
TO AGREE OR NOT TO AGREE? CONSENSUS AND PERFORMANCE IN NEW VENTURES

G. PAGE WEST III
Wake Forest University

G. DALE MEYER
University of Colorado, Boulder

EXECUTIVE SUMMARY

It is an intuitively appealing notion that enhanced firm performance is associated with agreement by top managers on a fundamental set of strategic goals and on methods to accomplish those goals. Nowhere should this relationship be more pronounced than in new ventures. New ventures tend to focus on narrow sets of products or markets; therefore the range of conceivable goals and methods should be narrower than would be the case if these firms were competing with many products in diverse markets. In addition, younger companies suffer from a "liability of newness," and lack the accumulated resources which allow more established firms to weather rough times. These conditions place an even higher premium on the need for top management of new ventures to agree on doing a few things very well.

Previous research has evaluated the relationship between performance and top management consensus. Interestingly, the results have been mixed and have sometimes contradicted intuition that top management agreement is related to better performance. Whereas previous studies have for the most part examined this relationship in larger companies competing in stable industries, the study reported here provides findings from newer entrepreneurial ventures in dynamic industries.

Several important findings emerge from this study. First, managers' assessment of better performance is not related to agreement on a primary set of strategic goals and means. Instead, perceived better performance is significantly and positively related to disagreement on secondary sets of strategic goals and means.¹ Second, powerful individuals in top management teams have an important impact on the nature of the consensus-performance relationship. In new ventures the influence of the CEO's perspective

¹In this study, primary goals and means are defined as those believed by the CEO to be of greater importance, and secondary goals and means are those believed by the CEO to be of lesser importance. See Methodology section for a specific description.

Address correspondence to Dr. G.P. West III, Wake Forest University, P.O. Box 7285 Reynolda Station, Winston-Salem, NC 27109-7285.

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and behaviors in forging agreement cannot be overlooked. Third, these results are evident during the earlier life cycle stages of a venture's development, and in dynamically changing competitive environments.

The findings of this study have implications for new ventures and the venture capital firms which support them, and for established corporations seeking to become more entrepreneurial. Entrepreneurship may be viewed as thriving in a world of ideas. This study shows a strong correlation between perceptions of superior performance and the presence of idea diversity within top management teams. The importance of idea diversity in earlier stages of a venture's development is especially interesting and contrasts with the traditional view of new ventures as being highly dependent on adherence to the founder CEO's initiating vision.

The relationships studied here also provide prescriptive advice for new ventures. Gaining agreement on all strategic issues by all top managers is not productive. Superior performance is not associated with this level of complete agreement. Attempting to force consensus among all managers on all issues may prevent important new ideas from being considered. In addition, we surmise that valuable firm resources may be used up in attempting to gain agreement across such a broad spectrum of strategic goals and means; their use in this manner may detract from their application toward other more substantive organizational issues.

Both entrepreneurial firms as well as established companies seeking to become more entrepreneurial should find ways to encourage the generation of idea diversity, particularly in the incipient stages of their new ventures. For established firms simply flattening a corporate hierarchy to create more of an entrepreneurial type of organizational structure may not be sufficient. In this research some of the younger ventures, which presumably enjoyed the benefits of such structure, did not enjoy the benefits of broad idea diversity and performed less well. In established companies the presence of "corpocracy" may still overshadow and constrain both initiating vision and the subsequent generation of multiple perspectives affecting new ventures. These firms should seek to develop and improve organizational communication systems to enhance the production and flow of new ideas.

The generation of idea diversity within start-up companies is particularly challenging. Often founder CEOs have technical backgrounds, but lack managerial experience. They may thus have difficulty in managing professionals in top management teams to generate diversity, and adherence to their initiating visions may also block consideration of other ideas. We suggest that firms therefore consider two alternatives to assist in the generation of multiple, challenging perspectives within the top management team. First, consideration might be given to hiring top managers with different industry and company backgrounds and who have not worked together previously. In addition, hiring practices might consider more subtle measures of managerial diversity, such as future time orientation or other cognitive dimensions such as integrative complexity. Second, new ventures might consider alternatives to traditional organization by function. This may include the creation of a position solely responsible for managing planning and developing idea diversity within the top management group. Firms might also consider rotating functional assignments among top managers in order to broaden each manager's perspective. © 1998 Elsevier Science Inc.

INTRODUCTION

The concept of consensus within a decision-making team focuses attention on the effects of competing ideas, goals, and objectives within an organization. Historically and intuitively, consensus on strategic objectives and competitive methods has been presumed important in achieving superior performance (Andrews 1971; Cyert and March 1963). The idea has been that when top managers agree on fundamental sets of goals and means of accomplishing such goals, the organization then can move uniformly and consistently toward accomplishment of the goals. More recently, consensus among top managers has been the subject of considerable empirical research, which suggests that these previous intuitions regarding consensus-performance relationships may not hold (Bourgeois 1980, 1985; Dess 1987).

Yet results of recent research have been equivocal on a variety of facets of the consensus-performance relationship. This stream of research is inconsistent as to whether or not fundamental agreement on goals and means enhances organizational performance, and contradictions have arisen about the contingent influence of the competitive environment on consensus and performance (Bourgeois 1985; Dess 1987; Dess and Origer 1987; Priem 1990).

The relationship between consensus and performance has not been adequately explored in entrepreneurial companies in high growth industries. And yet, arguably, entrepreneurship in such domains is a more critical environment in which to examine and understand such a key top management team dynamic. Information asymmetry and unique vision within the competitive environment lead to the creation of new ventures to begin with (Cooper, Folta, and Woo 1995). These ventures are beset with uncertainty and risk (Palich and Bagby 1995), and such ambiguity and uncertainty might generate many possible ways in which an opportunity might be conceived and pursued. In addition, younger companies are believed to suffer from a liability of newness (Stinchcombe 1965) and lack accumulated organizational slack (Cyert and March 1963) to weather unanticipated problems for long. Where firms compete in dynamic and growing industries which entertain many strategic possibilities but little margin for error, therefore, either severe disagreement or complete agreement (e.g. groupthink) among top managers would likely have a profound impact on firm performance.

Research has not properly focused on two dimensions that are important in evaluating consensus. These dimensions may be particularly critical in entrepreneurial companies in growth industries. They include: (1) differential influences of individuals within the groups in which strategic consensus is measured; and (2) differential content of strategic goals and means. The exclusion of these perspectives may help explain the contradictions in previous research and suggests future directions for theory development.

This study addresses these previous shortcomings. More specifically, this research investigates consensus within top management teams assuming the CEO has a differential influence in setting strategic goals and means. Previous work has suggested incorporating the varying levels of influence of members of top management teams (Hambrick 1992), particularly with regard to consensus research (Priem 1990). Evidence supports the idea that the CEO can have a great influence on top management consensus (Eisenhardt 1989). In younger, more entrepreneurial firms the CEO is expected to exert even greater influence on the top management team and on strategic direction (Meyer and Dean 1990).

In addition, differentiation is made between primary and secondary sets of goals and competitive means, and the relationship of performance to consensus on each such set is evaluated. Consensus on the priority of strategic issues has also been supported theoretically (Wooldridge and Floyd 1989) but has not been empirically explored.

PERSPECTIVES ARISING FROM PREVIOUS RESEARCH

Research on strategic consensus in organizations has produced contradictory findings and equivocal recommendations (Dess and Priem 1995). Consensus of top managers on goals has been both positively related to firm performance (Dess 1987; Shanley and Correa 1992) and negatively related to firm performance (Bourgeois 1980, 1985; Grinyer and Norburn 1977). Similarly, top management team consensus on competitive means has been both positively related to performance (Bourgeois 1980; Dess 1987)

and negatively related to performance (Dollinger, Daily, and Schwenk 1990). Finally, the relationship between performance and an interaction between consensus on goals and consensus on means has been seen as positive (Dess 1987; Priem 1990), negative (Priem 1990), or not significant at all (Bourgeois 1980).

Investigations of the potential moderating effects of environmental context on the consensus-performance relationship have also produced slightly opposing conclusions. In stable environments, in particular, theory hypothesizes that consensus on goals and means yields better performance (Dess and Origer 1987; Priem 1990). However, West and Schwenk (1996) find no relationship between consensus and performance, after moderation by type of industry environment. Thus it is unclear, particularly in dynamic competitive markets, whether or not managers should be seeking some measure of agreement on facets of their business. The paucity of consistent findings has led Dess and Priem (1995) to suggest four different models of the way in which consensus might be related to performance, each involving third variables.

As suggested at the outset, the role of consensus among top managers may be acutely important in young, entrepreneurial ventures, but empirical studies of consensus have not been conducted in such companies competing in high growth industries. Two previous empirical studies have been conducted among nondiversified public corporations which averaged \$90 million sales competing in multiple industries (Bourgeois 1980, 1985). Another study was among privately held companies averaging \$12 million sales, but which competed in a mature "stable" industry where slim profit margins and lowering costs were the primary strategic focus (Dess 1987). As a result, the existing body of research may not be helpful in understanding the critical relationship between top management team agreement and performance in younger, growth-oriented firms with multiple strategic possibilities presented by dynamic markets.

In addition, previous research has not appropriately accounted for the inherent within-industry ambiguity which often leads to new venture formation, and which may be particularly at issue in dynamic environments. The Bourgeois studies evaluate firms across industries, but do not account for the level of uncertainty or ambiguity prevalent in any of them. The Dess study considers firms in one industry regarded as stable and previously measured as stable at the aggregate industry level (Dess and Beard 1984). But the essence of entrepreneurship is the creation of wealth via the pursuit of opportunities that others have not perceived. This is how new ventures begin in the first place and is presumably how such ventures may continue to grow as new opportunities continue to be recognized by the firm (West and Wilson 1995). Any discussion of consensus is therefore inherently concerned with the need to understand how organizations sort through and come to agreement on the uncertainty of opportunity that competing ideas may present. Nowhere is this dynamic more powerful than in growth organizations whose very existence initially builds upon—and then continues to rely upon—ambiguities within their respective spheres of competition. Better understanding how managers of new ventures deal with perceived uncertainty and ambiguities in the competitive environment is at the heart of understanding new venture growth, and is at the heart of the current study on consensus.

Finally, most recent studies investigating the performance effects of consensus view consensus as an average perspective among all top managers on all issues (Bourgeois 1980, 1985; Dess 1987). But where consensus exists somewhere between complete disagreement and complete agreement, it implies that not all issues are agreed to and/or not all parties are in agreement. Questions naturally arise, therefore, as to *which* issues

form the basis of the consensus outcome, and *which* individuals form the basis of the consensual group. A perspective that helps account for the differential effects of issues and individuals on the nature of consensus outcome is thus called for.

Where previous research has treated all individuals as of equal influence, the differential influence of key top managers may not have been captured. Similarly, where previous research has viewed all issues as of equal importance, the differential influence of key issues may not have been captured in outcome measures. Thus the present study offers theoretical support for a perspective capturing these influences in growth-oriented entrepreneurial firms, and tests hypotheses arising out of this perspective.

INFLUENTIAL INDIVIDUALS AND ISSUES

From a sociological perspective Rossi and Berk (1985) discuss three aspects that affect normative consensus in social systems: domain, threshold, and segmentation of dissent. These characteristics of social systems can be applied to organizations.

First, the domain aspect suggests that there may be fundamental issues or themes around which consensus must be developed, and that consensus on other issues may be less instrumentally important. In organizations, therefore, consensus may be viewed as forming around a subset of strategic goals and means, rather than needing to form around all of the various goals and means alternatives raised by members of the top management team. Second, the existence of thresholds suggests that the boundary between crippling disagreement and enabling consensus may not be a smooth, linear function. Although not empirically tested to date, Priem (1990) also argues that the relationship between consensus and performance may not be linear. Achieving a critical threshold of consensus in organizations may therefore involve a particular coalition of participants and/or focus on a particular aggregation of strategic issues.

These first two points highlight an important difference between the concept of consensus and how it has been historically operationalized in management research. In past research consensus has been measured more or less as an average perspective of all managers on all issues by accounting for variance within the entire group on all issues (Bourgeois 1980, 1985; Dess 1987). However, theory, intuition, and practitioner perspectives² suggest that consensus is different conceptually. It evolves around a particular point of view or a particular issue, or around a subset of each. An averaged point of view among all managers on all issues does not capture this conceptual framework, and may in fact represent a different concept (such as compromise or mediation). These points also highlight the essential difference between consensus and groupthink (Janis 1972), which is illustrative of conditions when all decision-makers agree to all issues.

Finally, segmentation represents the extent to which dissent coincides with critical social groups and supports the possibility of the differential influence of individuals in a decision-making group. Previous research has segmented top management teams based upon demographic characteristics (Hambrick and Mason 1984), cognitive style (Hurst, Rush, and White 1989), and past joint work experience (Eisenhardt and Schoonhoven

²In interviews conducted as part of this research project, top managers offered a variety of other working definitions of consensus, such as "agreement with reservation," "agreement not to subvert," "begrudging acceptance," "tacit agreement," "majority rules," and others. It is clear from these discussions that consensus is very much a part of top management team deliberations on key strategic goals and competitive methods. It also seems to involve aspects of agreement and disagreement with specific individuals and/or specific ideas, rather than some kind of blending or averaging of perspectives.

1990). Another compelling basis for evaluating dissent within an organization, based upon Rossi and Berk's (1985) concept of segmentation among social groups, may be the different degrees of influence between levels of authority or among functional disciplines within the top management team.

Perspectives from strategy/policy and from social psychology also buttress the need to account for the influence of individuals and issues in evaluating consensus. Within decision-making groups the strategic agenda contains those issues that command attention by managers (Dutton 1988; Kingdon 1984). Research on agenda influence has demonstrated that different outcomes may result from the use of different agendas within groups (Levine and Plott 1977). Some items within agendas are given higher priority (Bowman and Bussard 1991) and may therefore command greater attention and be the subject of greater interest, discussion, and debate by team members in top management discussions. Thus, the individuals within the groups who set the agenda would appear to have the power to mold the outcome of group discussions on strategic issues.

Some information or some issues may overshadow others in perceived importance for decision-making groups. The nature of information and its distribution throughout decision-making groups also affects group outcomes. Whereas Nemeth (1986) finds that diversity of ideas within groups stimulates thinking and aids in solving complex problems, group members tend to focus discussions on information that is already shared among members rather than that which is not shared (Stasser and Titus 1985). Biases and narrow perspectives may be overcome when groups pool together unshared information about issues (Stasser and Titus 1985), but information about issues is pooled only to the extent it is distributed before groups convene for discussions (Stasser, Kerr, and Davis 1980). Where prioritized strategic agendas focus management attention on specific items, information sharing in advance of group discussions may primarily reflect the priority items. Dutton (1988), for example, holds that collective attention is indicated by the allocation of information processing capacity and resources to such issues.

In sum, in general terms the differential influences of individuals and of issues should be accounted for in consensus research. We now present an argument that for entrepreneurial firms competing in growth industries and markets, the CEO has a central influence on the nature of goals and means considered by the top management team. Moreover, the importance the CEO places on subsets of goals and means impacts the degree of consensus achieved within the team. As positioned around the CEO perspective, hypotheses are presented which relate team consensus to organizational performance.

CEO Influence

In entrepreneurial companies key individuals may be particularly influential on performance. Founders and CEOs of younger firms have a strong influence on strategy and performance (Meyer and Dean 1990). In addition, the assembly of the top management team is a critical element in the success of new ventures (Timmons 1994), and West (1995) finds that other top management team members besides the CEO in technology-based firms may exert influence on the strategic direction of the firm. How the CEO and the top managers interact in the establishment of strategy and work together toward performance goals thus becomes critically important in these firms (Dollinger et al. 1990; Meyer and Dean 1990).

Whereas the contributions of all top management team members are important, the CEO usually wields the greatest influence on strategy-making within such teams

(Finkelstein and Hambrick 1996), particularly in entrepreneurial companies. CEOs have the ability to shape top management deliberations and thereby effect positive change in organizations (Greiner and Bhambri 1989). Whereas top managers may use a participative style of management, CEOs view themselves as interventionists (Norburn 1989), which can dramatically impact the discussions and outcomes of top management team deliberations. We see evidence of this in Eisenhardt's (1989) study, which finds that CEOs in technology-based companies often make autocratic decisions when consensus cannot be reached quickly. In this fashion CEOs may either enhance discussion and debate, or cut it short to expedite important decisions and the initiation of competitive actions.

The CEO perspective thus represents a critical point around which consensus on strategic issues is both reflected in the literature and attended to by managers. Often identified with their founders or CEOs (e.g., Microsoft and Bill Gates, Netscape and James Clark), the strategies pursued by technology-based companies also often reflect the founders or CEOs. Consensus may be built up over time within a top management team around the ideas of the CEO. Or, as in the recent case of Microsoft's sudden about face on an internet strategy (Rebello 1996), top managers may convince the CEO that a new direction is important and thus gain commitment and resources. In either case, and reflecting the long-held intuition described at the outset regarding the relationship between consensus and performance, firm performance would seem to depend critically on the extent to which managers agree to and consistently pursue policies and direction of the CEO.

Measures of consensus outcome should therefore take into account the importance and influence of the CEO within the top management teams:

H1: Top management consensus around strategic goals and means believed important by the CEO will be positively related to firm performance.

Life Cycle Stage

As firms progress through stages of development, coordination issues increase in importance. This is because firms increase in size, require more sophisticated administration mechanisms and control, and hire more managers. Top management teams often increase in size to coordinate and control increasing functional specialization. Thus as firms develop, coordination difficulties increase, and agreement on strategy and management issues may be harder to achieve. In addition, these changing dimensions coincide with changes in key issues and strategies to which firms must attend as they progress through the organizational life cycle.

Life cycle models proposed in the literature include varying numbers of stages. Recent empirical work capturing the general logic of these models supports a four-stage model, which includes the stages of conception, commercialization, growth, and stability (Kazanjian 1988).

Most researchers define life cycle stages in the context of new organizational structure needed, or in the context of issues and problems that firms face in relating to their external environments. In reviewing firms across several industries, Miller and Friesen (1984) identify elements of strategy, situation, structure, and decision-making style as the critical areas of distinction for each of the different stages of firm development. These authors discovered that within each life cycle stage, characteristic sets of issues

and concerns in these critical areas differ from issues and concerns in other stages. Kazanjian (1988) also finds that there are significant differences between the dominance of certain problems at different life cycle stages in technology-based new ventures. For example, Kazanjian (1988) identifies three dominant problems that technology-based new ventures face during the growth stage: sales/ marketing, organizational systems, and people. These dominant problems are different in content and relative importance from those encountered during the earlier conception and commercialization stages (Kazanjian 1988).

Changing organizational life cycle dynamics might therefore affect the nature of the relationship between firm performance and consensus around the CEO's point of view. In earlier stages of a company's development, the concept that initially gave rise to the business is perhaps better understood by the management team. Ordinarily, this is the concept envisioned and pursued by the founding CEO or his/her immediate successor (West and Wilson 1995). The top management teams in younger companies tend to be smaller, and they have presumably been brought on board to assist in the execution of the envisioned business concept and plan. In such teams, consensus is therefore easier for the CEO to develop, and the envisioned business concept may thus be more consistently and effectively pursued. However, over time as firms progress through life cycle stages, the dominant problems to which top management teams must attend shift substantially, and changes in strategy may often be required. There is also greater difficulty in reaching consensus as the business coincidentally becomes more complex and top management teams grow larger and more functionally specialized. In these more progressive stages one might expect that close adherence to the CEO's perspective might forestall new ideas of professional managers from gaining sufficient voice in strategic discussions.

Background experience in combination with the position power of the CEO may help produce this dynamic. For example, Meyer and Dean (1990) discovered an "executive limit" scenario in technology firms, where founding CEOs refuse to rely upon or listen to their top managers. These CEOs maintained a "narrow technical mindset" and paid less attention to emergent operating and management issues, leading to suboptimal firm performance.

Together, these arguments suggest the following hypotheses:

H2a: Top management consensus around goals and means believed important by the CEO will be positively associated with firm performance in earlier life cycle stages.

H2b: Top management consensus around goals and means believed important by the CEO will be negatively associated with firm performance in later life cycle stages.

Issue Priority

In entrepreneurial companies key issues may also influence performance. Kazanjian (1988) outlines the dominant problems that firms face as they progress through stages of the organizational life cycle. Other life cycle stage research also tends to support the preeminence and priority of subsets of issues during different stages (Quinn and Cameron 1983).

Other empirical research demonstrates that some issues are more important in organizations than others. Among the sets of all possible issues important to organizations, "priorities define what is important to decision-makers" (Wooldridge and Floyd 1989, p. 300). Typically top management teams' agendas are set by the CEO (Bowman and

Bussard 1991); these may be explicit agendas for strategic planning and may also be implicitly communicated by the CEO (Noel 1989) through behavior, attention, and rhetoric. CEOs are in "positions that allow them to shape group activities; in so doing, they may amplify, nullify, or moderate" issue importance (Jackson 1992, p. 370).

As a result, the CEO has the ability to affect the information shared with and issues attended to by top managers. Since decision-making groups tend to focus on shared information (Stasser and Titus 1985), the top management team will tend to focus attention on information about those issues which are higher priorities for the CEO. The CEO's priorities therefore represent a critical point around which consensus on strategic issues is directed.

Thus top management teams concentrate on a subset of strategic goals and means which might be regarded as primary issues. But whereas primary issues that require critical consensus help focus the team, secondary issues may allow top managers to cultivate more diverse perspectives and may reflect emerging constituent interests. However, if CEOs strive to achieve agreement on the importance they assign to secondary issues as well as primary issues, the dynamic may begin to approach that of groupthink (Janis 1972). Misdirected resource decisions might be made and/or important opportunities and alternatives missed. The relationship of consensus to firm performance should therefore reflect the influence of issue priority within the top management teams.

H3a: Top management consensus around strategic goals and means believed to be of primary importance by the CEO will be positively related to firm performance.

H3b: Top management consensus around strategic goals and means believed to be of secondary importance by the CEO will be negatively related to firm performance.

Environmental Dynamism

At the outset we referenced the intuitive appeal to the notion that consensus on strategic issues is positively related to performance. Yet some evidence cited above suggests a negative relationship. In addition to calling on life cycle theory to attempt to explain these oppositions, recent work has also proposed a moderating role for environment: consensus will be negatively related to performance in dynamic environments while positively related to performance in more stable environments (Dess and Origer 1987; Priem 1990). The argument is that in dynamic environments it is difficult to achieve consensus among many different interpretations, opinions, and perspectives (Bourgeois 1985; Dess and Origer 1987). Furthermore, in such dynamic environments strong organizational performance relies upon diversity of perception and attendance to goals which address multiple constituencies (Bourgeois 1985). On the other hand in stable environments fewer challenges and complexities confront the firm, making the achievement of goals and means consensus and a unified approach to performance improvement more readily achievable.

Two models of strategy formation may help illustrate why these theorized relationships between consensus and performance are moderated by environmental dynamism. In dynamic environments top managers perceive new complexities and ongoing changes which they estimate might impact their business. Because change is constant, longer term plans may be difficult to put together. Instead, managers rely on a successive limited comparison model of strategic planning (Lindblom 1959) or an incremental approach, wherein they consider newly emergent ideas in the context of or as enhance-

ments to the current plans and direction of the firm. Under these conditions a stable consensus might be difficult to achieve with a constant influx of new ideas and alternatives. Moreover, because new ideas are seemingly important for the firm to consider in adapting to the ever-changing environment, agreement on and pursuit of a broad and fixed set of goals and means may cause the firm to drift strategically from the demands of the marketplace (Johnson 1988), leading to subpar performance. In contrast, where the environment is perceived as stable, managers believe they are able to plan for the longer term and to take many factors into account in doing so. A more rational comprehensive model of planning better describes this process (Bourgeois 1980). Slack resources in the environment enable firms to achieve consensus (Bourgeois and Singh 1983). Having the benefit of a comprehensive planning process should yield good identification of resources and capabilities, leading to stronger firm performance over time.

Whereas this discussion suggests a different consensus-performance relationship based on the type of environment the growing venture faces, we recognize an argument that it is still always important for companies to achieve consensus on strategic direction, and particularly so in dynamic environments. In every type of environmental context, high performing firms will be those that have found a guiding strategy. Firms that pursue no particular strategy and focus, or that are inconsistent in their strategy implementation, will not perform as well as firms which are consistent (Porter 1980). Consensus may be more difficult to achieve in dynamic environments than in stable ones, but Priem (1990) suggests that dynamic environmental contexts encourage the need for agreement.

However, the division of goals and means into primary and secondary sets yields interesting new predictions, depending upon the type of environment perceived by the top managers. Here we argue that primary goals and means are important in stable environments but are relatively unimportant in dynamic environments. In contrast, secondary strategic goals and means take on added significance when the environment is dynamic, but play little role when the environment is stable.

It would seem to be important to maintain a healthy injection of new ideas and strategic alternatives for the firm to consider as the competitive environment continues to change. Achieving consensus on any given set of secondary issues might prompt the organization to pursue a direction untenable in the longer term as the environment changes, or prevent the ongoing infusion of new ideas because of agenda effects and consequent management attention. After all, even as management agrees on a revised set of strategic goals and means, emerging issues from the changing competitive landscape will challenge the revised status quo. When the competitive environment is perceived as dynamic, therefore, achieving consensus on emerging secondary issues may handicap the firm. Furthermore, as top managers continue to advance new ideas and alternatives which they perceive in dynamic environments, an ongoing erosion of any consensus around previously agreed to primary goals and means will be experienced. Therefore, in dynamic environments we would expect to find that consensus around secondary goals and means will have a critically important relationship to performance, but that consensus around primary goals and means will have become less important.

The opposite conditions may hold in perceived stable environments. Here the influx of potential new ideas is limited and their infusion into top management discussions may have negligible effect on performance. At the same time, in more stable conditions such as those which Dess (1987) describes, a narrower set of strategic issues confronts management. Consensus on a fundamental set of goals and competitive means may thus be easier to accomplish and more directly related to firm performance.

Based on these ideas the following are offered as an enhancement to Hypotheses 3a and 3b:

H4a: Top management consensus around strategic goals and means believed to be of primary importance by the CEO will be positively related to firm performance in stable environments and unrelated to firm performance in dynamic environments.

H4b: Top management consensus around strategic goals and means believed to be of secondary importance by the CEO will be negatively related to firm performance in dynamic environments and unrelated to firm performance in stable environments.

METHODOLOGY

The study was conducted among CEOs and top managers of technology-based firms operating in three related SIC codes in a western state (computers, micro-electronics, software). CEOs interested in participating in a study of consensus designated the names of top managers in their companies who were involved in discussions and decisions on strategy and strategy-related issues, and who should also be surveyed. Of 51 companies whose CEOs agreed to participate, 35 usable sets of surveys (including both CEO and top managers) were returned. Nearly all the responding firms were private corporations; most characterized themselves as being either in the growth or stability stages of development. The average number of employees of participating firms was 128, and their average self-reported annual revenue was \$37 million. After the administration of mail surveys, a limited number of unstructured interviews were conducted with a sample of participants.

Among the 35 usable sets of surveys, the size of the top management teams ranged from three to nine managers, inclusive of the CEO. An average of 4.9 managers, inclusive of the CEO, responded to the surveys. A 100% response rate among all top managers was received from 20 of the 35 companies; in the remainder of companies 79% of the top managers returned the surveys.

The importance of corporate goals and competitive means were measured by two separate questions. Respondents were presented with a list of 20 possible strategic goals. The list contained items originally used by Bourgeois (1980, 1985), and was supplemented inductively with items based on exploratory conversations held with managers of nonsurveyed firms and a review of recent work on strategic goals and means (e.g., Porter 1980). See Appendix 1 for a listing of the strategic goals. For each item respondents were asked to rate its importance on a "scale of importance" ranging from 0 to 100, where 100 represented "critically important" and 0 represented "not at all important." Consistent with theory proposed herein that consensus should be measured as proximity to or distance from a particular point of view, *total goals consensus* in this study is measured as the sum of squared distances of managers' ratings from the CEO's rating of each item; such summed squared distances are then aggregated across all goals items for a final measure of consensus on goals. This method has the effect of placing the CEO as the point from which differences in the importance ratings assigned by top managers to each item are measured. The squaring of differences ensures that ratings which are either higher or lower than the CEO's ratings each add equally to the total measure.³

³This method of measuring consensus is different from that used in most previous studies in one fundamental sense. Previous studies rely upon the standard deviation of opinions among top managers as the measure of dispersion within the team. That method presumes that the average among top managers is important. In this study, consistent with the theory that specific individuals are important, consensus is measured as "distance" from an individual's point of view. While the standard deviation method automatically accounts for the size of the top management team,

For consensus on means to achieve strategic goals, respondents were presented with a list of 21 possible means. The items on the list derived from Bourgeois (1980, 1985) and from inductive consideration of conversations with managers and recent literature on strategy. The list of means also appears in Appendix 1. For each item respondents were again asked to rate its importance on a "scale of importance" ranging from 0 to 100, where 100 represented "critically important" and 0 represented "not at all important." As with goals consensus, *total means consensus* is measured as the sum of squared distances of managers' ratings from the CEO's rating of each item, with a final measure of consensus as the aggregation across means items of all summed distances.⁴

Primary goals and means are operationalized as those that were rated by the CEO in the top quartile on the "scale of importance" (e.g., a rating of 75 or higher). Secondary goals and means are all others in the lower three quartiles of the scale of importance. Measures of *consensus around primary and secondary goals and means* were developed as described above using these quartile distinctions. Evidence suggests that CEOs and other top managers can effectively attend to only a limited array of strategic issues (Bowman and Bussard 1991; Dutton 1988; Mintzberg, Raisinghani, and Théoret 1976). The quartile division was selected because it would tend to produce a list of approximately five primary goals and means if all were arrayed evenly across the scale of importance.

The number of individuals reporting directly to the top managers is used as a covariate in the regression analyses. Larger companies presumably have a greater capacity to scan the environment and identify new strategic issues or alternatives worthy of consideration by the top management team. Being able to potentially identify a greater number of issues and alternatives might make consensus more difficult to achieve, because there is greater information load placed on top managers (Daft and Lengel 1984). In considering their possible agreement to strategic goals and means, top managers must also consider the need to gain buy-in from the managers reporting directly to them (Wooldridge and Floyd 1990). Such buy-in may be more difficult within larger organizations. Using the total number of employees reporting directly to the respondents in each company controls both for the *information load* on top managers through their departments, as well as the ease or difficulty of gaining ultimate buy-in by their employees.

Life cycle stage is measured by the average rating of all managers in each company, using Kazanjian's (1988) descriptions of five stages that firms experience: (1) conception and development; (2) commercialization; (3) growth; (4) stability; and (5) decline. The mean for all companies in the survey was 3.4, indicating an average stage of development between growth and stability. To test the life cycle stage predictions companies are grouped into either earlier or later life cycle stage categories, based upon the mean among all companies for life cycle stage.

The dynamic nature of the environment the firms face is measured as perceived environmental dynamism. Whereas environmental dynamism has previously been viewed as an industry-level construct, and a condition which all companies within an

the summed distance method does not. Therefore, in this study we compare summed distance measures of consensus to measures of performance also summed across participating managers; see below in the discussion of the performance variable.

⁴As operationalized, the *higher* the aggregated distance scored in the goals and means consensus measures, the *lower* the degree of consensus (i.e., low scores = consensus, high scores = disagreement). In order to make the results reported below easier to interpret and consistent with the direction of the hypothesized relationships, the signs of correlation and regression coefficients have been reversed. Therefore in the statistical results reported, increases in the consensus are synonymous with increases in agreement.

industry therefore confront (Dess and Beard 1984), perceived environmental uncertainty and dynamism has recently received increasing attention (Huber, O'Connell, and Cummings 1975; Koberg and Ungson 1987; Milliken 1987, 1990). In fact, Dess also relies upon perceived environmental uncertainty measures as a contingency factor affecting the strategy making process (Lumpkin and Dess 1995). Thompson (1967) states that uncertainty is the fundamental problem with which top-level management must cope; this is particularly true and relevant for new ventures, where the opportunities and risks perceived by founders and CEOs play a primary role in new venture creation and growth (Cooper et al. 1995; Palich and Bagby 1995).

Here *perceived environmental dynamism* is determined by a composite of five items previously used by Miller and Friesen (1982) in exploring innovativeness in firms. The items reflect the rate of market, product, and technological change faced by firms, and respondents rated each on a 7-point scale ranging from stable to dynamic. The overall measure used for each firm is the sum of item ratings by each manager. The average item rating by each manager who responded is 4.6 on the 7-point scale. The measure has an alpha coefficient of 0.69. To test the environmental dynamism predictions firms are grouped into either perceived stable or perceived dynamic environment categories, based upon the mean for all companies for the perceived dynamism measure.

Most participating companies were privately held; therefore, detailed financial information was not available. *Firm performance* is thus measured by the subjective assessment of top managers, using the summed ratings of three performance-related question items across responding managers in each company. One item, based on Dess and Robinson (1984), asked for an assessment of the percent of ideal performance being achieved, where ideal performance equated to 100%. Two other items build on the tradition of strategy as competitive advantage leading to enhanced performance (Porter 1980). These items, assessing growth and overall performance relative to competitors on a 7-point agreement scale, were then interpolated into a 0 to 100 range equivalent. Lumpkin and Dess used a similar measure in evaluating the performance effects of strategy-making processes, noting that "subjective measures of performance can be consistent with objective measures" (1995, p. 1394). The overall measure used for each firm is the sum of the rating of each item across managers, which is then aggregated across all three items. The mean for the firm performance measure in this study is 970, suggesting that on average each manager responded with 66.2 out of the 100-point range for each item. The measure has an alpha coefficient of 0.87.

Hierarchical regression analysis is used to evaluate the relationship between performance and the independent variables measuring consensus (consensus on goals, consensus on means) and information load. Because of the nature of contingency relationships hypothesized, tests of the predictions based on environmental dynamism and life cycle stage are run as separate regressions. Transformations were used for two sets of variables to produce normal distributions and otherwise ensure conformance to regression assumptions. The consensus measures were adjusted using a square root transformation, and the information load variable was adjusted using a natural log transformation.

RESULTS

Correlations among critical variables are displayed in Table 1. The negative correlation between perceived performance and the consensus measures is in a surprising direction,

TABLE 1 Variable Means, Standard Deviations, and Correlations

	Mean	SD	1	2	3	4	5	6	7	8	9
1 Firm performance	970	367	—								
2 Environmental dynamism	112	45	0.657 ^b	—							
Consensus on:											
3 CEO goals total	229	66	-0.652 ^b	-0.691 ^b	—						
4 CEO goals primary	111	44	-0.301	-0.573 ^b	0.592 ^b	—					
5 CEO goals secondary	195	66	-0.658 ^b	-0.550 ^b	0.917 ^b	0.235	—				
6 CEO means total	248	81	-0.510 ^b	-0.803 ^b	0.744 ^b	0.528 ^b	0.629 ^b	—			
7 CEO means primary	125	50	-0.090	-0.481 ^b	0.388 ^a	0.486 ^b	0.209	0.645 ^b	—		
8 CEO means secondary	209	80	-0.582 ^b	-0.784 ^b	0.742 ^b	0.430 ^b	0.685 ^b	0.947 ^b	0.373 ^a	—	
9 Life cycle stage	3.42	0.72	0.081	-0.091	-0.144	0.006	-0.161	0.019	-0.080	0.046	—
10 Information load	1.61	0.41	0.438 ^b	0.585 ^b	-0.507 ^b	-0.345 ^a	-0.429 ^a	-0.702 ^b	-0.392 ^a	-0.696 ^b	-0.029

^aSignificant at $p < 0.05$.

^bSignificant at $p < 0.01$.

TABLE 2 Partial Correlations of Consensus with Information Load, Controlling for Top Management Team Size

	Partial Correlation with Information Load
Consensus on:	
CEO goals total	-0.058
CEO goals primary	0.034
CEO goals secondary	-0.049
CEO means total	-0.455 ^a
CEO means primary	-0.166
CEO means secondary	-0.442 ^a

^aSignificant at $p < 0.01$.

where increases in perceived performance are associated with decreases in consensus. Performance is significantly and negatively related to consensus around both the CEO total goals ratings ($r = -0.652, p < .01$) and total means ratings ($r = -0.510, p < .01$).

When separating the primary and secondary goals and means of the CEO, perceived performance is not significantly related to either primary goals or primary means individually; however, there is a significant negative relationship between performance and consensus around the CEO's secondary goals ($r = -0.658, p < .01$) and secondary means ($r = -0.582, p < .01$). Performance thus appears to be related significantly to disagreement among top managers on goals and means believed to be less important by the CEO.

There is some evidence in Table 1 that consensus is more difficult to achieve in larger firms. A significant negative correlation exists between information load and the measures of consensus. Since information load represents the number of employees reporting to top managers, it suggests that greater disagreement tends to be evident when there are a greater number of people involved. However, the size of the top management team may be related to the number of direct reports. Table 2 partials out the effects of the top management team size in this study, and presents first-order correlations between information load and consensus. Here it becomes evident that information load is particularly salient for consensus among top managers on strategic means; lower consensus on secondary strategic means is associated with high information load.

Hypothesis 1 states that consensus centered around strategic goals and means believed important by the CEO will be positively related to firm performance. Consensus centered around all the goals and means ratings of CEOs did significantly predict performance, but in a direction opposite that hypothesized (Table 3, model 1). A significant relationship exists between perceived performance and consensus around the CEO's goals and means ratings, after removing the effects of the information load covariate ($F = 6.98, p < .01$). On an overall basis performance increases to the extent that consensus decreases. This relationship is especially significant with respect to goals consensus, evidenced by the large negative beta coefficient for CEO Total Goals. Hypothesis 1 is not confirmed.

Hypotheses 2a and 2b make predictions regarding consensus around the CEO's goals and means in different life cycle stages. Hypothesis 2a states that CEO goals and means consensus will be positively associated with firm performance in early life cycle stages. Table 3 (model 2) indicates this hypothesis cannot be confirmed. Whereas measures of consensus around the CEO's goals and means are significantly associated with

TABLE 3 Regression Analysis on Firm Performance

	(1) Performance Overall	(2) Performance in Early Life Cycle Stages	(3) Performance in Later Life Cycle Stages
Independent variables			
CEO total goals consensus	-0.618 (-3.079) ^b	-0.599 (-1.696)	-0.647 (-2.474) ^a
CEO total means consensus	0.075 (0.308)	-0.299 (-0.599)	0.285 (0.953)
Information load	0.178 (0.942)	-0.104 (-0.296)	0.273 (1.130)
Adj. R ²	0.389	0.496	0.265
<i>df</i>	(3, 31)	(3, 10)	(3, 17)
F-Value	8.21 ^c	5.26 ^a	3.41 ^a
F change after covariate	6.98 ^b	4.58 ^a	3.26

^a Significant at $p < 0.05$.

^b Significant at $p < 0.01$.

^c Significant at $p < 0.001$.

Coefficients are standardized; *t*-values in parentheses.

perceived firm performance after removing the effects of information load ($F = 4.58$, $p < .05$) with 50% of the variance in performance explained, the direction of the relationships is precisely opposite that hypothesized. In early life cycle stages firm performance is significantly, but negatively, related to consensus around the CEO's total goals and means ratings.

Hypothesis 2b states that top management consensus around the goals and means ratings of the CEO will be negatively associated with firm performance in later life cycle stages. This prediction finds a partial measure of support (Table 3, model 3). In later stage companies the combination of top managers' consensus around the CEO's goals and means ratings in combination do not predict performance after removing the information load covariate ($F = 3.26$, NS). However, individually consensus around the CEO's goals ratings appears to be significantly and negatively related to performance, as illustrated by its standardized regression coefficient ($\beta = -0.647$, $p < .05$).

Hypotheses 3a and 3b differentiate between the effects of consensus around the primary and secondary goals and mean ratings of the CEO. Hypothesis 3a predicts that top manager consensus around the ratings of the CEO's primary goals and means will be positively associated with firm performance. Table 4 (model 4) indicates that the combination of consensus around the CEO's primary goals and means ratings does not significantly predict perceived firm performance. Therefore, hypothesis 3a is rejected.

Hypothesis 3b states that top management consensus around the secondary goals and means ratings of the CEO will be negatively related to performance. This hypothesis finds reasonably strong support. In Table 4 (model 5) the regression of performance against consensus around CEO secondary goals and means ratings is highly significant after removing the effects of information load ($F = 8.19$, $p < .01$). Looking at variables within the equation, consensus around the CEO's secondary goals ratings is also negatively related to the dependent variable performance ($\beta = -0.499$, $p < .01$); consensus around the CEO's secondary means ratings is not individually significant.

Hypotheses 4a and 4b offer refinements to hypotheses 3a and 3b, taking into account the effects of the competitive environment which top managers perceive. Hypothesis 4a predicts that consensus around CEO primary goals and means ratings will be positively associated with performance in stable environments, and unrelated to perfor-

TABLE 4 Regression Analysis on Firm Performance

	(4)	(5)	(6)	(7)	(8)	(9)
	Performance Overall	Performance Overall	Performance in Stable Environments	Performance in Dynamic Environments	Performance in Stable Environments	Performance in Dynamic Environments
Independent Variables						
CEO primary goals consensus	-0.251 (-1.377)		-0.070 (-0.302)	-0.102 (-0.356)		
CEO primary means consensus	0.201 (1.082)		0.324 (1.398)	0.365 (1.249)		
CEO secondary goals consensus		-0.499 (-2.773) ^b			-0.342 (-0.919)	-0.641 (-2.633) ^a
CEO secondary means consensus		-0.162 (-0.714)			0.003 (0.007)	-0.100 (-0.302)
Information load	0.430 (2.491) ^a	0.111 (0.609)	0.431 (1.921)	0.250 (0.862)	0.261 (0.975)	-0.047 (-0.157)
Adj. R ²	0.173	0.420	0.107	0.137	0.106	0.330
<i>df</i>	(3, 31)	(3, 31)	(3, 15)	(3, 12)	(3, 15)	(3, 12)
F-Value	3.37 ^a	9.21 ^c	1.72	0.64	1.71	3.47
F change after covariate	1.11	8.19 ^b	0.98	0.78	0.97	4.92 ^a

^aSignificant at $p < 0.05$.

^bSignificant at $p < 0.01$.

^cSignificant at $p < 0.001$.

Coefficients are standardized; *t*-values in parentheses.

mance in dynamic environments. Table 4 (models 6 and 7) outlines the results of the tests of this hypothesis. In neither stable nor dynamic environments was perceived firm performance significantly predicted by consensus around the CEO's primary goals and means ratings. In stable environments these consensus measures accounted for only 11 percent of the variance in performance ($F = 0.98$, NS), and in dynamic environments they accounted for 14 percent of the explained variance in performance ($F = 0.78$, NS).

In contrast, hypothesis 4b predicts that top management consensus around the CEO's secondary goals and means ratings will be negatively related to performance in dynamic environments, and unrelated to performance in stable environments. Table 4 (models 8 and 9) provides support for both these hypothesized relationships. In dynamic environments, secondary goals and means consensus measures significantly and negatively predict firm performance ($F = 4.92$, $p < .05$). In stable environments the combination of secondary goals and means consensus measures bear no relation to firm performance ($F = 0.97$, NS). Thus hypothesis 4b finds strong support.

DISCUSSION OF RESULTS

This study examines top management team consensus on a more disaggregated basis relative to previous studies. The study examines primary and secondary goals and means versus all goals and means combined, orients consensus around a particular point of view versus an average team point of view, and attempts to uncover differences between life cycle stages and types of competitive environments faced by firms. Where the sample of firms are dichotomized on a variable and result in a smaller subsample, the significant results observed are quite likely very strong practically.

These results offer new perspectives on how perceived performance in younger ventures is related to levels of agreement within top management teams. They highlight the need to account for the influence of individuals on strategy formulation and implementation, and thus on firm performance in younger ventures. Here measures of consensus around the CEO's goals and means were significant predictors of perceived performance on an overall basis and within earlier life cycle stages, but surprisingly in a direction opposite that hypothesized. Most importantly, measures of consensus around the CEO's secondary goals and means were strong predictors of performance, while measures of consensus around primary goals and means were not. This latter finding is especially evident in competitive environments perceived as dynamic by top management teams.

These findings illustrate interesting new relationships. Given the normative motivation of consensus studies and the intuitive appeal of the hypothesized relationship, the finding that measures of consensus around primary goals and means are not significant predictors of performance in either stable or dynamic environments is a bit surprising. Contradicting previous research and long-held management thinking, top management consensus on issues perceived by the CEO as higher priority does not seem to be related to the perceived performance of their firms, at least with regard to newer ventures.

Several possibilities suggest themselves as reasons for the insignificant relationship found here between performance and primary issue consensus. First, because of the reasonably small sample size the statistical power of the regression testing the hypothesized relationship is not very high (Cohen 1988), and any moderately significant relationship might not be identified. In addition, the firm performance measure used in this study is a perceptual measure which oriented responding managers to the potential of

the firm in its markets. The relationships uncovered here may also reflect managers' collective beliefs that anticipated increases in potential performance depend less on the issues historically important to the CEO, and more on newly-emergent issues discounted somewhat by the CEO.

Having qualified this finding based on characteristics of the test and variables, it is worthwhile to note that this relationship tends to support a view emerging out of other studies of young technology ventures. Previous research, mentioned earlier, has determined that the myopic technical perspective of CEOs of technology-based firms interferes with the discussion and embracing of important alternatives from their top managers. Moreover, research has also concluded that such CEOs are often dogmatic with regard to their views (Meyer and Dean 1990). Such CEO characteristics and traits enhance the team process loss dynamics of agenda influences and partial information sharing. Together a picture emerges of growing young companies which might be increasingly out of touch with changing markets, as they adhere to a circumscribed set of issues important in the founding conditions of their firms but less important today and in the future.

What is powerfully revealed in this study is a negative relationship between firm performance and consensus on secondary sets of strategic goals and means. This is evident in both the correlations in Table 1 and from the regression tests on secondary goals and means. The significant and negative relationship between performance and consensus on secondary strategic issues suggests that trying to reach consensus on secondary issues may detract from performance. Forcing most managers to agree on secondary strategic issues may prevent important emergent ideas from gaining currency in strategic considerations. When firms progress through their development into more dynamic and uncertain competitive situations, for example as may occur when moving between stages of organizational development (West and Wilson 1995), a diversity of ideas seems to be important in helping to arrive on that combination of goals and means which will be successful. Similarly, when competitive environments become more dynamic and turbulent, the groupthink characterized by agreement of all managers on a very broad range of issues may be detrimental.

Alternatively, valuable and limited management resources may be required to achieve such an extensive level of consensus around secondary issues. In qualitative interviews with top managers following the administration of the survey in this research, managers expressed concern that extended efforts by their CEOs to gain agreement to pet programs or initiatives forestalled other top managers from advancing alternatives of their own. In one case the continuity of consensus-seeking effort by the CEO around such initiatives prompted the need for additional information search and unanticipated departmental activity, interfering with ongoing efforts to pursue other organizational goals. Where CEOs and top managers in new ventures enjoy limits on their time and attentional resources, the pursuit of agreement on a broad range of less important issues may detract from the application of such resources to other more important organizational objectives.

The differences which this study illustrates may shed light on alternate conceptions of the concept of consensus. How much agreement constitutes "consensus" is an interesting question which has not been adequately explored. The literature is unclear on this. Dess and Origer (1987) cite Holder's (1976) notion that consensus is where all managers are in agreement, which sounds suspiciously like groupthink. On the other hand, Bourgeois (1980) cites Cohen and Cyert (1973) who claim that the organizational goal

set must be accepted. Acceptance does not necessarily equate with agreement in the sense of commitment. Priem et al. (1995), for example, find that individual acceptance of a group's strategic choice or implementation actions differed depending on whether the group used a dialectical inquiry or consensus technique for decision-making. Thus, at the group level there may be a consensus, but at the individual level still varying levels of commitment to and satisfaction with the group decision. Amason (1996) argues that commitment and understanding underlie consensus. However, his argument is made and tested in the context of a specific decision that has already been made; the prior consensus literature is examining relationships at a higher, or more general, strategic level involving sets of possible goals and sets of possible means. In future research the distinction between primary and secondary sets of goals and means may offer a means to understand the boundary between mere agreement and commitment.

The results here also highlight two factors not considered in previous consensus research which may have led to prior equivocal findings. First, the relationship between performance and consensus is moderated by environmental dynamism. Priem (1990) theorized that lower consensus would be associated with enhanced performance in dynamic environments, while greater consensus would be associated with enhanced performance in more stable environments. Here we provide a disaggregated finding that in dynamic environments less consensus on secondary issues is related to performance, but that consensus on primary issues is not related to performance in either environment. Contrary to Priem (1990), here there is no significant relation in stable environments between performance and agreement among top management on goals and means of either a primary or secondary nature. One might argue that in such stable environments managers tend to specialize more, and do not focus on behaving as teams. Established routines and strategic recipes persevere, having served the company well.

In interpreting these results, we must be careful to note that environmental dynamism here was measured using managers' subjective assessments. Thus, a "stable" environment perceived by managers in these technology industries may not generalize to more staid, less objectively dynamic industries. Future research should explore these relationships within such industries. At the same time, however, how top managers perceive their industries may be equally as important as the objectively assessed growth and competitive dynamics. Those who perceive dynamically changing conditions may generate a greater number of new ideas and alternatives for the top management team to consider, thus affecting consensus within the team.

Second, this research suggests the importance of life cycle stage in considering top management consensus and performance. Previous research has not separated the effects of different development stages on consensus measures. This study finds that in earlier life cycle stages performance is significantly but negatively related to the combination of consensus on goals and means, while in later life cycle stages no such relationship exists. This is counterintuitive to much thinking about new ventures in their earlier developmental stages, wherein consistency of purpose and pursuit have been highly valued. Miller (1993), for example, proposes that strategic simplicity (focusing on a limited set of strategic issues) will serve firms well in earlier stages of development but not in later. While not directly testing the Miller propositions, the consistent finding here that primary goals and means consensus measures are not related to performance would seem to argue against Miller's conclusions. Here better firm performance in earlier life cycle stages is associated with firms where disagreement on goals and means is evident.

This study did not examine whether the source of such disagreement is primary or secondary sets of goals and means, and this will be a promising area for future research.

This research also did not evaluate consensus-performance relationships after partialing out possible effects resulting from whether the CEOs interviewed were founder CEOs or not. Whether the relations revealed here generalize to non-founder CEOs of technology-based firms remains to be explored. As suggested earlier, the firms in this study compete in industries which are generally regarded as highly dynamic. Additional research on firms competing in industries regarded as less dynamic must be conducted before the findings here can be broadly generalized.

One additional caveat regarding these findings is that the study only evaluates associations between performance and consensus, and therefore interpretation of causal direction must be done carefully. Our intuition is that better performance would not be a cause of idea diversity within younger firms. Instead, we might expect to find managers in better performing firms coalescing more around a subset of goals and means which they believe to have been particularly effective. On the other hand, diverse idea generation provides a seedbed for experimenting and learning, and thus can result in improved performance.

IMPLICATIONS FOR ENTREPRENEURSHIP

The results of this research have application to entrepreneurship in new ventures, as well as to established organizations seeking to become more entrepreneurial. Enhanced performance is found to be associated with a diverse set of perspectives within the organization, as opposed to convergence on a fixed set. The suppression of multiple perspectives may lead to a stranglehold of organizational inertia (Mezias and Glynn 1993), both in start-ups and in established organizations seeking greater corporate entrepreneurship. This points to the need to better understand the conditions under which new perspectives are encouraged and flourish within top management teams.

Previous research has found evidence of highly conscripted thinking within new ventures. Whereas newer ventures face many sets of problems in their development, West (1992) reasons the inability to anticipate problems and opportunities in subsequent development stages arises from parochial thinking within top management teams, and finds evidence of this process (West and Wilson 1995) even in obviously artificial situations. Often the occasion for restricted thinking may spring from strong-willed, sometimes dogmatic CEOs who are the moving force behind the groupthink which can characterize younger firms. Founder CEOs often lack sufficient management skills to help their firms make critical life cycle stage transitions, and instead rely on their own narrow technical views (Meyer and Dean 1990). Firm performance suffers, as a result, and in many cases new leaders are needed to help effect successful stage transitions. CEOs also make quick decisions (Eisenhardt 1989; Wally and Baum 1993), often autocratically when consensus cannot be reached (Eisenhardt 1989). Such styles of decision-making may overshadow thoughtful consideration of important alternatives for younger firms.

The evidence presented in this study, that consideration of alternatives is important even in early life cycle stages, challenges conventional thinking about the purely positive visionary role of CEOs early in a company's development. Adherence to the initiating vision without due consideration of strategic alternatives may be detrimental to firm performance. The findings here imply that others' ideas are also quite important at this stage of development. At the same time, the partial correlations between information

load and consensus also point to significant challenges for management as organizations grow larger. In larger organizations a greater number of new ideas are forthcoming from middle management, and the task of gaining commitment grows commensurately.

Established organizations which seek to become more entrepreneurial must face a similar dynamic. Traditional hierarchy and formalized processes are being replaced by “flatter hierarchies, decentralized decision making, greater capacity for tolerance for ambiguity, permeable internal and external boundaries, empowerment of employees, capacity for renewal” (Daft and Lewin 1993, p. ii). Experimentation with these structural forms is expected to produce more entrepreneurial, more innovative efforts. However, the implication of this research for such experiments is that structural changes alone may not facilitate effectively performing entrepreneurial ventures. This study shows that despite the structure that such ventures provide, there are examples of firms which do not produce the positive dynamic of idea diversity. This research implies that the management of ideas may be a more critical factor in successful entrepreneurial efforts in corporate new ventures. Facilitating structure is only one means to encourage idea generation in such ventures, and venture managers need to consider other avenues as well.

Entrepreneurship may thus be viewed as thriving in a world of ideas. As highlighted earlier, the very nature of entrepreneurship is rooted in opportunity recognition amidst uncertainty in the competitive environment. The successful entrepreneur recognizes opportunity while others either see none or see paralyzing ambiguity. The successful entrepreneur also recognizes risk and uncertainty, acquiring and managing resources against this backdrop through the startup phases. Within this milieu, vision and ideation are the source material of entrepreneurial and innovative new business combinations to begin with. The findings of this research prompt the question, “Why should these entrepreneurship dynamics change as the venture grows?” While the initiating vision continues to be important in guiding overall direction for new ventures, challenging and competing ideas also appear to be important as the ventures develop over time. Opportunity recognition continues to be important for growing new ventures, and opportunities for growth and enhanced competitive position are better perceived within an environment where ideas, alternative perspectives and interpretations flourish. The pursuit of certainty through management structure and systems, with the consequent reduction of ideas which challenge the status quo, may lead to performance decrements in growing ventures. On the other hand, entrepreneurial firms which embrace the uncertainty associated with new ideas and perspectives may continue to find new opportunities for growth and performance improvement.

The findings of this research therefore offer several prescriptions for new venture leaders, for venture capital firms considering leadership for funded ventures, and for corporate managers encouraging greater entrepreneurship. Whereas successfully started new ventures depend upon the ideas, vision, and determination of entrepreneurs and founders, the successful management of fledgling enterprises calls for a different set of skills. From early on, leaders of new ventures are advised to encourage diverse points of view, while at the same time maintaining vision and direction. This is a difficult challenge. It might be difficult for any founder who confronts the myriad tasks facing startups; it may be particularly difficult for founders who are not well-versed in managing diversity and managing professionals. In corporate settings these sets of skills may also be lacking; the presence of the corpocracy may overshadow and constrain both initiating vision and subsequent multiple perspectives.

To encourage greater corporate entrepreneurship, corporations should take actions that break with the traditional kinds of institutionalized information flows. Such institutionalized flows constrain the generation of truly new ideas (Hamel and Prahalad 1994; Stinchcombe 1990). The establishment of "skunkworks" or the removal of new venture teams from the corporation (both physically and organizationally) may serve this purpose. The success of IBM's PC development team in Boca Raton in the early 1980s and Hewlett-Packard's printer development team in the late 1980s provide good examples of the ways in which breaking the corporate binds may free up entrepreneurial effort within large conservative organizations.

More generally, corporations interested in venturing should consider developing enhanced information and organizational communication systems as critical resources. Instead of focusing on the roles of managers and their organization in the hierarchy, attention to communications systems focuses on the information sharing relationships among all managers (West and Meyer 1997). Systems enhancing the production of ideas will lead to improved knowledge about an organization's capabilities and future sources of competitive advantage. They serve to break the barriers of organization structure and bureaucracy which limit creative corporate efforts. As part of enhanced communication system development, for example, corporations might use group decision support systems (GDSS) (McCartt and Rohrbaugh 1995). GDSS may be particularly useful for new ventures because they overcome constraining group processes, discussed previously, such as the agenda influence of powerful leaders and the pooling of only that information which is already shared (West 1996).

CEOs of new firms and venture capitalists who fund them might consider addressing this challenge by considering two alternatives in hiring practices and organization. Growing entrepreneurial firms require strong top management teams. In hiring top managers, CEOs and venture capitalists often consider the depth of prior industry experience represented on the team, and in some cases whether top managers have worked together previously (Eisenhardt 1989). While such top management team characteristics are valuable, they may also contribute to elevated levels of parochial thinking. When top managers share common experiences within an industry, they tend to view the industry in similar ways. Moreover, the rapid changes occurring in many technology-based industries, such as hardware and software development, may obsolete previous knowledge regarding what works strategically. Thus hiring top managers based upon past experience and accomplishments may limit the firm's future more to those ideas which have worked in a rapidly fading past.

The hiring of CEOs and top managers might instead emphasize the importance of heterogeneous worldviews within the top management team. Top managers might be hired from completely different industries from that in which the new venture operates (e.g., John Sculley at Apple), or past joint work experience might be regarded as particularly insulating versus particularly valuable. Hurst, Rush, and White (1989) argue that top management teams should include managers who can better perceive opportunities, as well as managers who are better able to execute strategy. Extending this theoretical perspective, West (1995) provides empirical evidence that heterogeneity of future time perspectives within top management teams in technology-based companies is positively related to changes in firm strategy over time. The more varied the perceptual filters and biases held by top managers within a team, the greater the likelihood the firm will develop alternative points of view and effect changes in strategy as the competitive environment changes (West 1995). One possible means to distinguish dif-

ferent styles of perceiving amongst prospective top managers is the MBTI scale based on pioneering work by Jung, although this has received mixed reviews in terms of personnel selection (Haley and Stumpf 1989; Hurst et al. 1989). Future research is needed to develop better instruments to gauge differences in perspective and other cognitive dimensions.

Second, new venture management might consider alternatives to the traditional organization by functions among top managers. Some evidence suggests that past functional experience and orientation contributes to biases and narrowed perception (Dearborn and Simon 1958). Where the best interests of the organization are served by broadening points of view rather than narrowing them, strict functionally oriented organizations may not be the best solution. Instead, new venture management might consider two alternatives. First, in addition to functionally oriented top managers, a new top manager position might be created with the responsibility for overseeing idea generation and broadly encompassing strategic development. Typically, a position primarily responsible for strategic planning is not created until an organization has become much larger and faces more complex circumstances. Here we suggest such a position might be valuable earlier in a company's stage of development. Such a position would relieve the contradictory assignment placed on the CEO to both manage toward the initiating vision as well as generate alternatives which challenge that vision. In so doing, many of the possible agenda effects of the CEO's position might be avoided. More importantly, the establishment of such a position would be symbolic of the firm's very real interests in seeking alternative viewpoints. Second, CEOs might consider revolving assignments for top managers on their teams. By periodically shifting senior managers from one functional discipline to another, CEOs will foster a better understanding by each manager of critical dimensions across functions, and thereby promote broader perspectives from each manager within the team.

The prescriptions offered here tentatively respond to the findings in this study which imply that consensus on broad sets of issues is inconsistent with better performance, that instead firms should seek to encourage differences of opinion. Entrepreneurship arises from the management of resources under the uncertainty presented by the presence of many ideas and possibilities. Management of entrepreneurial ventures should seek to preserve this dynamic as their organizations grow and develop, by seeking to promote greater uncertainty in manageable ways.

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APPENDIX 1 Strategic Goals and Means Rated by Top Managers

<i>Possible Strategic Goals</i>	<i>Possible Means to Achieve Goals</i>
Net profit over 5 years	New product/service development
Rate of sales growth	Customer/client service
Recognition as an innovative or creative firm	Operating efficiency
Creation of an effective organizational structure	Quality of products/services
Employee satisfaction/morale	Experienced/trained personnel
Development of new products/services	Maintain high inventory levels
Net profit over one year	Competitive pricing
Management excellence	Broad range of products/services
Firm prestige/reputation	Refining and improving existing products/services
Market share and penetration	Brand identification and image
Development of a management information system	Innovation/creativity in marketing techniques and methods
Management development and retention	Control of channels of distribution
Lowest cost relative to competitors	Procurement of raw materials
Employee compensation and benefits	Uniqueness of product/service
Growth in assets and reserves	Minimizing the use of outside financing
Dividends distributed	Serving special markets or customer needs
Community service/ethical and environmentally sound activities	Products in high price market segments
Customer/client support	Advertising
Development of reliable vendors and customers	Reputation within industry
Uniqueness of products/services	Forecasting market growth and competitive activities
	Innovation
