

Initiating strategic planning

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Abstract

A raft of commentators has observed that too little is known of the contingencies that precede the instigation of formal planning. The objective of this paper is to explore, describe, and explicate the processes, factors, and dynamics that relate to the initiation of formal planning efforts within organizations. This article uses the following structure. First, a conceptual model of the antecedents of planning initiation is presented that identifies and describes ten antecedent factors. Thereafter, the research design, methodology, and the approach adopted is described and justified. After tests to gauge the reliability and validity of the measures employed (including confirmatory factor analysis), 237 responses to a mailed survey are analyzed and the presented framework evaluated. The paper culminates with a discussion of implications. © 2005 Elsevier Inc. All rights reserved.

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1. Introduction

Many aspects of the scholarly investigation of planning within organizations form a source of academic debate and conceptual division (e.g. see Mintzberg, 1994a; Ansoff, 1994; Heracleous, 1998; Kaplan and Beinhocker, 2003). However, theorists seem broadly in agreement that the development or emergence of a coherent and implementable plan is beneficial to firms (Aram and Cowen, 1990; Wooldridge and Floyd, 1990; Miller and Cardinal, 1994; Floyd and Wooldridge, 1997; Hopkins and Hopkins, 1997) and involves or should involve a process (Pettigrew, 1977; Judson, 1996; Smith, 1998; Rowden, 1999), albeit founded on an often misunderstood dynamic process of strategizing (see Mintzberg, 1994b,c; Hamel, 1996) that is not necessarily rational or logical (see Piercy and Giles, 1989; Butel and Watkins, 2000). In this sense, researchers from a wide range of perspectives agree that planning only yields superior returns for an organization, if such efforts are implemented successfully (e.g. Noble and Mokwa, 1999; Dibb and

Simkin, 2003; Taylor and Wright, 2003). Nevertheless, while insights have been generated into the consequences of strategizing and planning processes (Miller and Cardinal, 1994; Berman et al., 1997; Hopkins and Hopkins, 1997; Ferrier, 2001), and Menon et al. (1999) have examined the factors that affect the nature and form of the planning process, the factors that antecede such formal planning remain obscure. Indeed, while much is known about the nature, dynamics, and consequences of the planning process, comparatively few insights have been generated into the forces that impede ‘strategic thinking’ prior to the formal initiation of planning (see Harris, 1996a,b) and a range of theorists have argued that too little is known of the contingencies that precede the instigation of formal planning (e.g. Bracker and Pearson, 1986; Harris, 1996a,b; Menon et al., 1999). In these regards, generating a greater understanding of the process of planning initiation is of interest and importance to both theorists and practitioners.

This study aims to contribute insights into these issues through explicitly concentrating on the exploration and description of the factors that antecede the initiation of strategic planning. As such, the focus of the paper is not on the success of plans or the forces that shape the form of the planning process, but rather this research centers on the contingencies that affect whether strategic thinking is

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translated into subsequent formal planning efforts. In this way, the objective of this research is to explore, describe, and explicate the processes, factors, and dynamics that relate to the initiation of formal planning efforts within organizations.

2. The initiation of planning

Fig. 1 identifies the key constructs in the study in order to steer the subsequent review and discussion. This framework presents the initiation of planning to be driven by ten factors grouped into management characteristics, firm dynamics, and environmental factors.

2.1. Management characteristics

A review of extant literature leads to the suggestion that four key characteristics of management are related to the initiation of planning (see Fig. 1). The first factor centers on the extent to which management possesses relevant and applicable planning skills. That is, the extent to which the management of the firm have the skills to be able to undertake or to manage a formal planning effort. The view that the lack of such skills constitutes a crucial factor in the initiation of planning emerges, in part, from ongoing efforts to explore strategy development in small and often family businesses (see Gibb and Scott, 1985; Carter et al., 1996; Hunt and Handler, 1999). This view is apparent in a study of the development of marketing planning in small firms by Carson (1985) that concludes that the lack of relevant specialist expertise acts as a significant constraint on evolution and progress. This contention is concordant with research into the internal diffusion of innovations that suggests that the experience and skill levels of management exerts a significant affect on the adoption of innovations (e.g. Higgins and Hogan, 1999; Young et al., 2001).

However, the argument that planning skills are associated with the initiation of formal planning can also be linked to studies of executives in large firms (see Higgins and Vincze,

1993; Hopkins and Hopkins, 1997). For example, Geletkanycz and Hambrick (1997) study the external ties of top executives and conclude that those boards with wider experience and skills from such extra-industry ties, are likely to generate novel strategies. Hambrick and Mason (1984) echo this view by contending that the experience of executives will play a significant role in the identification and development of strategic directions. Similarly, Hopkins and Hopkins (1997) find strong links between managerial strategic planning expertise and planning intensity. These and other insights lead Boeker (1997, p. 213) to conclude that “the skills, knowledge, and background that executives bring to the top management team play a central role in influencing strategic choices”. Thus:

H₁. The greater the extent of executives’ planning skills, the greater the likelihood of successful planning initiation.

The second management factor that can be argued to be linked to planning initiation is the ‘time orientation’ of management (see Fig. 1). That is, the extent to which the management of the firm have a time orientation that is focused on short-term horizons or longer-term issues. Intuitively, an organization that is focused on short-term gain and rewards is less likely to plan, while a firm with a longer-term perspective is more likely to take steps to plan for the future (Harris, 1996a). The innovation literature mirrors this view by arguing that short-term management horizons, matched by inappropriate systems (especially those of remuneration) are critical inertia forces that impede change and innovation (see for example, Quinn, 1985). Similarly, in a study of broader planning efforts, Harris (1996a) suggests that where short-term issues are prioritized over the medium and long-term concerns, planning is less likely. Thus, Harris (1996a) argues that short-term time pressures act as obstacles to planning initiation.

Aram and Cowen (1990, p. 65) concur with the view, that a long-term perspective is a prerequisite to planning, and argue that to achieve the full potential of planning efforts, the top management of firms should be “proactive in initiating planning”. These findings lead Gibb and Scott

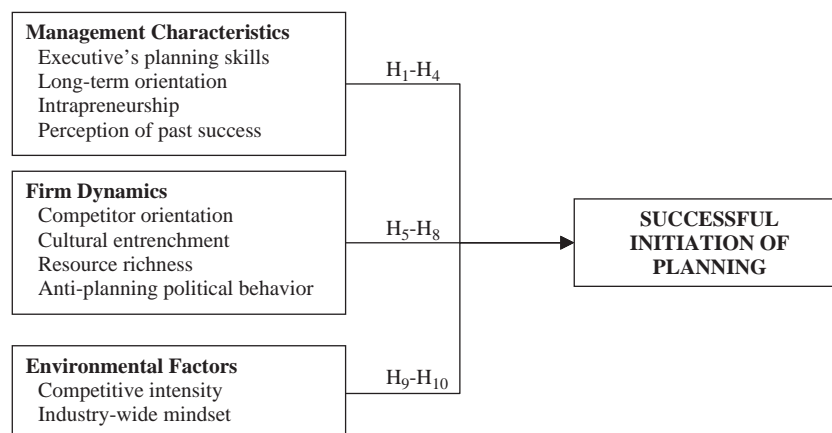


Fig. 1. Factors associated with the successful initiation of planning.

(1985) to contend that the capability of a firm effectively to manage change is related to the extent to which managers and executives develop and apply a long-term perspective to their decision-making. Therefore:

H₂. The greater the extent of a long-term orientation among top managers, the greater the likelihood of successful planning initiation.

The third characteristic of management that is argued to be linked to the initiation of planning is the extent of intrapreneurship (see Kuratko et al., 1990; Oden, 1997; Antoncic and Hisrich, 2001). A preliminary working definition of ‘intrapreneurship’ is ‘the degree to which managers exhibit entrepreneurship and innovation within the firm’. Intrapreneurship emerged as a topic of interest in the early 1980s and has subsequently been linked to firm performance (for example, Guth and Ginsberg, 1990; Zahra and Covin, 1995) for a wide variety of organizational types (Carrier, 1994). Hart (1992) forwards the suggestion that intrapreneurship constitutes an increasingly important determinant of planning and, ultimately, corporate success. However, it is Menon et al. (1999) that provides the strongest empirical backing for this claim. Menon et al. (1999) study the antecedents to planning activities during plan formulation and as such focus on the post-initiation phase of planning. Nevertheless, this study provides support for a link between intrapreneurship and planning initiation through the finding that the form of planning is influenced by the innovativeness of the corporate culture. Thus, it is hypothesized that:

H₃. The greater the extent of management intrapreneurship, the greater the likelihood of successful planning initiation.

Finally, the framework suggests that management perceptions of past or ongoing success are related to the likelihood of the initiation of formal planning (see Fig. 1). The conceptual roots of this argument are traceable to early research into organizational decision making. The link between planning initiation and perceptions of past success can be modeled in a manner similar to the ‘garbage can model of organizational choice’ (see Cohen et al., 1972). That is, if managers perceive that in the immediate past the organization has performed successfully, then such success will not generate a ‘stream of problems’, triggering ‘a stream of solutions’ most notably in the form of planning. De Wit and Mayer (1988) observe that formal planning and reasoning is unlikely where executives fail to perceive a problem.

Thurston (1983, p. 163) argues that where “chief executives perceive little or no potential gain from using such planning” they are unlikely to begin formal planning and instead rely on their “gut feel” while Hopkins and Hopkins (1997) find a strong link between perceptions of the merits of planning and planning intensity. Similar findings have also emerged in the small business literature where the role of strategic planning has been viewed as

controversial (see Shorey, 1992). Thus, Orpen (1993, p. 63) concludes that “many small business owners do not believe that there are any advantages for them in strategic planning” as management intuition is likely to generate sufficient (or indeed higher) performance. This parallels research into intra-firm adoption of innovation that finds strong associative links between the adoption of innovative management practices and perceptions of potential gain (see Young et al., 2001). These views are synthesized in the study of Harris (1996a) who concludes that where management view immediate past performance as ‘successful’, management action to improve performance through planning is unlikely. Conversely, where organizational crisis ensues as a result of perceived poor past performance, planning is more likely to be initiated (see Harris, 1996a). Therefore:

H₄. The lower the management perception of immediate past successful performance, the greater the likelihood of successful planning initiation.

2.2. Firm dynamics

Fig. 1 presents four firm dynamics factors as linked to the initiation of formal planning. Competitor orientation encompasses the extent to which firms are oriented toward and understand not only the strengths and weaknesses but also the tactical and strategic capabilities of both current and potential competitors (see Day and Wensley, 1988; Narver and Slater, 1990; Noble et al., 2002). Conceptual support for a link between competitor orientation and planning initiation can be found in the population ecology perspective on organization–environment relations (see Hannan and Freeman, 1977, 1989). Population ecologists argue that managerial choice and control is low with the environment acting as a natural constraint and selector (see Hannan and Freeman, 1989). However, especially pertinent to the current study, research from this perspective also suggests that a key driver of organizational inertia is a lack of information and insight regarding competition (see Hannan and Freeman, 1984, 1989). This suggests that where organizations are ignorant of competitor actions, managements are less likely to instigate efforts to change. In such conditions, firms with existing strategies are likely to become increasingly committed to their current course of action (see Brockner, 1992; McCarthy et al., 1993) while in firms with no existing planning process, the initiation of planning is unlikely. This conclusion has parallels with the ‘garbage can model’ (see Cohen et al., 1972), in that a paucity of knowledge regarding competitors can be equated to a lack of ‘problems’ resulting in a lack of decision-solutions.

Adopting a somewhat different perspective, Hamel and Prahalad (1989) suggest that competitor orientation relates to planning efforts. In brief, Hamel and Prahalad (1989) argue that most strategy-making entails the mere imitation of competitors (and thus some degree of awareness of

competitor actions) rather than the development of competitor-relative novel strategic intent. This view is supported in the study of small firms by [Gibb and Scott \(1985\)](#) who argue that the inability fully to appreciate the competitive environment is likely to impede the initiation of planning efforts. Consequently:

H₅. The greater the extent of competitive orientation, the greater the likelihood of successful planning initiation.

Second, [Fig. 1](#) presents the degree of ‘cultural entrenchment’ as linked to the initiation of formal planning. [Harris \(1999, p. 119\)](#) defines cultural entrenchment as “the extent to which the culture of an organization is firmly established and widely held” and equates the concept to that which other researchers have labeled cultural ‘strength’, ‘psychological penetration’, and ‘thickness’ (see [Sathe, 1983](#); [Weick, 1985](#); [Weiner, 1988](#)). Cultural entrenchment can be viewed as akin to an embedded organizational frame of reference (see [Shrivastava and Schneider, 1984](#)) that acts as a constraint on individual, group, and organizational activities and decision-making (see [Shrivastava and Schneider, 1988](#)).

[Baer and Frese \(2003\)](#) argue that the successful adoption of management innovations is significantly aided by supportive organizational cultures and climates (see also [Frese et al., 1997](#); [Edmondson, 1999](#)). In a study of planning formulation, [Menon et al. \(1999\)](#) find that an innovative culture (the antithesis of entrenched cultural values), is related to the form of planning undertaken. Similarly, in an exploratory case study of planning initiation, [Harris \(1999\)](#) finds that six entrenched values appear to impede the initiation of planning within the case company (the six entrenched values being reactivity, management activities and practice, compartmentalization, short-term cost orientation, internal focus, and; stability). [Harris \(1999\)](#) argues that the existence of strongly-held, and widely-shared entrenched cultural values restricts the ability of firms hampers the initiation of planning. Therefore:

H₆. The greater the extent of cultural entrenchment, the lower the likelihood of successful planning initiation.

The third firm level factor argued to be related to the initiation of planning is that of resource richness (see [Fig. 1](#)). In the current study, the term ‘resource’ is used to denote accumulated resource endowments and can be equated to what a variety of theorists have labeled ‘assets’ ([Mahoney, 1995](#); [Kamoché, 1996](#); [Hooley et al., 1998](#)). Given that skill resources have been discussed previously, the focus here is principally on financial and management time resources. In this regard, it seems intuitively logical that firms with restricted money and time resources will be unlikely to instigate formal planning efforts that consume such limited resources. Conversely, firms that are rich in time and money are more likely to initiate planning efforts in an attempt to ensure that such conditions continue ([Harris, 1996a,b](#)).

The availability of such scarce resources is an issue for most organizations but particularly for small businesses (see [Carson, 1985](#); [Moen, 2000](#)). Indeed, [Gibb and Scott \(1985, p. 602\)](#) contend that the development of formal planning in small firms is significantly restricted by “the financial situation of the company, particularly in terms of liquidity,” while [Gibb and Dyson \(1982\)](#) argue that coping with change and planning efforts in small businesses are considerably curtailed by limited management time resources. Similarly, [Shuman and Seeger \(1986\)](#) argue that: “a company cannot begin the process without first making the decision to allocate some of its limited resources to planning. And a company will not decide to plan until it has identified both the benefits and the costs (people, money, and time) associated with planning.” In this regard, strong support is found for the argument that where firms have limited time and money resources, planning initiation is less likely. Thus:

H₇. The greater the availability of management time and money resources, the greater the likelihood of successful planning initiation.

The final firm-level factor argued to be associated with the initiation of planning is the extent of political activity (see [Fig. 1](#)). [Harris \(1996b\)](#) argues that the initiation of planning is most frequently stopped by the political maneuvering of managers opposed to planning. Based on exploratory interviews, [Harris \(1996b\)](#) argues that seven political acts can be associated with the impediment of planning initiation. These include tactics of deflecting process, ‘moving the goal-posts’, creating a situation of scarce resources, impeding decisions, condemning planning, forming a coalitions, and tenacious resistance. Similarly, research into the adoption of innovative changes by managers finds that organized resistance to change can effectively block desired change (see for example, [Young et al., 2001](#)). Research into both plan formulation (for example, [Pettigrew, 1977](#)) and implementation (for instance, [Cespedes and Piercy, 1996](#)) mirror this through the suggestion that political activity is central to planning initiation. With regard to the formulation of plans, [Pettigrew \(1977; p. 80\)](#) argues that strategy formulation can best be understood as “a process of political decision-making”, while [Guth and MacMillan \(1986\)](#) suggest that active and passive political intervention by middle managers is central to successful plan execution. Indeed, [Wooldridge and Floyd \(1990\)](#) argue that middle management is crucial to successful planning, while subsequently [Wooldridge and Floyd \(1992\)](#) support the view that ‘upward influence behaviors’ are linked with firm strategy. These and subsequent findings lead [Floyd and Wooldridge \(1997\)](#) to conclude that the actions of middle management exert a considerable influence over strategy development and execution. Thus:

H₈. The lower the level of political activity, the greater the likelihood of successful planning initiation.

2.3. Environmental factors

This category of antecedents is divided into two main factors, namely; the extent of competitive intensity and the strength of industry-level mindsets (see Fig. 1). In the first instance, it is argued that intense competitive environmental conditions are associated with the initiation of planning. This contention is supported by earlier arguments regarding a link between a competitor orientation and planning initiation (see H₅). However, additional support can also be found in the small business literature. In particular, Matthews and Scott (1995) empirical investigation of planning sophistication and performance in small and entrepreneurial firms concludes that environmental uncertainty exerts a strong influence over planning efforts. Similarly, Gibb and Scott (1985, p. 601) theorize that the likelihood of planning and any process of planning is linked with the extent and the “strength of competitive pressures..”

Support for an environment-planning initiation link is also found in the more general strategic management literature (see Dess and Beard, 1984; Romanelli and Tushman, 1986). For example, Hopkins and Hopkins (1997) uncover a significant association between environmental complexity and planning intensity in the banking sector. Similarly, Parnell et al. (2000, p. 525), after a cross-industry survey, forward the argument that the development of strategy is “to some extent a response to key perceived uncertainties” principally environmental in nature. This view echoes the earlier conclusions of Miller and Cardinal (1994). In a meta-analysis of existing contingency frameworks of strategic planning and firm performance, in addition to broader findings, Miller and Cardinal (1994) conclude that environmental factors exert a significant force over the whole process and outcomes of planning. In this way, implicit support is found for the contention that environmental competitive conditions are related to planning initiation. Thus:

H₉. The greater the competitive intensity of environmental conditions, the greater the likelihood of successful planning initiation.

Fig. 1 presents the strength of ‘industry mindsets’ as associated with planning initiation. That is, Fig. 1 suggests that the extent to which firms share strong industry-wide assumptions, values, and artifacts is linked to their likelihood to initiate planning. In the current study, ‘industry mindset’ is akin to the term ‘macroculture’, derived from Abrahamson and Fombrun (1994) who found that organizational failure could be attributed to failures of the macro (industrial) as well as the micro (organizational) cultures of companies (also see Whipp et al., 1989; Gordon, 1991; Chatman and Jehn, 1994). However, ‘industry mindset’ is preferred to ‘macroculture’, since the latter infers an industry-level isomorphic tendencies (see Di Maggio and Powell, 1983; Langston et al., 1997).

A diverse range of theories and literatures support an industry mindset-initiation association. First, institutional theory supports the view that firms within industries are most likely merely to evolve, whereas new or external players are more likely to revolutionize (see Hamel and Prahalad, 1989). In this way, the internal character of firms within industries (including the extent of planning) reflects the dominant institutions of the field (see Hoffman, 1997). Hence, strong industry-wide mindsets are likely to restrict innovation and the formal initiation of change. This argument is also supported by the ecological population perspective that contends that the broader environment acts as both a constraint and selector (see Hannan and Freeman, 1989). In this way, industry isomorphism is a significant inertia force (see Hannan and Freeman, 1989). Evidence for this phenomenon can be found in the study of Geletkanycz and Hambrick (1997) who find that intra-industry executive ties are linked with strategic conformity while extra-industry ties are associated with comparative strategic innovation. These and other findings support the conclusion of Harris (1996a) that the initiation of planning is affected by the strength of industry-wide mindsets. Hence:

H₁₀. The stronger the industry-wide mindset, the lower the likelihood of planning initiation.

3. Research design and methods

To test the hypotheses, a descriptive research design was utilized and a self-administered postal survey was deemed the most appropriate data collection method. A sample of one thousand firms was obtained from a data brokerage agency. Criteria for inclusion in the sample included: turnover, number of employees, and the instigation of some form of formal planning within the last year. Prospective respondents were pre-contacted by individualized postal mail in order to obtain agreement for involvement and to ensure suitability. Thereafter, each respondent was mailed a personalized, individually signed letter of introduction, the questionnaire, and a pre-paid return envelope. In an effort to improve the response rate, participation was incentivised with eligibility for inclusion in a small (\$150) prize draw. Following a number of reminder letters, response rates were calculated using the CASRO Council of American Survey Research Organizations (1982) method that offers the researcher a standardized method of calculation. Out of the 1000 firms contacted, forty-nine proved ineligible while two hundred and thirty-eight completed, and nine incomplete questionnaires were returned. This generates a response rate of just over 38%. This response rate is considered acceptable for a postal survey and compares well with other studies.

The scales employed were developed using conventional psychometric procedures (Churchill, 1979) and were based on existing scales as well as on scale development work

conducted during pre-testing. Pre-testing procedures involved two pilot surveys of practitioners followed by two critical reviews by panels. In total, eleven scales were employed, of which seven were adapted from existing scales.

A nine-item scale was developed specifically for the study to gauge the extent of formal planning initiation. This scale assesses the degree to which organized and structured planning had been initiated and the extent to which the process was successful in that genuine strategizing was occurring. Hence, during the development process, care was taken to ensure that the scale contained items that tapped not only whether planning efforts survived, but also the extent to which genuine planning and strategizing occurred (rather than, for example, mere complex budgeting and control).

Four scales gauging management characteristics (see Fig. 1) were employed. The extent of intrapreneurship was gauged using the nine-item scale of Kuratko et al. (1990) while the extent to which it was perceived that the firm had experienced immediate past success was measured using an adaptation of the seven-item 'Feelings of Success' scale of Hall et al. (1978) and Brown et al. (1993). The degree to which decision-making was oriented toward the long-term, was gauged using a five-item scale, in part derived (but adapted) from Narver and Slater (1990). The extent of executives' planning skills was assessed via six items developed for the study.

The survey measures four firm dynamics (see Fig. 1). Five items measure the extent of political activity, these items were adapted from Piercy's (1987) measure of organizational politics. Competitor orientation was assessed using the four-item Narver and Slater measure while resource richness was evaluated using five-items derived from Kuratko et al. (1990). Cultural entrenchment was evaluated using a four item scale developed specifically for the current study but based on the theory of Harris and Ogbonna (1999) and Harris (1999). Two environmental factors were measured. First, the degree of competitive intensity was gauged via the five-item scale of Jaworski and Kohli (1993). Second, the extent of an industry-wide mindset was measured using a six-item scale developed for the study but based on Gordon's (1991) study of 'macrocultures'.

Seven-point Likert type scoring was adopted for all items (Likert, 1932a,b), as seven-point scales have been found to increase reliability of data findings (Barnes et al., 1994; Churchill and Peter, 1984). A chi-square (goodness of fit) test was applied to the responses to measure if there is a significant difference between the distributions of respondent firms and non-respondent firms by means of a respective industry analysis and no such differences were found. Following the recommendations of Armstrong and Overton (1977), the responses of early and late respondents were compared to gauge non-response bias and no significant differences ($p < 0.01$)

were found among any of the variables or factors used in later analyses.

4. Findings

The reliability of the measures employed was examined through Confirmatory Factor Analysis (CFA) and the calculation of Cronbach alpha coefficients (Cronbach, 1951). CFA reveals that each indicator loads significantly on its designated factor ($p < 0.01$). Further, CFA produced chi-squared-degrees of freedom ratio well below the criterion of Marsh and Hocevar (1985) with adjusted goodness-of-fit (AGFA) significantly better than a one factor model. Reliability was also gauged via the examination of Cronbach alpha coefficients that Nunnally (1978) suggests should be over 0.7 for a scale to be considered reliable. The tests resulted in the calculation of coefficients which ranged from 0.67 (resource richness) to 0.91 (for both executives' planning skills and political activity) (see Table 1).

Nine of the eleven measures were above the Nunnally (1978) criterion of 0.7 and can therefore be classified as acceptably reliable without further discussion. However, two of the measures fall just below this criterion causing concern (resource richness $\alpha = 0.67$, cultural entrenchment $\alpha = 0.69$). In contrast to the Nunnally (1978) criterion of 0.7, Peterson (1994) and Slater (1995) suggest that 0.6 is the 'criterion in use' while Nunnally (1967) originally advocated a threshold of 0.50. Consequently, coupled with the finding that the deletion of additional items would reduce the coefficient further, it was concluded that scales were well above the 'criterion in use' and thus acceptably reliable.

Hair et al. (1998) note that construct validity can be gauged in a variety of ways. The survey instrument was pretested and piloted to improve content validity (see Dillman, 1978; Churchill, 1999). However, in order to assess the validation of index operationalization, items in each scale were correlated to the whole scale. This analysis indicates that each of the correlations is both statistically significant ($p < 0.01$) and in the expected direction. This evaluation provides an indication of convergent validity (see Table 1). Discriminant validity was gauged using two tests. First, following an econometric procedure recommended by Maddala (1977), all exogenous variables were regressed on all other exogenous variables and the resultant goodness-of-fit coefficients compared to the final model. This procedure finds that all the adjusted goodness-of-fit coefficients are significantly lower than the final model and provides a tentative indication of discriminant validity. However, more robust evidence of discriminant validity was found through the analysis of chi-squared difference tests, in which the correlations between all possible pairs of constructs are once freely estimated and once set to unity (Gerbing and Anderson, 1988). All chi-square differences were significant

Table 1
Preliminary analysis of measures employed

Scale	Number of scale items	Cronbach alpha coefficient	Item-to-total correlations†		Mean	Standard deviation
			Lowest	Highest		
<i>Successful initiation of planning</i>	9	0.82	0.38	0.59	3.59	1.19
<i>Management characteristics</i>						
Executives' planning skills	6	0.92	0.75	0.82	5.17	1.03
Long-term orientation	5	0.71	0.33	0.55	4.69	0.79
Intrapreneurship	9	0.84	0.36	0.58	4.51	1.19
Perception of past success	7	0.83	0.61	0.76	5.27	0.93
<i>Firm dynamics</i>						
Competitor orientation	4	0.84	0.56	0.75	4.93	1.17
Cultural entrenchment	4	0.69	0.36	0.59	3.86	1.05
Resource richness	5	0.67	0.31	0.56	4.40	0.82
Political behavior	5	0.91	0.71	0.89	3.89	0.99
<i>Environmental factors</i>						
Competitive intensity	5	0.82	0.43	0.75	4.47	1.62
Industry-wide mindset	6	0.74	0.43	0.53	3.42	1.53

†Pearson correlation coefficient.

at the 0.05 level, suggesting that these measures are not collinear. The lowest differences were between cultural entrenchment and resource richness ($\Delta\chi^2_{(1)}=12.27$). These results suggest that the constructs under analysis are distinct and discriminately valid.

A two-stage analysis procedure was used to test the hypotheses. First, in order tentatively to explore and describe associations between the ten exogenous measures and the measure of the successful initiation of planning, zero-order correlation analysis was conducted. Table 2 documents the results of correlation analysis. Briefly, strong support emerges for H₂, H₄, and H₅–H₁₀ in that each association is in the expected direction and is highly statistically significant ($p<0.001$). Preliminary indications suggest that a long-term orientation, a competitor orientation, resource richness, and competitive intensity are all positively associated with planning initiation, while the extent of cultural entrenchment, perceptions of past success, political behavior, and an industry-wide mindset are negatively linked. However, H₁ and H₃ are not supported by correlation analysis in that executives' planning skills and management intrapreneurship are found not to be significantly associated with planning initiation (although both are in the expected direction).

The correlation analysis presented in Table 2 provides support for eight of the ten hypothesized associations (although no support is found for links between either executives' planning skills or intrapreneurship and planning initiation). However, zero-order correlation analysis might over-estimate the strength and direction of association. Consequently, a second-phase of multivariate analysis was deemed necessary. Given the nature of the hypothesized relationships, regression analysis was reviewed as a potentially appropriate form of analysis. Hair et al. (1998) argue that the three most commonly used forms of variable selection in multiple linear

regression analysis are those of forward, backward, and stepwise variable selection. However, while these forms of regression have been widely used (see McIntyre et al., 1983), Bryman and Cramer (1994, p. 245) claim that such approaches are controversial since they “afford priority to statistical criteria for inclusion rather than theoretical ones.” Therefore, consistent with the recommendations of a number of commentators (see for example Everitt and Dunn, 1991; Bryman and Cramer, 1994), forward, backward, and stepwise selection methods were rejected in favor of the enter method of model specification.

Tests for multicollinearity, linearity, normality, and homoskedasticity indicated no significant problems. How-

Table 2
Product-moment correlations between successful initiation of planning and exogenous variables

Scale	Hypothesized association	Correlation coefficient (<i>r</i>)	Interpretation of test
<i>Management characteristics</i>			
Executives' planning skills	H ₁ +	0.11	Not supportive
Long-term orientation	H ₂ +	0.43***	Supportive
Intrapreneurship	H ₃ +	0.10	Not supportive
Perception of past success	H ₄ –	–0.23***	Supportive
<i>Firm dynamics</i>			
Competitor orientation	H ₅ +	0.29***	Supportive
Cultural entrenchment	H ₆ –	–0.32***	Supportive
Resource richness	H ₇ +	0.43***	Supportive
Political behavior	H ₈ –	–0.33***	Supportive
<i>Environmental factors</i>			
Competitive intensity	H ₉ +	0.27***	Supportive
Industry-wide mindset	H ₁₀ –	–0.16**	Supportive

**Significant at the 0.01 level.

***Significant at the 0.001 level.

ever, to control for institutional factors (such as principal sector of operation), managerial factors (such as age, gender, length of tenure, and role), and industry factors (such as size and competitive intensity) Kruskal–Wallis tests were applied. For all bar one result, these tests revealed no statistical differences ($p < 0.05$) suggesting that the exogenous variables are not moderated by such institutional, managerial, or industry factors. Indeed, the incorporation of these interaction factors into the regression equation did not improve the significance of the equation. Consequently, non-significant interaction factors are excluded from the subsequent analysis. However, in the case of informant age and executive's planning skills, the Kruskal–Wallis test revealed a significant difference ($p = 0.02$). This, intuitively logical finding, demonstrates that the planning skills of executives are related to age. Consequently, to control for the moderating effects of age on the measure of executive's planning skills, an interaction factor is included in the regression analysis.

Table 3 presents the results of multiple linear regression analysis and documents both standardized regression coefficients (beta) and significance statistics. The goodness-of-fit of the regression was considered by examining both the coefficient of multiple determination (R^2) and the adjusted coefficient of multiple determination (adjusted R^2). First, the R^2 was acceptably high at 0.487. That is, the proportion of the variance of the dependent variable, around its mean that is explained by the ten independent variables is sufficiently high to claim goodness-of-fit (cf. Myers, 1990). Second, since the R^2 coefficient fails to account for the number of variables in the equation and thus tends to over-

estimate variance, the adjusted R^2 was examined. The adjusted R^2 value was 0.447 again supporting a claim of goodness-of-fit (cf. Rousseeuw and Leroy, 1987). In essence, the adjusted R^2 indicates that over 44% of the variance in the successful initiation of planning is explained by the independent variables. In essence, this supports the view that the hypothesized independent variables constitute important antecedents to planning initiation. The explanatory power of the overall model was also gauged by the use of an F -test that calculates the ratio of explained to unexplained variance in the regression equation. The F -statistic was found to be highly significant ($p < 0.001$), leading to the conclusion that the regression equation documented in Table 3, exhibits significant explanatory power (Neter et al., 1989).

Table 3 presents a regression analysis revealing that eight of the ten exogenous variables are significantly associated with planning initiation ($p < 0.05$). H_1 – H_4 respectively argue that executives' planning skills, long-term orientation, intrapreneurship, and perception of past success were associated with planning initiation. H_1 argues that the planning skills of executive's would be linked to planning initiation. Regression analysis reveals little support for a direct relationship with executives' planning skills not significantly associated (H_1) ($\beta = 0.07$, $p < 0.05$). However, the inclusion of the age* executives' planning skills as an interaction factor (as suggested in the Kruskal–Wallis test discussed previously), finds a positive association ($\beta = 0.12$, $p = 0.03$) indicating that older executives are more likely to have greater planning skills and thus initiated planning. However, correlation analysis (see Table 2) provides tentative support for H_2 and H_4 but does not support H_1 and H_3 . Regression analysis supplies a similar pattern of associations (see Table 3), with a long term orientation positively ($\beta = +0.24$), perceptions of past success negatively ($\beta = -0.15$) and both significantly (respectively, $p < 0.001$, $p < 0.05$) linked with planning initiation as hypothesized in H_2 and H_4 . However, no significant support is found for the hypothesized positive association between either intrapreneurship (H_3) ($\beta = 0.03$, $p < 0.05$) and planning initiation (see Table 3). Overall, these findings lead to rejecting H_1 although an age-moderated association is found while H_2 and H_4 are accepted and H_3 is rejected.

H_5 – H_8 respectively claim that competitor orientation, cultural entrenchment, resource richness, and political behavior are linked with the successful initiation of planning. Correlation analysis (see Table 2) indicates monotonic associations with each independent variable significantly ($p > 0.001$) linked with planning initiation. The regression analysis documented in Table 3, supports these preliminary findings with each factor significantly loading ($p > 0.05$). Such differences in the significance of the correlation coefficients and the regression coefficients indicate an over-estimation of association during bivariate correlation analysis. Nevertheless, multivariate analysis supports the hypothesized associations at acceptable sig-

Table 3
Regression estimates of the initiation of planning relationships

Scale	Hypothesized association	Standardized regression coefficient	Interpretation of test
<i>Management characteristics</i>			
Executives' planning skills	H_1+	0.07	Not supported
Long-term orientation	H_2+	0.24***	Supported
Intrapreneurship	H_3+	0.02	Not supported
Perception of past success	H_4-	-0.15*	Supported
<i>Firm dynamics</i>			
Competitor orientation	H_5+	0.14*	Supported
Cultural entrenchment	H_6-	-0.17**	Supported
Resource richness	H_7+	0.25***	Supported
Political behavior	H_8-	-0.14*	Supported
<i>Environmental factors</i>			
Competitive intensity	H_9+	0.29***	Supported
Industry-wide mindset	$H_{10}-$	-0.14*	Supported
<i>Interaction factor</i>			
Age* executives' planning skills	-	+0.12*	

*Significant at the 0.05 level.

**Significant at the 0.01 level.

***Significant at the 0.001 level.

nificance levels (competitor orientation $p > 0.05$, cultural entrenchment $p > 0.01$, resource richness $p > 0.001$, and political behavior $p > 0.01$). Hence, sufficient evidence is found to conclude that H_6 – H_8 are fully supported.

H_9 argues that competitive intensity is positively linked with planning initiation while H_{10} suggests that an industry-wide mindset is negatively associated. Zero-order correlation analysis supports the hypothesized associations (competitive intensity $p > 0.001$; industry-wide mindset $p > 0.01$). Regression analysis further supports this view and finds competitive intensity to be positively ($\beta = 0.29$) and industry-wide mindset to be negatively ($\beta = -0.14$) and both significantly (respectively, $p < 0.001$, $p < 0.01$) associated with planning initiation. These results support the acceptance of H_9 and H_{10} .

5. Conclusions and implications

While much is known of the consequences of planning processes (e.g. Miller and Cardinal, 1994; Ferrier, 2001), and Menon et al. (1999) contribute insights into the factors that affect the form of the planning process (after initiation), comparatively little is known of the factors that antecede the successful initiation of formal planning. The present article builds on existing theory to identify ten factors that may relate to planning initiation. After analyses of survey data, the evidence supports eight of the hypothesized links.

The originality and novelty of the empirical work undertaken represent the first contribution of this study. Empirical evaluations of this ‘initiation’ phase of planning (or preplanning) were lacking prior to the current study. This lacuna in extant theory and knowledge is, perhaps, all the more surprising since a number of commentators have observed that more organizations do not plan than those that generate plans (see for example Harris, 1996a), let alone achieve genuine strategizing. In this regard, the findings of the current study provide insights into the reasons why firms fail to begin the planning process, or fail to sustain early planning efforts. In this respect, a contribution of this study is the identification and evaluation of a range of factors that are argued to be antecedents to the successful initiation of formal planning. Therefore, the findings suggest that an incomplete understanding of planning dynamics will persist without an appreciation of all of the phases of planning (including initiation).

This study also contributes insights into the management-related factors that are associated with the successful initiation of formal planning. Strong evidence supports the view that firms adopting a long-term perspective are more likely to initiate planning in an effort to understand and become more responsive to long term opportunities and threats. A number of earlier studies (Aram and Cowen, 1990; Harris, 1996a) support this conclusion. Similarly, consistent with extant theory (for instance Thurston, 1983; Orpen, 1993), this study indicates that where executives

perceive immediate past performance to be successful, the instigation of planning is less likely. Overall, these findings appear to support the view that planning initiation is strongly reliant on the characteristics of firm management (see Harris, 1996a).

No evidence supports the view that either executives’ planning skills or the extent of managerial intrapreneurship are directly related to planning initiation. These findings are contrary to the suggestions of a number of earlier commentators (see for example Gibb and Scott, 1985; Hart, 1992; Carter et al., 1996). However, the uncovering of a link between skills and planning initiation moderated by age, highlights the need for further descriptive and causal research to examine the potential for associations moderated by institutional, managerial, and industry factors not measured in the current study (see suggestions for future studies).

The findings showing links between firm dynamics and planning initiation forms the third contribution of the study. Strong empirical evidence support the arguments that a competitor orientation and resource richness were positively linked and cultural entrenchment, and political behavior was negatively associated with planning initiation. As firms’ become oriented toward the activities of competitors, the need for and benefits of planning become prioritized and actioned. Further, the results indicate that the greater the management investment in financial and time resources, the more likely the success of planning initiation. This reflects the resource requirements of planning efforts and is intuitively logical, in that it seems commonsense to suggest that poorly resourced efforts are more likely to fail. However, this finding may provide a central explanation for the failure of many firms (particularly small businesses) either to initiate planning or to instigate planning successfully. Some support is found for the contention that planning activities are only really suited for larger or more resource-rich organizations.

The findings of the study also raise a number of implications for practitioners. First, through identifying eight significant factors linked with successful planning initiation, the findings of the current study suggest that practitioners embarking on planning efforts should evaluate the firm and environmental contingencies prior to beginning the process. Second, in the case of firms where planning efforts have failed to succeed, the results of this study suggest that a critical evaluation of the context of planning may provide useful insights and explanations for planning failure. Further, given the difficulties that executives, managers, and organizations appear to face on planning initiation, the findings of the current study support the view that training programs should incorporate a broader conceptualization of the planning process that reflects not only the critical importance of plan generation and implementation but also the crucial ‘phase’ of planning initiation as the most tangible evidence of strategic thinking.

Important limitations suggest caution in interpreting the findings and indicate future avenues for research. First, although efforts have been made to ensure that this study focuses on the key factors linked with planning initiation, further efforts should be made to identify, explore, and describe additional or associated exogenous factors. In particular, future studies should explore the potential moderating effects of control variables not measured in the current study (such as technological turbulence, relative cost, market growth, market concentration, market entry barriers, buyer power, seller power, technological change, competitor hostility, and market turbulence). Second, while the current study has utilized regression analysis to explore associations, the use of structural equation modeling and path analysis could assist in exploring potential indirect associations and generate a more complete view of dependent factors. Third, while recognizing the practical and methodological difficulties of longitudinal research, such a design may clarify the extent that independent factors found associating with planning initiation causally affect such behavior.

References

- Abrahamson E, Fombrun CJ. Macrocultures: determinants and consequences. *Acad Manage Rev* 1994;19(4):728–55.
- Ansoff HI. Comment on Henry Mintzberg's rethinking strategic planning. *Long Range Plan* 1994;27(3):31–2.
- Antonic B, Hisrich RD. Intrapreneurship: construct refinement and cross-cultural validation. *J Bus Venturing* 2001;16(5):495–527.
- Aram JD, Cowen SS. Strategic planning for increased profit in the small business. *Long Range Plan* 1990;23(6):63–70.
- Armstrong JS, Overton TS. Estimating non-response bias in mail surveys. *J Mark Res* 1977;14(August):396–403.
- Baer M, Frese M. Innovation is not enough. *J Organ Behav* 2003;24:45–68.
- Barnes J, Paswar A, Gilbert F. Number of factors obtained by chance: a situation study. In: Wilson KJ, Black W, editors. *Developments in marketing science*, vol. 16. Nashville, TN: Academy of Marketing Science; 1994.
- Berman JA, Gordon DD, Sussman G. A study to determine the benefits small business firms derive from sophisticated planning versus less sophisticated types of planning. *J Bus Econ Stud* 1997;3(3):1–12.
- Boeker W. Executive migration and strategic change: the effect of top manager movement on product–market entry. *Adm Sci Q* 1997;42:213–36.
- Bracker JS, Pearson JN. Planning and financial performance of small, mature firms. *Strateg Manage J* 1986;7(6):503–22.
- Brockner J. The escalation of commitment to a failing course of action: towards theoretical progress. *Acad Manage Rev* 1992;17(1):39–61.
- Brown SP, Cron WL, Leigh TW. Do feelings of success mediate sales performance–work attitude relationships? *J Acad Mark Sci* 1993;21:91–100.
- Bryman A, Cramer D. *Quantitative data analysis for social scientists*. London: Routledge; 1994.
- Butel L, Watkins A. Evolving complex organizational structures in new and unpredictable environments. *J Bus Res* 2000;47(1):27–43.
- Carrier C. Intrapreneurship in firms and SMEs: a comparative study. *Int Small Bus J* 1994;12(3):54–61.
- Carson D. The evolution of small firms. *Eur J Mark* 1985;19(5):7–16.
- Carter NM, Gartner WB, Reynolds PD. Exploring start-up event sequences. *J Bus Venturing* 1996;11(2):89–105.
- CASRO Council of American Survey Research Organizations. On the Definition of Response Rates. CASRO Special Report, The Council of American Survey Research Organisations, Port Jefferson, NY; 1982.
- Cespedes FV, Piercy NF. Implementing marketing strategy. *J Market Manag* 1996;12:135–60.
- Chatman JA, Jehn KA. Assessing the relationships between industry characteristics and organizational culture. *Acad Manage J* 1994;37(3):522–33.
- Churchill GA. A paradigm for developing better measures of marketing constructs. *J Mark Res* 1979;14(February):64–73.
- Churchill GA. *Marketing research: methodological foundations*. London: Dryden Press; 1999.
- Churchill GA, Peter JP. Research design effect on the reliability of rating. *J Mark Res* 1984;16(November):360–75.
- Cohen MD, March JG, Olsen JP. A garbage can model of organizational choice. *Adm Sci Q* 1972;17(1):1–25.
- Cronbach LJ. Coefficient alpha and the internal structure of tests. *Psychometrika* 1951;16:297–334.
- Day GS, Wensley R. Assessing advantage: a framework for diagnosing competitive superiority. *J Mark* 1988;52(April):1–20.
- De Wit B, Mayer R. Strategy formation. In: De Wit B, Mayer R, editors. *Strategy Process, content, context*. London: International Thompson Business Press; 1988. p. 69–149.
- Dess GG, Beard DW. Dimensions of organizational task environments. *Adm Sci Q* 1984;29:52–73.
- Di Maggio P, Powell D. The iron cage revisited: institutional isomorphism and collective rationality in organizations. *Am Sociol Rev* 1983;48:147–60.
- Dibb S, Simkin L. Market segmentation: diagnosing and treating the barriers. *Ind Mark Manage* 2003;30(8):609–24.
- Dillman DA. *Mail and telephone surveys: the total design method*. New York, NY: John Wiley and Sons; 1978.
- Edmondson A. Psychological safety and learning behavior in work teams. *Adm Sci Q* 1999;44:350–83.
- Everitt BS, Dunn G. *Applied multivariate data analysis*. London: Edward Arnold; 1991.
- Ferrier WJ. Navigating the competitive landscape: the drivers and consequences of competitive aggressiveness. *Acad Manage J* 2001;44(4):858–78.
- Floyd SW, Wooldridge B. Middle management strategic influence and organizational performance. *J Manag Stud* 1997;34:465–85.
- Frese MD, Hilburger FT, Leng K, Tag A. The conception or personal initiative. *J Occup Organ Psychol* 1997;70:139–61.
- Geletkanycz MA, Hambrick DC. The external ties of top executives: implications for strategic choice and performance. *Adm Sci Q* 1997;42:654–81.
- Gerbing DW, Anderson JC. An updated paradigm for scale development incorporating unidimensionality and its assessment. *J Mark Res* 1988;25(2):186–92.
- Gibb AA, Dyson J. *Stimulating the growth of owner managed firms*. Small firms research conference. U.K.: Glasgow; 1982.
- Gibb A, Scott M. Strategic awareness, personal commitment and the process of planning in the small business. *J Manag Stud* 1985;22(6):598–631.
- Gordon GG. Industry determinants of organisational culture. *Acad Manage Rev* 1991;16(2):396–415.
- Guth WD, Ginsberg A. Guest editors' introduction: corporate entrepreneurship. *Strateg Manage J* 1990;11:5–15.
- Guth WD, MacMillan IC. Strategy implementation versus middle management self-interest. *Strateg Manage J* 1986;7:313–27.
- Hair JF, Anderson RE, Tatham RL, Black WC. *Multivariate data analysis*. USA: Prentice Hall International Inc.; 1998.
- Hall DT, Goodale J, Rabinowitz S, Morgan M. Effects of top–down departmental and job change upon perceived employee behavior and attitudes. *J Appl Psychol* 1978;63(February):62–72.
- Hambrick DC, Mason PA. Upper echelons: the organization as a reflection of its top managers. *Acad Manage Rev* 1984;9(2):193–206.

- Hamel G. Strategic as revolution. *Harvard Bus Rev* 1996;(July/August): 62–82.
- Hamel G, Prahalad CK. Strategic intent. *Harvard Bus Rev* 1989:63–76.
- Hannan M, Freeman J. The population ecology of organizations. *Am J Sociol* 1977;82(5):929–64.
- Hannan M, Freeman J. Structural interim and organizational change. *Am Sociol Rev* 1984;49(2):149–64.
- Hannan M, Freeman J. Population ecology. Boston, MA: Harvard University Press; 1989.
- Harris LC. The impediments to initiating planning. *J Strat Mark* 1996a;4(2):129–42.
- Harris LC. The anti-planner's tactics to thwart planning initiation. *J Strat Mark* 1996b;4(4):239–53.
- Harris LC. Initiating planning: the problem of entrenched cultural values. *Long Range Plan* 1999;32(1):117–26.
- Harris LC, Ogbonna E. Developing a market oriented culture: a critical evaluation. *J Manag Stud* 1999;36(2):177–96.
- Hart S. An integrative framework for strategy-making processes. *Acad Manage Rev* 1992;17(2):327–51.
- Heracleous L. Strategic thinking or strategic planning. *Long Range Plan* 1998;31(3):481–7.
- Higgins SH, Hogan PT. Internal diffusion of high technology innovations: an empirical study. *J Bus Ind Mark* 1999;14(1):61–72.
- Higgins JM, Vincze JW. Strategic management: concepts cases. Chicago: Dryden; 1993.
- Hoffman A. From heresy to dogma: an institutional history of corporate environmentalism. San Francisco: New Lexington Press; 1997.
- Hooley G, Möller K, Broderick A. Competitive positioning and the resource-based view of the firm. *J Strat Mark* 1998;6:97–115.
- Hopkins WE, Hopkins SA. Strategic planning–financial performance relationships in banks: a causal examination. *Strateg Manage J* 1997; 18:635–52.
- Hunt JM, Handler WC. The practices of effective family firm leaders. *J Dev Entrep* 1999;4(2):135–51.
- Jaworski BJ, Kohli AK. Market orientation: antecedents and consequences. *J Mark* 1993;57(July):53–70.
- Judson AS. Making strategy happening. Oxford: Blackwell; 1996.
- Kamoché K. Strategic human resource management with a resource-capability view of the firm. *J Manag Stud* 1996;33(2):213–35.
- Kaplan S, Beinhocker E. The real value of strategic planning. *MIT Sloan Manag Rev* 2003;44(2):71–91.
- Kuratko DF, Montagno RV, Hornsby JS. Developing an intrapreneurial assessment instrument for an effective corporate entrepreneurial environment. *Strateg Manage J* 1990;11:49–58.
- Langston P, Clarke GP, Clarke DB. Retail saturation, retail location, and retail competition. *Environ Plann A* 1997;29:77–104.
- Likert R. The method of constructing an attitude scale. In: Fishbein M, editor. Readings in attitude theory and measurement, 1967. New York, NY: John Wiley; 1932a. p. 90–5.
- Likert RA. Technique for the measurement of attitudes. *Arch Psychol* 1932b:140.
- Maddala GS. Econometrics. Kogakusha, Tokyo: McGraw-Hill; 1977.
- Mahoney JT. The management of resources and the resource of management. *J Bus Res* 1995;33(2):91–101.
- Marsh HW, Hocevar D. Applications of confirmatory factor analysis to the study of self concept: first- and higher order factor models and their invariance across groups. *Psychol Bull* 1985;97:562–82.
- Matthews CH, Scott SG. Uncertainty and planning in small and entrepreneurial firms: an empirical assessment. *J Small Bus Manage* 1995;(October):34–52.
- McCarthy AM, Schoorman FD, Cooper AC. Reinvestment decisions by entrepreneurs: rational decision-making or escalation of commitment. *J Bus Venturing* 1993;8(1):9–24.
- McIntyre DO, Montgomery DB, Serinvasan V, Weitz BA. Evaluating the statistical significance of models developed by stepwise regression. *J Mark Res* 1983;20:1–11.
- Menon A, Bharadwaj S, Adidam PT, Edison SW. Antecedents and consequences of marketing strategy making: a model and a test. *J Mark* 1999;63:18–40.
- Miller CC, Cardinal LB. Strategic planning and firm performance: a synthesis of more than two decades of research. *Acad Manage J* 1994; 37(6):1649–65.
- Mintzberg H. The rise and fall of strategic planning. London: Prentice Hall; 1994a.
- Mintzberg H. Rethinking strategic planning: part I Pitfalls and fallacies. *Long Range Plan* 1994b;27(3):12–21.
- Mintzberg H. Rethinking strategic planning: part II New roles for planners. *Long Range Plan* 1994c;27(3):22–30.
- Moen O. SMEs and international marketing: investigating the differences in export strategy between firms of different size. *Journal of Global Marketing* 2000;13(4):7–23.
- Myers RM. Classical and modern regression with applications. Boston, MA: PWS-Kent Publishing Company; 1990.
- Narver JC, Slater SF. The effect of a market orientation on business profitability. *J Mark* 1990;54(October):20–35.
- Neter J, Wasserman W, Kutner MH. Applied Linear Regression Models. Homewood, IL: Irwin; 1989.
- Noble CH, Mokwa MP. Implementing marketing strategies: developing and testing a managerial theory. *J Mark* 1999;63(4):57–75.
- Noble CH, Sinha RK, Kumar A. Market orientation and alternative strategic orientations: a longitudinal assessment of performance implications. *J Mark* 2002;66(4):25–40.
- Nunnally JC. Psychometric theory. New York: McGraw-Hill; 1967.
- Nunnally JC. Psychometric theory. New York: McGraw-Hill; 1978.
- Oden HW. Managing corporate culture, innovation, and intrapreneurship. Westport: Greenwood Publishing Group; 1997.
- Orpen C. Strategic planning, scanning activities and the financial performance of small firms. *J Small Bus Plan Entrep* 1993;11(1):62–72.
- Parnell JA, Lester DL, Menefee ML. Strategy as a response to organizational uncertainty. *Manage Decis* 2000;38(8):520–30.
- Peterson R. A meta-analysis of Cronbach's coefficient alpha. *J Consum Res* 1994;21(2):381–91.
- Pettigrew AM. Strategy formulation as a political process. *Int Stud Manage Organ* 1997;7:78–87.
- Piercy NF. The marketing budgeting process. *J Mark* 1987;51(4): 45–61.
- Piercy NF, Giles W. The logic of being illogical in strategic marketing planning. *J Market Manage* 1989;5(1):19–31.
- Quinn JB. Managing innovation: controlled chaos. *Harvard Bus Rev* (May-June):73–84.
- Romanelli E, Tushman ML. Inertia, environments, and strategic choice. *Manage Sci* 1986;32:608–21.
- Rousseeuw PJ, Leroy AM. Robust regression and outlier detection. New York, NY: John Wiley and Sons; 1987.
- Rowden RW. Potential roles of the human resource management professional in the strategic planning process. *SAM Adv Manage J* 1999; 64(3):22–9.
- Sathe V. Implications of corporate culture: a manager's guide to action. *Organ Dyn* 1983;(Autumn):5–23.
- Shorey DJ. Entrepreneurship and the new firm. London: Croom Helm; 1992.
- Shrivastava P, Schneider S. Organizational frames of reference. *Human Relat* 1984;37(10):795–809.
- Shrivastava P, Schneider S. Basic assumption themes in organizations. *Human Relat* 1988;41(7):493–515.
- Shuman JC, Seeger JA. The theory and practice of strategic management in smaller rapid growth firms. *Am J Small Bus* 1986;11(1):7–18.
- Slater SF. Issues in conducting marketing strategy research. *J Strat Mark* 1995;3(4):257–70.
- Smith JA. Strategies for start-ups. *Long Range Plan* 1998;31(6):857–72.
- Taylor WA, Wright GH. A longitudinal study of TQM implementation: factors influencing success and failure. *Omega* 2003;31(2):97–113.

- Thurston PH. Should smaller companies make formal plans? *Harvard Bus Rev* 1983;(September–October):162–88.
- Weick K. Sources of order in under organized systems. In: Lincoln YS, editor. *Organizational theory and inquiry: the paradigm revolution*. Beverly Hills: Sage; 1985.
- Weiner Y. Forms of value systems: a focus on organizational effectiveness and cultural change and maintenance. *Acad Manage Rev* 1988; 13(4):534–45.
- Whipp R, Rosenfeld R, Pettigrew A. Culture and competitiveness: evidence from two mature UK industries. *J Manag Stud* 1989;26(6): 561–85.
- Wooldridge B, Floyd SW. The strategy process, middle management involvement, and organizational performance. *Strateg Manage J* 1990;11(March–April):231–41.
- Wooldridge B, Floyd SW. Middle management involvement in strategy and its association with strategic type. *Strateg Manage J* 1992;13:265–73.
- Young GJ, Charns MP, Shortell SM. Top manager and network effects on the adoption of innovation management practices. *Strateg Manage J* 2001;22:935–51.
- Zahra SA, Covin JC. Contextual influences on the corporate entrepreneurship–performance relationship: a longitudinal analysis. *J Bus Venturing* 1995;10(1):43–58.