

RESEARCH NOTES AND COMMUNICATIONS

STRATEGIC PLANNING AS COMPETITIVE ADVANTAGE

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Since 1970, over forty empirical studies have examined the performance consequences of formal strategic planning. This line of research has drawn heavy criticism from reviewers on methodological grounds, and has produced confusing, apparently contradictory results. This article reevaluates the planning-performance relationship from a resource perspective, arguing that strategic planning does not satisfy the criteria for sustainable competitive advantage—although it may produce economic value, it is easily imitated and may be substitutable. The article suggests that previous studies produced inconsistent results because they did not account for the dissemination of strategic planning over time, or for industry differences in strategic planning factor markets. An empirical test in two industries finds that formal strategic planning and financial performance are unrelated in a 'planning equilibrium' industry, but positively related in an industry with strategic planning factor market imperfections.

INTRODUCTION

Around 1970, empirical researchers began to examine the performance consequences of formal strategic planning (e.g., Thune and House, 1970; Ansoff *et al.*, 1970; Herold, 1972), and over 40 planning-performance studies have appeared since that time. However, in recent years this line of research has slowed to a trickle, and with good reason: previous studies lacked theoretical grounding, produced a bewildering array of contradictory findings, drew heavy criticism for inadequate methodologies, and had little or no discernable net impact on strategic management research or practice (Shrader, Taylor, and Dalton, 1984; Pearce, Robbins, and Robinson, 1987; Pearce, Freeman, and Robinson, 1987). No meta-analysis of previous studies has yet appeared, and empirical work in this area has quietly vanished from strategy scholars' research agendas.

Nonetheless, it seems evident that the planning-performance relationship bears significantly on strategic management research and practice, and that strategy scholars should not abandon this line of inquiry altogether. This article reevaluates the planning-performance research, arguing that previous studies suffered mainly from poor theoretical grounding, blinding them to critical intervening variables, particularly the nature of the strategic planning factor market. Drawing on the strategic planning literature and the resource view of the firm (Lippman and Rumelt, 1982; Wernerfelt, 1984; Hansen and Wernerfelt, 1989; Barney, 1986a,b, 1991), the article suggests not only that planning-performance research can produce meaningful results, but that it may be possible to reconcile apparent contradictions in previous studies. The following section briefly reviews the planning-performance research and presents the theoretical approach, and subsequent sections present hypotheses and an empirical test.

Key words: Strategic planning, competitive advantage, resource theory

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STRATEGIC PLANNING AND FINANCIAL PERFORMANCE

The first planning–performance studies emerged after the rapid expansion of formal strategic planning in the 1960s (Henry, 1980). Although the studies employed diverse methodologies and measures, they shared a common interest in exploring the financial performance consequences of the basic tools, techniques, and activities of formal strategic planning, i.e., systematic intelligence-gathering, market research, SWOT analysis, portfolio analysis, mathematical and computer modeling, formal planning meetings, and written long-range plans. The studies did not generally examine the relationship between performance and planning *skill*, but rather the relationship between performance and the extent of formal planning, variously referred to as ‘comprehensiveness,’ ‘rationality,’ ‘formality,’ or simply, ‘strategic planning.’

The planning–performance research has been reviewed extensively elsewhere (e.g., Kudla, 1980; Armstrong, 1982, 1986; Shrader, Taylor, and Dalton, 1984; Rhyne, 1986; Pearce, Robbins, and Robinson, 1987; Pearce, Freeman, and Robinson, 1987), and from these reviews emerged the unanimous conclusion that the studies were confusing, contradictory, and impossible to reconcile. For example, in concluding their review, Shrader *et al.* (1984:154) stated flatly, ‘There is no systematic relationship between long-range planning and organizational performance,’ and Pearce, Freeman, and Robinson (1987:671) concluded that, ‘Empirical support for the normative suggestions that all firms should engage in formal strategic planning has been inconsistent and often contradictory.’ To explain the contradictions, the reviewers focused on methodological flaws, including failure to account for key contingency variables, incomplete and unreliable planning measures, cross-sectional designs, heterogeneous samples, small sample sizes, and nonrobust statistical procedures.

Overall, the reviewers found that positive planning–performance relationships outnumbered negative ones. In 15 studies reviewed, Armstrong counted 10 positive planning–performance relationships (though only five were significant at $p < 0.05$), two negative relationships (though, in fact, neither was statistically significant), and three nonsignificant

relationships. Armstrong (1986) later updated this count to 11 positive relationships, 2 negative, and 3 nonsignificant. In their broader review of 31 studies, Shrader *et al.* (1984) counted 20 positive relationships, 11 nonsignificant relationships, and no negative relationships.

Although these counting exercises supported the presumption of a positive planning–performance relationship (or at least a nonnegative one), reviewers rejected this conclusion because of the methodological problems noted above, and because of variance in the research methodologies employed across studies (Foster, 1986). In his review, Starbuck (1985) concluded that the more rigorous the methodologies, the more the correlations tended toward zero, and indeed the correlations did diminish as methodologies became more sophisticated over time. Armstrong (1982; 1986) raised the additional possibility that researchers’ and journal referees’ biases may have skewed results in favor of formal planning, concluding that, ‘the issue is far from resolved. We need research that is conducted with considerably more care.’ (1986:184)

Although the reviewers raised serious problems, the resource view of the firm may facilitate a reconciliation. In contrast to Porter’s notion that firms achieve competitive advantage by positioning themselves in structurally-profitable industries and strategic groups, the resource view asserts that a firm’s competitive advantage may arise from idiosyncratic, firm-specific differences that produce persistent, supernormal profits (Teece, 1982; Rumelt, 1984; Wernerfelt, 1984), for example organizational climate (Hansen and Wernerfelt, 1989), culture (Barney, 1986b; Fiol, 1991), or administrative skill (Powell, 1990). The resource view holds that, in order to generate sustainable competitive advantage, a resource must provide economic value and must be presently scarce, difficult to imitate, nonsubstitutable, and not readily obtainable in factor markets (Barney, 1986a; Dierickx and Cool, 1989; Peteraf, 1990).

Planning adherents have long asserted that formal strategic planning provides benefits that ultimately produce economic value (Steiner, 1979; Thompson and Strickland, 1987)—it generates information, it ensures a thorough consideration of all feasible options, it forces the firm to evaluate its environment, it stimulates new ideas, it increases motivation and commitment, it enhances internal communications and interaction,

and it has symbolic value to stakeholders. And, although critics rejected previous empirical findings, the counting exercises described earlier do not contradict this view, since none of the studies produced statistically-significant negative results.

From the resource view, however, strategic planning cannot produce sustainable competitive advantage unless, in addition to providing economic value, it is also scarce and imperfectly imitable, and therein lies the problem. Evidence suggests that, in most highly-developed economies, strategic planning tools and techniques have become widely disseminated over the past 25 years (Henderson, 1979; Henry, 1980, 1981; Wheelan and Hunger, 1990) due to a range of factors, including increased enrollments in business degree programs and executive seminars, interfirm migration of executives and planning staff, low entry barriers in the strategic planning consulting industry, the proliferation of strategic planning books and articles, and bandwagon effects (Abrahamson and Bartner, 1990). This dissemination demonstrates that isolating mechanisms do not protect strategic planning from competitive imitation, and some researchers have even argued that other resources, such as ideologies (Brunsson, 1982) and confident presumptions (Weick, 1987), may act as effective strategy substitutes. In the present day, one would expect to find strategic planning or an effective substitute in nearly all organizations except those where dissemination has been impeded either through lack of information (as in lesser industrialized nations), or a powerful nonplanning bias or tradition.

If firms derive economic value from strategic planning, but cannot protect it from competitive imitation, then one would have expected the earliest planning–performance studies to report positive planning–performance relationships, with later studies reporting nonsignificant (but nonnegative) findings as competitive imitation occurred. Armour and Teece (1978) cited this phenomenon in their investigation of the dissemination of M-form structures, and it is perfectly consistent with the findings in previous planning–performance studies. Furthermore, if planning does produce economic value, one would expect some firms to carry strategic planning to dysfunctional extremes, with others substituting ideologies and shared convictions for formal planning. These trends were observed

clearly in the 1980s, with early planning adherents admitting planning excesses (e.g., GE's decision to eliminate in-house planning staff [Hamermesh, 1986]), and other firms employing 'culture' and 'shared values' (Peters and Waterman, 1982) as substitutes for traditional formal integrating devices.

We need not condemn previous planning–performance studies for incompetence or duplicity—taken as a whole, they have produced precisely the expected result if strategic planning is an economically valuable, but imitable and substitutable, strategic factor. The studies may have used imperfect methodologies, but the methodologies did not produce the apparent contradictions; these resulted from our own assumption that the planning–performance relationship should remain constant over time, and from the studies' lack of theoretical grounding, which caused them to neglect differences in strategic planning dissemination. Because of differences in sample design and measurement, it would prove extraordinarily difficult to reconcile previous studies by assessing these differences retroactively. The present empirical research examines the planning–performance relationship in two industries with significant variance in planning dissemination.

HYPOTHESES

It is predicted that, in industries where strategic planning has become widely disseminated (i.e., where a condition approximating 'planning equilibrium' exists), the correlation between formal strategic planning and profitability does not significantly differ from zero. In modern industrialized nations such as the U.S., it is expected that one would find such strategic planning factor markets in most stable, established industries competing in reasonably competitive product markets. As such, the first hypothesis is as follows:

H1: In 'planning equilibrium' industries, the correlation between formal strategic planning and profitability does not differ significantly from zero.

It is also predicted that positive planning–profitability correlations exist in 'planning disequilibrium' industries, i.e. where formal strategic planning is imperfectly disseminated.

Thus, the second and third hypotheses are as follows:

H2: In 'planning disequilibrium' industries, the correlation between formal strategic planning and profitability differs positively and significantly from zero.

H3: The correlation between strategic planning and profitability is significantly greater in 'planning disequilibrium' industries than in 'planning equilibrium' industries.

DATA AND MEASURES

Although a test of these hypotheses would ideally involve large samples of planning equilibrium and disequilibrium industries, the current test focuses on two industries with significant differences in strategic planning factor markets—further testing among larger industry samples will be needed to confirm the present findings. The sample, data collection, and measurement for this study have been described in detail elsewhere (Powell, 1992). The empirical study is focused on single-business firms in two U.S. four-digit SIC-code industries: wooden upholstered furniture (SIC 2512) and women's dresses (SIC 2335). The former was chosen for testing H1 because the industry demonstrated market and competitive stability (using objective measures described in the earlier article), and because formal planning was widely disseminated, according to assessments provided in interviews with industry participants, consultants, and experts. SIC 2335 was chosen for testing H2 because, according to assessments provided in industry interviews, formal strategic planning was not yet widely disseminated due to a long-standing entrepreneurial tradition. Other criteria for selection are described in the earlier article.

Using Dillman's Total Design Method (1978), mail surveys were mailed to the CEOs of all firms in SIC codes 2512 and 2335. 113 firms responded (68 in SIC 2512, and 45 in SIC 2335), for a response rate of 20.8 percent. This was considered acceptable, in light of the high proportion of privately-held firms, the direct involvement of CEOs, and the fact that the sample represents a significant proportion of two relatively homogeneous industry populations.

The external validities of the samples were established by comparing sample data with known population parameters, and a test for interrater reliability was conducted.

The dependent variable, profitability over a 3 year period, was measured subjectively, but the convergent validity between subjective and objective measures was established. The strategic planning scales—measuring goal-setting, scanning, and analysis—were based on scales developed by Miller (1987), and are given in the Appendix. The scales were tested for reliability using Cronbach's alpha (Cronbach, 1951), and the coefficients fell between 0.77 and 0.79, a range generally considered acceptable for such scales (Van de Ven and Ferry, 1979).

A measure of CEO personality—locus of control (Rotter, 1966)—was included in the survey, since CEOs with internalized loci of control may provide overly optimistic performance estimates, while attributing that performance to their own strategic planning and foresight (Miller, Kets de Vries, and Toulouse, 1982). The scale is given in the Appendix. Firm size and age were also measured, since these may confound planning–performance correlations (Fredrickson, 1984; Shepherd, 1972; Schoeffler, Buzzell, and Heany, 1974). Firm size was defined as the natural logarithm of the number of full-time employees (Blau and Schoenherr, 1971; Miller, 1987), and firm age as the number of years since incorporation.

RESULTS

Table 1 gives the means and standard deviations for all variables for each industry, along with a zero-order correlation matrix. Results for the hypothesis testing, which uses partial correlation coefficients (controlling for firm size, age, and CEO locus of control), are given in Table 2. Table 1 corroborates assessments obtained in the interviews—furniture firms scored significantly higher than apparel firms on all formal strategic planning dimensions (for overall planning, the difference between the means is significant at $p < 0.05$, using a two-tailed t -test).

Hypothesis 1 predicts that, in the furniture industry, where a relative planning equilibrium exists, the partial correlation between strategic planning and profitability does not differ signifi-

Table 1. Descriptive statistics and correlations

No. Variable	m	s.d.	I	Furniture industry							
				2	3	4	5	6	7	8	
1. Goal-setting	3.42	0.98	1.00								
2. Analysis	2.42	1.16	0.65	1.00							
3. Scanning	2.35	1.28	0.35	0.55	1.00						
4. Overall planning	2.60	0.99	0.72	0.93	0.78	1.00					
5. Firm size (ln emps)	5.52	1.31	0.15	0.52	0.33	0.47	1.00				
6. Firm age	4.35	1.06	-0.01	-0.08	-0.06	-0.07	0.01	1.00			
7. CEO locus of control	1.60	0.76	-0.25	-0.19	-0.36	-0.30	0.04	-0.02	1.00		
8. Profitability	3.40	0.96	-0.04	0.06	0.12	0.08	0.06	-0.17	1.27	1.00	

No. Variable	m	s.d.	I	Apparel industry							
				2	3	4	5	6	7	8	
1. Goal-setting	3.01	1.14	1.00								
2. Analysis	2.05	1.11	0.63	1.00							
3. Scanning	1.74	1.19	0.50	0.52	1.00						
4. Overall planning	2.15	0.97	0.78	0.91	0.78	1.00					
5. Firm size (ln emps)	5.23	1.34	0.47	0.57	0.60	0.66	1.00				
6. Firm age	4.38	0.86	0.08	0.12	0.08	0.12	0.10	1.00			
7. Locus of control	1.76	0.89	-0.12	-0.37	-0.31	-0.36	-0.45	0.17	1.00		
8. Profitability	3.36	1.15	0.40	0.23	0.38	0.36	0.19	-0.32	-0.44	1.00	

cantly from zero. As Table 2 shows, this hypothesis is supported by the data—the planning–performance correlations range between $r = 0.01$ and $r = 0.13$ for the four planning variables, the correlation for overall planning is $r = 0.06$, and none of the coefficients differs significantly from zero.

Hypothesis 2 predicts that, in the apparel industry, where a relative planning disequilibrium exists, the partial correlation between planning and profitability differs positively and significantly

from zero. As shown in Table 2, Hypothesis 2 is supported by the data. In the apparel industry, all four coefficients are positive (ranging between $r = 0.14$ and $r = 0.47$), three of the four are statistically significant, and the correlation between profitability and overall planning is $r = 0.36$ (significant at $p < 0.05$). Table 2 also indicates support for Hypothesis 3, showing that three of the four coefficients are significantly greater in the apparel industry than in the furniture industry.

Table 2. Hypothesis testing: Correlations with profitability

	Furniture (H1)	Apparel (H2)	Difference (H3)
Goal-setting	-0.13	0.47***	*** ¹
Analysis	-0.04	0.14	ns
Scanning	-0.01	0.37**	**
Overall planning	-0.06	0.36**	**

Key to statistical tests: * = $p < 0.10$, ** = $p < 0.05$, *** = $p < 0.01$.

All *t*-tests are two tailed, and control for firm size, age, and CEO locus of control.

¹The statistical significance of the difference between the correlation coefficients was tested using a normal curve test and R. A. Fisher's *r* to *z* transformation.

DISCUSSION

The results suggest at least three different, and offsetting, planning–performance effects: (1) a negative cross-industry effect—even though strategic planning was more widely practiced in the ‘planning equilibrium’ industry, the planning–performance correlation was significantly lower; (2) a zero within-industry effect in the ‘planning equilibrium’ industry—the planning–performance correlation was near zero in the furniture industry; and (3) a positive within-industry effect in the ‘planning disequilibrium’ industry—the planning–performance correlation was positive and significant in the apparel industry. Since none of the previous planning–performance studies



controlled for planning equilibria (many were conducted using *Fortune* 1000 or Compustat data bases, where a large number of heterogeneous industries were represented, in addition to widespread differences in product diversification), their findings reflected various, confounding combinations of these three effects.

The data do not support the conclusion that furniture industry firms should reduce or abandon current strategic planning levels, despite the non-significant planning–performance correlations—the correlations merely reflect the industry’s planning equilibrium. If a significant number of competitors abandoned strategic planning, one would predict the eventual emergence of a positive planning–performance relationship, and a subsequent return to the present equilibrium.

In the apparel industry, some nonplanning firms probably would benefit from increased strategic planning. The findings reflect the fact that, in addition to ongoing market instability (resulting primarily from its fashion orientation), this industry recently endured the competitive instability of intensified foreign competition. The traditional entrepreneurial, nonplanning orientation of many firms, which created the industry’s planning disequilibrium, probably fit the ongoing market instability, but the added competitive instability defied conventional thinking in the industry, and perhaps caught entrepreneurial firms unprepared. The data suggest that the firms that prospered despite the threat were those that systematically monitored their environments.

CONCLUSIONS

Since the origins of the Business Policy field in the 1950s, researchers have concerned themselves with the attributes and impacts of strategic planning, and this concern increased with the expansion of modern strategic management research. As such, it is somewhat disturbing, and a minor source of embarrassment, that the planning–performance relationship remains so poorly understood. This article argues that researchers should reconsider the planning–performance research, but should approach the issue with more secure theoretical footing. The article provides one theoretical approach based on the resource view of the firm, and describes an empirical trial based on this perspective.

The limitations of this study have been discussed elsewhere (Powell, 1992), but limitations resulting from the small industry sample ($n = 2$) deserve special mention in the present context. Clearly, the article’s central conclusion—i.e., that planning and performance are more highly correlated in planning disequilibrium industries—remains tentative in the absence of empirical support among a larger industry sample. From the current data, one might reasonably conclude, for example, that the greater degree of planning in the furniture industry reflects industry stability rather than a planning equilibrium, and that planning and performance are more highly correlated in unstable industries. Although the researcher attempted to establish significant differences in planning equilibria using measures other than the extent of planning (including anecdotal measures), the results are only suggestive, and much larger samples of industries with significant planning equilibrium differences are needed to corroborate the present conclusions.

A related limitation is the assumption that strategic planning provides economic value. This assumption was adopted because it was consistent both with the preponderance of the strategic planning literature, and with findings in previous planning–performance research. However, this assumption is not unassailable, and the findings could be interpreted as indicating planning disequilibria in both the furniture and apparel industries, with zero net economic value in the furniture industry and positive net economic value in the apparel industry. The researcher does not believe this criticism withstands evidence to the contrary, but did attempt to exclude this hypothesis *a priori* by exercising diligence in selecting the industries studied—an attempt was made to find industries with different levels of planning dissemination, and pretest interviews suggested (and the field study confirmed) that planning was, indeed, more widely disseminated in the furniture industry; certainly if planning has zero economic value in the furniture industry, then its widespread dissemination would require explanation. However, the researcher urges other strategy scholars to test the current interpretation using alternative methodologies.

One unexpected, but potentially important, contribution of this study is its linkage of strategy process with strategy content. Traditionally,

strategy researchers have used process and content as fundamental organizing categories for conference proceedings, textbooks, and pigeonholing one another's research interests. However, by viewing strategy process as a potential source of competitive advantage, this article addresses process and content issues simultaneously, and suggests that the process-content division may be arbitrary and limiting to the field. If process is a strategic choice with competitive advantage implications, then process and content are not mutually exclusive, but both belong to a larger construct: using resource language, both are 'resources' or 'strategic factors.' As such, process and content are probably more similar than generally thought, and may not stand, in the long run, as fundamental organizing categories for the field.

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APPENDIX: MEASUREMENT SCALES

Strategic Planning. Respondents were asked to indicate, on a scale of 0-5, the accuracy of 11 statements concerning their firms' strategy-making activities. The scale was anchored at either extreme with the words 'Very Accurate' or 'Not at all Accurate.' The statements, with the variable being measured in parentheses, were as follows:

1. We have broad, long-range goals known to all managers (GOALS).
2. We have specific, short-term goals known to all managers (GOALS).
3. Our firm's actions are based more on formal plans than on intuition (ANALYS).
4. We have a manager or department devoted exclusively to formal planning (ANALYS).
5. We hold regular managers' meetings to discuss overall strategy (ANALYS).
6. We use mathematical and computer models as planning aids (ANALYS).
7. We have a written plan for the next 12 months (ANALYS).

8. Our planning outlook is more long-term than short-term (ANALYS).
9. We search systematically for information about our competitors (SCANNNG).
10. We use special market research studies (SCANNNG).
11. We search systematically for new products, acquisitions, and investments (SCANNNG).

CEO Locus of Control. The CEOs were asked to indicate, on a scale of 0-5, the accuracy of five statements concerning their own values and attitudes. The scale was anchored at either extreme with the words 'Very Accurate' or 'Not at all Accurate'. The statements were as follows:

1. Becoming a success is a matter of hard work; luck has little or nothing to do with it.
2. Getting ahead largely means being at the right place at the right time.
3. For the most part, my firm's success is controlled by forces too complex to understand or control.
4. I have found that I can control my firm's environment to a large extent.
5. Many times I feel I have little or no influence over what happens inside my firm.