, Mokwa, and Varadarajan 1990) was a high 8.89. These characteristics of the informants imply that they had the knowledge and confidence to respond to the issues under study.

Measures of Constructs and Validity

Table 1 presents the measures and their sources. We pretested the instrument in interviews with 35 part-time MBA students who had a minimum of three years of business experience. We obtained feedback that pertained mainly to ambiguities or difficulties in responding to the items and suggestions for adaptations to ensure the clarity and appropriateness of items. We revised the instrument accordingly. We defined marketing strategy development as involving the determination of decisions (e.g., product design, development, promotion, pricing, distribution) that require large resource commitments and long time horizons and are difficult to reverse in the short run.

We measured performance ($\alpha = .84$) with three items by asking respondents to indicate the extent to which the product has achieved its sales, market share, and profit objectives since its launch. We also asked respondents to indicate on a single item the degree to which the overall performance of the product has met management expectations (1 = "well below expectations," and 10 = "well above expectations"). These two measures have a high correlation of .72 ($p < .001$), which suggests that there is convergent validity. We measured MSC ($\alpha = .91$) with five items by asking informants to rate, for example, the extent and depth of the search for strategic alternatives. We measured output reward ($\alpha = .89$) with four items by asking informants to indicate the degree to which rewards for project members were based, for example, entirely on performance outcomes. We measured process reward ($\alpha = .87$) with four items by asking informants, for example, the degree to which rewards were based on the quality of strategic decisions.

We measured task conflict ($\alpha = .88$) with five items that tapped the degree of disagreements among project members about ideas, goals, and processes adopted in the strategy-making process. We measured collaborative conflict resolution ($\alpha = .81$) with four items that examined the degree to which the project members confronted and collaborated to resolve conflicts in the strategy-making process. Similarly, we measured conflict avoidance ($\alpha = .72$) with four items that reflected the extent to which the project members refrained from confronting the conflicts. We captured intraindustry relationships ($\alpha = .88$) and extraindustry relationships ($\alpha = .96$) with four new items based on Geletkanycz and Hambrick's (1997) conceptual descriptions and project members' contacts with managers within and outside the industry, respectively.

We measured implementation speed ($\alpha = .78$) with four new items that tapped the degree to which the strategy implementation was timely and faster than the planned schedule. We measured technology uncertainty ($\alpha = .90$) with four items that pertained to the unpredictability of changes in technology and the rate of product introductions. The five items measuring market uncertainty ($\alpha = .75$) reflected the speed of change of customer demand and competitor actions.

We controlled for several variables. We used firm size, measured by the number of employees, to control for greater complexity and economies of scale in large firms in strategy making. We used project size, measured by the number of people who have significant influence in marketing strategy decision making, to control for interaction dynamics that affect performance of groups. We coded industry as high technology (1) and low technology (0). We included product advantage ($\alpha = .73$) (measured with three items that reflected the quality of the product, compared with competitors' products and previous products of the firm) and market duration of the product (measured by the number of months the product has been on the market) because each is a likely antecedent of performance.

We sought to control for common method bias by encouraging respondents to seek multiple responses to the questionnaire. A t-test analysis indicated no significant differences for all the study variables between the 20% of questionnaires completed by multiple informants and the 80% of questionnaires completed by single informants. We

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TABLE 1
Confirmatory Factor Analysis Results of Measures

Measures and Sources	Description	Standardized Factor Loading	t-Value
Performance CR = .80 AVE = .68 (Atuahene-Gima 1995)	To what extent have the objectives for marketing the product been achieved with respect to		
	•Sales	.85	12.34
	•Market share	.78	10.53
	•Profit	.87	13.01
MSC CR = 89 AVE = .79 (Menon et al. 1999)	During the marketing strategy development process (product and associated marketing strategies), to what extent did the project members		
	•Develop many alternative courses of action to achieve the intended objectives?	.88	12.80
	•Conduct multiple examinations of any suggested course of action the project members wanted to take?	.82	11.04
	•Thoroughly examine multiple explanations for the problems faced and for the opportunities available?	.81	10.96
	•Search extensively for possible alternative courses of action to take advantage of the opportunities?	.78	9.50
	•Consider many different criteria before deciding on which possible courses of action to take to achieve your intended objectives?	.79	9.88
Output reward CR = .89 AVE = .68 (Atuahene-Gima and Li 2002)	To what extent do you agree with the following statements about the process of rewarding project members?		
	•Rewards to project members were entirely related to achievement of performance objectives for project activities.	.84	10.44
	•Rewards for project members were entirely based on final outputs achieved.	.81	9.56
	•The project members' rewards depended upon the market performance of the product.	.79	8.45
	•In rewarding the project members, primary weight was placed on objective criteria such as results achieved.	.76	7.86
Process reward CR = .83 AVE = .59 (Atuahene-Gima and Li 2002)	To what extent do you agree with the following statements about the process of rewarding team members?		
	•Rewards to project members were based on subjective criteria such as attributes of the product.	.76	7.89
	•Rewards to project members were based on effectiveness of implementation of the strategy rather than results.	.75	7.70
	•The rewards depended entirely on the quality of strategic decisions made rather than results.	.66	6.66
	•Project members were rewarded for completing major stages in the marketing strategy development process.	.65	6.06
Task conflict CR = .89 AVE = .69 (Menon, Bharadwaj, and Howell 1996; Pelled, Eisenhardt, and Xin 1999)	To what extent did project members in the marketing strategy development disagree with each other about		
	•Ideas concerning the best way to maximize the effectiveness of the marketing strategy.	.65	7.60
	•Ideas concerning the different goal priorities for the marketing strategy.	.75	8.86
	•The best way to ensure the success of the strategy.	.73	8.82
	•Which marketing objectives should be considered more important.	.62	7.25
	•Different approaches for developing and implementing the strategy.	.85	11.18
Collaborative conflict behavior CR = .82 AVE = .55 (Jehn 1995; Song, Xie, and Dyer 2000)	When conflicts arose among project members during the marketing strategy development process:		
	•We tried to exchange complete and accurate information to resolve them.	.77	10.12
	•We played down our differences and emphasized our common interests.	.47	5.69
	•We engaged in genuine collaborative effort to resolve them.	.82	11.29
	•We discussed them, focusing on the common goals of the strategy.	.85	12.15
Conflict avoidance behavior CR = .73 AVE = .41 (Jehn 1995; Song, Xie, and Dyer 2000)	When conflict arose among project members during the marketing strategy development process:		
	•We refrained from arguments about the issues.	.42	4.63
	•We avoided the issues altogether.	.65	7.60
	•We tried to stay away from any disagreements.	.75	8.86
	•Our disagreements were swept under the carpet.	.72	8.47

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TABLE 1
Continued

Measures and Sources	Description	Standardized Factor Loading	t-Value
Implementation speed CR = .75 AVE = .44 (New scale)	To what extent do you agree with the following statements about implementing the market strategy?		
	•The implementation was faster than in other previous strategies.	.75	8.73
	•The implementation was much faster than our planned schedule required.	.69	7.70
	•The strategy was implemented in a shorter time than expected.	.57	6.08
	•Speed of implementation of the strategy was a critical concern of the project members.	.66	7.00
Product advantage CR = .74 AVE = .50 (Atuahene-Gima 1995)	To what extent do you agree or disagree with the following statements about the product?		
	•Quality of the product compared well with competitor products.	.78	9.55
	•The product was of higher quality than competing products.	.59	6.17
	•Quality of the product compares well with others we have developed in the past.	.83	10.21
Market uncertainty CR = .72 AVE = .37 (Jaworski and Kohli 1993)	Indicate your degree of agreement about how well these statements describe the market environment for the product.		
	•Competitor activities in the market are quite uncertain.	.40	4.80
	•The product-market has many new competitors.	.45	5.26
	•The product-market competitive conditions are highly unpredictable.	.52	5.88
	•Customers' preferences change quite rapidly.	.77	7.22
	•Customers' needs in our industry are changing quite rapidly.	.85	7.98
Technological uncertainty CR = .88 AVE = .65 (Jaworski and Kohli 1993)	Indicate your degree of agreement about how well these statements describe the technological environment for the product.		
	•The technology in the market environment was changing rapidly.	.78	10.55
	•Technological changes provide big opportunities in the industry.	.63	7.87
	•A large number of new product ideas have been made possible through technological breakthroughs in the industry.	.81	11.11
	•There are major technological developments in the industry.	.94	14.53
Intraindustry relationships CR = .84 AVE = .62 (New scale)	To what extent do you agree with the following statements about your project members during the market strategy development?		
	•Project members communicated frequently with knowledgeable executives within our industry.	.59	8.33
	•Project members had close interactions with knowledgeable people about conditions in our industry.	.64	8.55
	•Project members received a lot of information from other executives within our industry.	.84	12.46
	•Project members received advice about the project from knowledgeable people within our industry.	.74	10.37
Extraindustry relationships CR = .92 AVE = .71 (New scale)	To what extent do you agree with the following statements about your project members during the marketing strategy development?		
	•Project members put a lot of effort into communicating with knowledgeable people outside our industry.	.70	9.23
	•Project members maintained close contacts with knowledgeable people in firms outside our industry.	.84	11.18
	•Project members learned a lot from knowledgeable people in firms not operating in our industry.	.71	9.30
	•Project members received useful information from knowledgeable people outside our industry.	.81	10.89

Notes: We measured all items on a five-point scale (1 = "No extent," and 5 = "To a great extent"), except for performance, which we measured on a five-point scale where 1 = "Strongly disagree," and 5 = "Strongly agree."

conducted a statistical check for common method variance with the Harman one-factor method (Podsakoff and Organ 1986). If common method bias is a serious problem, a single factor should emerge or one general factor should account for most of the variance. A principal components factor analysis of all measures yielded 13 factors with eigenvalues greater than 1.0, with total explained variance of 73%. Because several factors were uncovered and the first factor accounted for only 15% of the variance, common method bias may not be a serious problem (Menon et

al. 1999, p. 31). Finally, we tested several interaction effects that could not be explained by common method bias because informants could not have guessed the complex relationships involved (Aiken and West 1991; Evans 1985).

In a confirmatory factor analysis, each measure loaded significantly on the expected constructs, which demonstrates convergent validity. Together, the factor loadings and model fit indexes (goodness-of-fit index = .89, root mean square error of approximation = .06, comparative fit index = .91, and nonnormed fit index = .93) presented in Table 1 suggest that the model fit is acceptable. Table 2 reveals that the diagonal elements representing the square roots of the average variance extracted (AVE) for each of the constructs are greater than the off-diagonal elements, which satisfies the criterion of discriminant validity (Fornell and Larcker 1981; Sakar, Echambadi, and Harrison 2001). Finally, the constructs' previously reported alpha and the composite reliabilities (CRs) presented in Table 2 indicate that each exceeded the accepted reliability threshold of .70. Table 2 presents the correlations and descriptive statistics of the constructs. We used the average score of measures of each construct for further analysis.

Analysis and Results
Model Specification and Estimation

$$(1) \quad MSC = \alpha_0 + \alpha_1(OUTR) + \alpha_2(PROR)$$
$$+ \alpha_3(TASKC) + \alpha_4(COLLA) + \alpha_5(AVOID)$$
$$+ \alpha_6(INTRA) + \alpha_7(EXTRA) + \alpha_8(TASKC \times COLLA)$$
$$+ \alpha_9(TASKC \times AVOID) + \alpha_{10}(CON_{1-4}) + \varepsilon_1, \text{ and}$$

$$(2) \quad PDPERF = \beta_0 + \beta_1(MSC) + \beta_2(IMPSD) + \beta_3(MKTUN)$$
$$+ \beta_4(TEKUN) + \beta_5(MSCSQ)$$
$$+ \beta_6(MSC \times IMSPD) + \beta_7(MSC \times MKTUN)$$
$$+ \beta_8(MSC \times TEKUN) + \beta_9(CON_{1-12}) + \varepsilon_2,$$

where

$MSCSQ$ = squared term for marketing strategy comprehensiveness,
$OUTR$ = output reward,
$PROR$ = process reward,
$TASKC$ = task conflict,
$COLLA$ = collaborative conflict resolution,
$AVOID$ = conflict avoidance,
$INTRA$ = intraindustry relationships,
$EXTRA$ = extraindustry relationships,
$PDPERF$ = performance,
$IMPSD$ = implementation speed,
$MKTUN$ = market uncertainty,
$TEKUN$ = technology uncertainty, and
CON = control variables.

As Aiken and West (1991) recommend, we mean-centered relevant variables before we created the interaction terms. The variance inflation factors in the regression models were all less than 2, which indicates that multicollinearity is not a serious problem. Table 3 contains the results.

Model 1 in Table 3 tests the effects of the control variables on MSC. Model 2 adds the main effects of the antecedent variables, which contribute 42% ($\Delta F = 12.82$, $p < .001$) more than the variance explained by the control variables. The addition of the interaction terms in Model 3 added 3% ($\Delta F = 2.60$, $p < .01$) to the explained variance obtained in Model 2. H_{1a}, which predicts that output reward is positively related to MSC, is not supported. Process reward is positively related to MSC, in support of H_{1b} ($\alpha = .24$, $p < .01$). H_2, which suggests that the relationship between task conflict and MSC is more positive when collaborative conflict resolution is higher than when it is lower, is not supported. Rather, the results show that collaborative conflict resolution is a positive predictor of MSC ($\alpha = .15$, $p < .05$). H_3 is supported because the relationship between task conflict and MSC is more negative when conflict avoidance is higher than when it is lower ($\alpha = -.16$, $p < .01$). H_{4a}, which posits a positive link between intraindustry relationship and MSC, is not supported. The link between extraindustry relationship and MSC is positive ($\alpha = .36$, $p < .001$), in support of H_{4b}.

Model 4 in Table 3 reports the main effects of the control variables on performance. Note that in this model, we also controlled for process and output rewards (Atuahene-Gima and Li 2002), intra- and extraindustry relationships (Geletkanycz and Hambrick 1997), and task conflict and conflict resolution methods (Jehn 1995) because previous studies suggest that they can influence performance. Model 5 adds the main effects of the antecedent variables, which contribute 5% ($\Delta F = 1.73$, $p < .10$) more than the variance explained by the control variables. Model 6 adds the squared term for MSC and the interaction terms. These variables increased explained variance by 8% ($\Delta F = 2.92$, $p < .01$) more than the explained variance we obtained in Model 5. The data do not support H_5, which predicts a nonlinear relationship between MSC and performance ($\beta = .07$, not significant). In support of H_6, the data in Model 6 show that MSC has a more positive effect on performance when implementation speed is higher than when it is lower ($\beta = .24$, $p < .001$). H_{7a} is supported because the relationship between MSC and performance is positively moderated by technology uncertainty ($\beta = .18$, $p < .05$). H_{8b} is supported because market uncertainty negatively moderates the effect of MSC on performance ($\beta = -.23$, $p < .01$). Regarding the control variables, product advantage ($\beta = .38$, $p < .001$) and task conflict ($\beta = .16$, $p < .10$) are positively related to performance.

Discussion
This study examines the antecedents and conditions under which MSC affects performance at the project level. The results suggest that by rewarding process activities in marketing strategy development, managers provide significant incentives for project members to broaden the search for strategic alternatives and to deepen their analysis in marketing strategy development. This finding builds on Menon, Bharadwaj, and Howell's (1996) finding that formalization is important for developing quality marketing strategy. It also provides evidence that formalized reward systems

TABLE 2
Correlation Matrix and Descriptive Statistics of Measures

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Performance	.82a																
2. MSC	.21*	.89															
3. Process reward	.05	.34**	.77														
4. Output reward	.18*	.18*	.24**	.82													
5. Intraindustry relationships	.03	.21*	.15	−.01	.84												
6. Extraindustry relationships	.11	.44**	.09	.04	.22**	.78											
7. Task conflict	.11	.36**	.26**	.02	.11	.28**	.69										
8. Collaborative conflict resolution	.16	.23**	.16*	.14	.04	.04	−.00	.74									
9. Conflict avoidance behavior	−.11	−.20*	−.01	−.24**	−.04	.01	−.01	−.18*	.64								
10. Implementation speed	−.10	.14	.18*	.45**	.05	.03	.22**	.31**	−.08	.66							
11. Technology uncertainty	.01	.00	.20*	.07	.02	.09	.22**	−.08	.06	.01	.81						
12. Market uncertainty	.14	.05	.08	.14	−.03	.06	.35**	−.11	.12	.16	.45**	.61					
13. Product advantage*	.43**	.24**	.22**	.34**	.13	.11	−.07	.38**	−.18*	.31**	−.02	−.03	.71				
14. Market duration of product	−.06	−.12	−.11	−.02	.00	−.06	−.10	.13	−.12	−.04	−.13	−.23**	−.04	N.A.			
15. Project size	.07	.05	.07	−.01	−.03	.01	.12	.13*	−.12	.20*	.06	−.02	.01	.20*	N.A.		
16. Firm size	.08	.04	.05	.02	−.02	.08	.16	.06	−.02	.10	.14	.13	.08	−.02	.01	N.A.	
17. Industry dummy	.07	−.02	−.13	.15	.03	.11	−.09	.11	−.04	.10	.25**	−.00	.16*	−.03	−.10	.06	N.A.
Mean	3.45	2.92	2.34	2.81	2.88	2.24	2.84	3.71	2.26	2.97	3.32	2.85	3.68	17.54	5.66	401.15	.65
S.D.	.91	.88	.86	1.03	1.05	1.06	.85	.75	.85	.86	1.10	.79	.77	15.09	3.95	223.64	.35

*$p < .05$.
**$p < .01$.
aFigures on the diagonal are square roots of AVE. N.A. = not applicable.

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TABLE 3
Results of Regression Analysis of Antecedents and Outcomes of MSC

Variables	Hypotheses	MSC			Performance		
		Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Controls and Direct Effects							
Project size		.04 (.46)	.01 (.19)	.01 (.13)	.05 (.59)	.10 (1.08)	.08 (.87)
Firm size		−.02 (−.32)	−.05 (−.70)	−.04 (−.54)	.03 (−.33)	.03 (.35)	.05 (.52)
Industry dummy		−.04 (−.49)	−.08 (−1.06)	−.06 (−.85)	.05 (.60)	.05 (.57)	.05 (.59)
Product advantage					.42 (4.12)***	.44 (4.28)***	.38 (3.67)***
Market duration of product					−.09 (−1.07)	−.09 (−1.03)	−.10 (−1.17)
Technology uncertainty		−.06 (−.57)	−.11 (−1.44)	−.10 (−1.20)		−.09 (−.89)	−.05 (−.47)
Market uncertainty		.09 (.92)	.06 (.68)	.06 (.77)		.18 (1.74)*	.10 (.93)
Output reward	H_{1a}		.05 (.64)	.04 (.47)	.01 (.13)	.07 (.71)	.13 (1.22)
Process reward	H_{1b}		.26 (3.53)***	.24 (3.24)**	−.07 (−.82)	−.07 (−.72)	−.14 (−1.39)
Task conflict			.19 (2.35)**	.17 (2.08)**	.15 (1.53)†	.13 (1.27)	.16 (1.55)†
Collaborative conflict resolution behavior			.16 (2.22)**	.15 (2.05)*	.04 (.39)	.10 (.99)	.14 (1.39)
Conflict avoidance behavior			−.16 (−2.16)**	−.18 (−2.43)**	−.02 (−.17)	−.01 (−.13)	−.02 (−.20)
Intraindustry relationships	H_{4a}		.05 (.72)	.06 (.86)	−.06 (−.66)	−.05 (−.56)	−.03 (−.29)
Extraindustry relationships	H_{4b}		.39 (5.21)***	.36 (4.82)***	.02 (.19)	.01 (.14)	.02 (.17)
Implementation speed						−.21 (−1.99)**	−.20 (−1.94)*
MSC						.01 (.05)	.00 (.03)
Relevant Interaction Effects							
Task conflict × collaborative conflict resolution behavior	H_2			.02 (.24)			
Task conflict × conflict avoidance behavior	H_3			−.16 (−2.26)**			
MSC^2	H_5						.07 (.71)
MSC × implementation speed	H_6						.24 (2.77)***
MSC × technology uncertainty	H_{7a} H_{7b}						.18 (1.81)*
MSC × market uncertainty	H_{8a} H_{8b}						−.23 (−2.11)**
R^2		.01	.43	.46	.22	.27	.34
Adjusted R^2		.00	.38	.39	.13	.16	.21
F−value		.20	7.70***	7.14***	2.58**	2.42**	2.66***
ΔR^2			.42	.03		.05	.08
Partial F-value			12.82***	2.60**		1.73†	2.92**
N		135	135	135	131	131	131

†$p < .10$.
*$p < .05$.
**$p < .01$.
***$p < .001$.
Notes: We report standardized regression coefficients (t-values are in parentheses). Reduced sample size for Models 4–6 is the result of the deletion of outlier cases.

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enhance strategy comprehensiveness (Fredrickson 1986). A key finding is that the positive effect of task conflict on MSC is completely buffered by conflict avoidance, such that it becomes negative. It appears that open debate, diversity of opinions, and interpretations of market information can often generate adverse reactions from people whose views are criticized (Jehn 1995). The avoidance of such conflicts stifles the positive effect of task conflict on MSC. It is surprising that the collaborative conflict resolution method does not moderate the link between task conflict and MSC, as we predicted. These findings suggest that conflict avoidance and collaborative conflict resolution methods are related phenomena but are not opposite ends of the same spectrum.

Extraindustry relationships, but not intraindustry relationships, significantly enhance MSC. By having extraindustry relationships, project members gain exposure to diverse information and perspectives, which help in the discovery and analysis of diverse alternative strategic options. Contrary to our expectations, intraindustry relationships have no relationship with MSC. A possible reason for this finding is that such relationships tend to limit project members' capacity to envision multiple and different strategic alternatives in marketing strategy making. Together, the findings illuminate the enhanced insights that can accrue from combining both contingency and institutional theories as an explanatory platform for MSC.

The results on the contingent relationship between MSC and performance advance the literature on three fronts. First, we bring some clarity into the literature by showing that the relationship between MSC and performance is not concave. Indeed, MSC has no significant, direct effect on performance in this sample. Second, MSC has a positive effect on performance when it is combined with implementation speed. Implementation speed, by itself, is negatively related to performance. This finding could suggest that because it is a slow process, MSC and implementation speed are contradictory, such that extreme comprehensiveness may have a strong dilutive effect on the benefits of speedy implementation. It is also possible that a firm has a relatively slow strategy development process but speeds up its implementation process to market a product quickly, thereby enhancing performance (Eisenhardt 1989).

We explored these arguments in a *post hoc* analysis. We created a typology of four groups of firms using the median split method and compared them using analysis of variance. Firms with high MSC and implementation speed (49 firms) had significantly higher performance mean scores (3.97) than did firms with low MSC and high speed (3.41) (38 firms), which in turn had higher mean scores than firms with high MSC and low speed (2.98) (32 firms), which in turn did not differ from the 18 firms that had low MSC and low speed (2.56) ($F = 7.79$, $p < .01$). The results suggest that though MSC is important, it must be implemented speedily to achieve positive performance effects, which reinforces the importance of strategy implementation in extant marketing strategy research (Noble and Mokwa 1999).

Third, on the premise that technology and market uncertainties may have different implications for the effect of marketing strategy making on performance, we examined their differential moderating effects. Technology uncertainty positively moderates the effect of MSC on performance, in support of the argument that it provides a more conducive environment for MSC because the direction of change may be recognizable. That is, the time sensitivity of technology information may be low and therefore amenable to systematic analysis and comprehension (Pavitt 1998). The argument that technology information is unsuited for effective MSC is therefore not supported by our data. In contrast, MSC diminishes performance when market uncertainty is high. This lends support to the view that market information is highly time sensitive and that strategy making requires more real-time information flow than can be provided through a formal, comprehensive process (Glazer and Weiss 1993).

In summary, our study provides empirical support for the argument that components of the environment differ in their perceived time sensitivity and information-processing demands on project members in marketing strategy making. This extends the work of Glazer and Weiss (1993) and indicates the perils of a simple categorization of the environment into certain and uncertain. Our study suggests that if distinctions are not made among sources of uncertainty, insights into the complexity of the moderating effect of environmental uncertainty on the relationship between MSC and performance may be obscured.

Managerial Implications

The findings of our study suggest that to engender MSC, managers must reward project members for adherence to specific processes that ensure rigor and thoroughness in information collection and analysis. In addition, managers should encourage project members to cultivate relationships with people outside their own industries to gain both new insights and an expanded perspective in marketing strategy development. This could involve a provision of specific training and resources that enhance the external relationships of project members. Finally, managers must note that avoiding conflicts that result from task disagreements may hurt the level of MSC.

The results of this study also caution managers that an unquestionable positive view may be too simplistic, because its impact on performance is moderated by both internal and external factors. Specifically, the study suggests the need for managers to pay more attention to enhancing their firm's strategy implementation capability, because speedy implementation appears to alleviate the costs of the inherent slowness of MSC. The differential moderating effects of technology and market uncertainties suggest to managers that these sources of uncertainties create different information-processing demands in strategic decision making. Therefore, managers must understand the nature of the information-processing expertise required under each environmental condition in undertaking MSC to increase its performance effects. These findings underscore the need for managers to be more proactive in training project members to acquire the appropriate information-processing skills for marketing strategy making.

Limitations and Directions for Further Research

This study has some limitations. First, although we followed previous research (Li and Calantone 1998; Menon, Bharadwaj, and Howell 1996; Menon et al. 1999) in using a single, knowledgeable project manager who held a senior-level position as our informant, the results may be subject to single-informant bias. A reasonable argument can be made that such senior managers' knowledge about a marketing strategy may be of a summary, top-line nature and likely reflects a positive bias. Further research that uses middle managers as informants would help clarify whether the results reported herein are sensitive to key informants' level of seniority.

Second, because the focus of our study was MSC at the project level, it cannot speak directly to the contradictory findings reported by studies of MSC at the firm level. However, we believe that future studies that test the thrust of our theoretical model at the firm level can provide a means for resolving the previous discordant findings. Third, although objective performance measures would have been more desirable, they are usually unavailable at the project level. However, we note that subjective measures of performance continue to be useful in studies of marketing strategy development (e.g., Menon, Bharadwaj, and Howell 1996; Menon et al. 1999) and may provide the best option given differences in the nature of industries, time horizons, economic conditions, and goals of the sample firms. Finally, the generalizability of the findings is limited because our sample is not representative of U.S. firms.

In addition to alleviating the limitations of this study, there are other fertile avenues for further research in this domain. First, further research should examine other project-level antecedents because we explained only 46% of the variance in MSC. Second, we find that collaborative conflict resolution does not moderate the effect of task conflict on MSC. Xie, Song, and Stringfellow (1998) identify several other conflict resolution methods, such as competition, accommodation, compromise, and hierarchical methods. The extent to which such methods moderate the effect of task conflict on MSC should be examined in further research. Third, our study examined intra- and extraindustry relationships with a specific focus on managers. However, consultants, suppliers, and customers may be sources of input into marketing strategy development. Studying project members' relationships with these external constituents will enrich the understanding of how MSC emerges.

Fourth, future researchers should further explore the internal and external conditions under which MSC affects other performance outcomes. In particular, implementation factors such as strategic and role commitment (Noble and Mokwa 1999) and cross-functional integration (Menon et al. 1999) require investigation. Fifth, although several previous studies have reported differential moderating effects of sources of uncertainty in the relationship between marketing strategy and performance (e.g., Atuahene-Gima 1995; Glazer and Weiss 1993; Jaworski and Kohli 1993; Weiss and Heide 1993), few have offered a theoretical rationale for the observed differences. Given the importance of environmental uncertainty to the understanding of marketing phenomena, our distinction between the differential moderating roles of technology and market uncertainties is a valuable addition to the literature. The theoretical differences advanced herein hold promise for further research that examines how marketing strategy and other marketing capabilities are influenced differentially by these and other sources of uncertainty.

Finally, some scholars would argue that our description of MSC is an incomplete view of the reality of strategic decision making because it fails to recognize the cognitive limitations of managers and their resource limitations in searching for and interpreting information (Bahaee 1992; Cyert and March 1963). Such scholars would point to incremental decision making that involves experienced-based mental routines that produce answers automatically without apparent formal information search and evaluation. Further research should examine the determinants and outcomes of such decision-making processes in marketing strategy making.

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