

Published in *Strategic Marketing and Management*, H. Thomas and D. Gardner (eds.), John Wiley & Sons, Ltd, 1985, pp. 73-87. Reprinted with permission.

Evidence on the Value of Strategic Planning in Marketing: How Much Planning Should a Marketing Planner Plan?

J. Scott Armstrong and David J. Reibstein
Department of Marketing, Wharton School,
University of Pennsylvania, Philadelphia, Pa. 19104

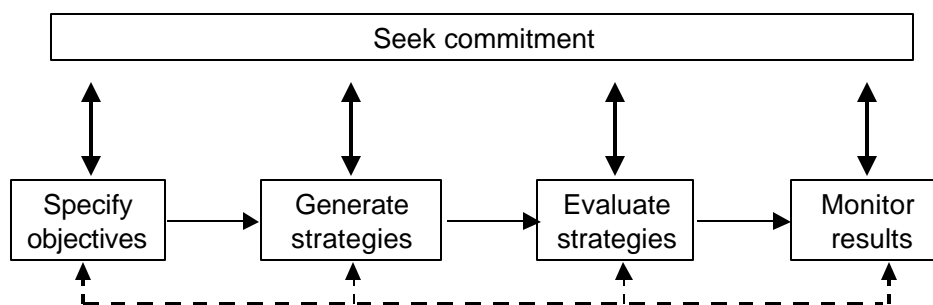
What evidence exists on the value of formal planning for strategic decision-making in marketing? This paper reviews the evidence. This includes two tests of face validity. First, we use the market test: Are formal procedures used for marketing planning? Next, we examine expert prescriptions: What do they say is the best way to plan? More important than face validity, however, are tests of construct or predictive validity: What empirical evidence exists on the relative value of formal and informal approaches to marketing planning? The paper concludes with suggestions on the types of research that would be most useful for measuring the value of formal marketing planning.

Before reviewing the evidence, we present a framework for the formal planning process.

The Formal Planning Process

Although various formulations differ slightly, the basic framework for corporate strategic planning can be described by five steps: specify objectives, generate alternative strategies, evaluate strategies, monitor results, and seek commitment. Many corporate planners argue that each of these steps should be carried out in a formal manner (that is with operational guidelines and presumably with each step written out). The relationships among the various steps are shown in Figure 1. A detailed description of each of these steps is provided in Armstrong (1983).

Figure 1. Formal strategic planning process



The various steps in the planning process have been studied by researchers in organizational behavior. This research, summarized in Armstrong (1982), suggests that explicit objective setting and monitoring of results are especially important to the success of planning. In addition, research on group problem-solving has implied that the development of alternative strategies should be helpful (Janis and Mann, 1977).

Field research on the value of corporate strategic planning has been of limited value in identifying which of these steps are more important. The one exception was that explicit attempts to involve key stakeholders (commitment seeking) did tend to be related to the profitability of firms (Armstrong, 1982).

Formal strategic planning is not expected to be useful in all situations. With the exception that formal planning tends to be useful in situations involving large changes (Armstrong, 1982), the research has been of little help in identifying the situations in which formal strategic planning is most useful. Various authors have suggested aspects of situations where planning should be valuable. For example, planning should be useful in situations that are complex and where uncertainty is high (e.g. the introduction of a new technical product). It should also be useful where a cooperative effort is required.

The Market Test

To what extent do marketing planners follow the formal five-step procedure described above? To examine this, we reanalyzed data from Hopkins (1981), who had surveyed 267 manufacturing and service firms that prepare formal marketing plans. Almost all of the respondents were senior marketing managers who were responsible for the preparation of their company's marketing plan.

Hopkins (1981) summarized the 'features' included by the companies in their marketing plans in his Tables 12, 13, and 14. We reclassified these features according to our five-step procedure. This gave us a rough indication of the extent to which formal processes were used. The setting of objectives and the generation of strategies were the features appearing most often in company plans. Only one-third of the firms discussed the evaluation of strategies, one-fifth monitored results, and a negligible percentage included a discussion of commitment. These results are summarized in the first row of Table 1.

Table 1. Use of Formal Planning Process for strategic Marketing: The Market Test

Sources	Identify objectives		Generate strategies			Evaluate strategies	Monitor results	Gain commitment
	Marketing	Corporate	Explicit	Multiple	Contingency			
Hopkins (1981) (267 firms): 'Spelled out in detail'	80	n.a.	100*	30	24	36	20	0
Wharton School, Marketing Planning Seminar (50 planners): "Procedures"	38	10	22	0	0	4	0	4

n.a. information not available

* Presumably, only those procedures that asked for an explicit strategy were included in this sample.

As an alternative to the examination of marketing plans, we considered surveys on planning practices. Unfortunately, we found no prior studies that would lend themselves to analysis. Coe (1981) used a survey to assess usage of formal strategic planning techniques, but this was limited to techniques for the generation and evaluation of strategies; she did not examine the complete planning process.

To gain additional information on the use of formal planning, we surveyed 50 participants in a marketing planning seminar for executives. The program was sponsored by the Wharton School Marketing faculty in January 1982. About two-thirds of these participants were from marketing functions. They had substantial experience with planning as 54 percent reported planning to be 'a major part of my job' and another 32 percent said it was 'some aspect of my job'. Over 90 percent reported planning to be 'useful' or 'very useful' (the top two categories on a five-point scale) for strategic decision-making in their organizations.

A closer examination of the Wharton survey revealed a different picture of the use of formal planning, however. This survey, self-administered in a group setting, asked: 'What are the different steps involved in your company's procedure for developing its marketing strategy?' Of the 42 respondents to this question, 12 described only data that they collected, and two described administrative steps. The remaining 28 described something resembling a planning process. Of these, 19 (38 percent of total sample) said they examined objectives, and five (10 percent) said they looked at overall corporate objectives. Eleven respondents (22 percent) mentioned that explicit strategies should be developed, but none suggested the need to look at alternative strategies. Two (4 percent) said strategies were evaluated, none mentioned monitoring, and two (4 percent) mentioned implementation. In short,

their stated procedures for formal planning did not follow the entire five-step process of Figure 1, nor did they describe formal procedures that fell outside of our five-step process. A summary of the procedures is provided in the second row of Table 1.

Expert Prescriptions

Two types of sources were used to examine expert prescriptions. The first, 'published sources', represents the writing of experts. To be included, the source had to be published (book, paper in journal, or monograph); it had to relate to marketing; and it had to be a source where the reader would expect to find a comprehensive treatment of the planning process. The second, 'company sources', was based on procedural manuals for marketing planning used by large corporations. Presumably, these were written by experts who are involved with actual marketing problems. These sources frequently covered topics other than the planning process. For example, some would devote much consideration to the situation in which planning was to be used, and some would go into detail on techniques that could be used in a particular phase of the planning process. We were not selective; we used all sources that we could obtain that met the above criteria.

Each source was coded according to how closely it followed the five-step process summarized in Figure 1. This coding was not simple. Few of the sources drew upon the corporate strategy literature. Thus the format and the jargon varied considerably from that used in corporate strategy.

In speaking of 'objectives', some sources restricted themselves solely to marketing objectives, apparently under the assumption that these objectives would be consistent with the organization's overall objectives. Other sources stressed the need to view marketing strategy as part of a larger system. The latter viewpoint is more consistent with the corporate strategy literature, which states that one benefit of explicit planning is to ensure that the various components of the system are consistent with one another. Formal techniques in this area would include checklists, non-directive interviews of key stakeholders, and survey research.

The 'generation of strategies' in corporate planning has stressed three aspects. First there is a need for an explicit strategy. Second, it is desirable to examine alternative strategies. Third, contingency strategies should be developed in case the organization's environment or capabilities change. Formal approaches here would draw upon such techniques as checklists, brainstorming, PIMS (Anderson and Paine, 1978), experience curves, and structured group meetings.

The 'evaluation of strategies' refers to formal procedures for rating the possible outcomes against the stated objectives. At the simplest level this might involve checklists with subjective ratings. It would also include such techniques as cost accounting, survey research, regression analysis, decision trees, Delphi, mathematical programming, or the devil's advocate.

To 'monitor results' in an explicit way, one would look for procedures outlining how to track inputs and outputs (e.g. surveys, cost accounting), what results would lead to change to a contingency plan, when to schedule periodic reviews, and when the plan should be revised. PERT charts would be relevant to monitor the implementation of the strategy.

Finally, explicit approaches for 'gaining commitment' would include procedures for identifying who should be involved in the planning process (i.e. which stakeholder groups), when they should be involved (e.g. in which phases of the planning process), and how should they be involved (e.g. receive information, provide information, or participate in decision-making).

This coding procedure was then applied to both published and company sources as described in the following sections.

Published sources

Our intent was to provide a complete listing since 1970 of all published sources where the reader might expect to find a comprehensive approach to marketing planning. Of course, the reader's expectations may not have been matched by the author's intent. For example, Boyd and Larreche (1980), Day (1975) and Wilson et al. (1978) said that they did not intend their papers to be comprehensive (personal communication).

Many sources were suggested to us by experts in marketing planning.*[?] Among these was the anthology by Guiltinan and Paul (1982). References in these sources led to additional sources. Finally, we circulated various drafts of this paper during a 6-month period in an attempt to find additional sources.

Initially, we coded each source independently. A source was coded as 'brief mention' when the topic was mentioned but was not discussed in any substantive manner. If it then went on to describe operational procedures it was labeled as a 'discussion'. Next we met to discuss our codings. We also sent copies of this paper to the authors of each source to determine how they would code their own work. Our ratings are provided in Table 2 (ratings by the authors are also provided if they differed from ours).

Table 2. Expert Recommendations On Planning Process

Sources	Identify objectives		Generate strategies			Evaluate strategies	Monitor results	Gain commitment
	Marketing	Corporate	Explicit	Multiple	Contingency			
<i>Published by experts</i>								
Abbell ^a and Hammond (1979)	*a ⁺	a ⁺⁺	**	*a ⁺		**		*a ⁺
Boyd ^d and Larreche (1980)			**					
Buijs (1979)	*		**	*		*		
Day ^a (1975)	*	*	*	*	*	a ⁺⁺	*	
Hopkins (1981)	*		**			*	*	
Jain (1981)	**	**	**			*		*
Kollat <i>et al.</i> (1972)	**	*	**			*	*	
Luck ^a and Ferrell (1979)	*a ⁺	a ⁺	**	*	*	**	**	
Murray (1979)								
Schanck (1979)	*	*	*					
Stasch ^a and Lanktree (1980)	*					*		**
Webster (1979)	*	a ⁺	**a ⁻			a ⁺	*	
Wilson, George, ^a and Solomon (1978)	*		*a ⁺	a ⁺	a ⁺	*		**
<i>Percentage of experts recommending Company prescriptions Hopkins (1981): '35 Firms'</i>	85	54	92	46	23	77	38	31
<i>Percentage of firms recommending</i>	94	11	89	9	9	20	11	9

* Brief mention; ** discussion.

Concerning objectives, few sources took a systems viewpoint. That is, rather than looking at all who are affected by the marketing plan, they looked only at 'marketing objectives'. Further, this viewpoint was narrowly defined, with the emphasis upon subgoals, such as market share. This conclusion was reached independently in a review by Anderson (1982).

Although all of the sources saw a need for generating explicit strategies, it was not so common for them to recommend the generation of multiple strategies, and it was even less common to recommend the creation of contingency plans. Evaluation of strategies, however, received much attention.

The monitoring of the plan and commitment were given modest consideration. However, as with the other phases, the experts were recommending much more formality in these areas than currently exists. (Compare their prescriptions with the estimated use of formal planning in Table 2.)

[?] Vijay Mahajan was especially helpful in our search for relevant sources.

^a These authors responded to our request for feedback on the ratings. An a+ means that the authors coded their publication as more comprehensive than we did, while an a- means their rating was towards 'less comprehensive.'

Company sources

Hopkins' (1981) survey also described the planning processes recommended by each of 38 selected firms. These 38 had been selected in an attempt to provide a wide range of approaches. This sample included most of the procedures considered to be exemplary (personal communication with Hopkins). We discarded three firms (Exhibits 21, 29 and 36 in Hopkins) as the documentation seemed incomplete.

The planning guidelines from Hopkins, summarized at the bottom of Table 2, suggest an even more narrow viewpoint than that provided in the published sources. Within the scope of these planning guidelines, little attention was given to marketing as part of a system; alternative and contingency strategies were seldom requested; little attention was given to evaluation; and even less attention was given to procedures for monitoring results and gaining commitment. It was interesting to note that none of the firms in Hopkins' sample is known to have included the complete five-step procedure in their set of guidelines for preparing marketing plans. (Hopkins said that the procedures for some firms were considerably more extensive than reported in his exhibits, so our summary may understate the prescriptions for formal planning.)

Although expert prescriptions are more favorable to the use of formal planning than the market test, the experts also ignored steps in the planning process. These omissions were more common by those experts who are closest to the planning process. Academic experts ignored fewer steps. In particular, they were more likely than the company experts to recommend an explicit evaluation of strategies.

Empirical Evidence

If one argues that marketing planning is a unique activity, and that tests on the value of formal planning must be carried out in a marketing context, the situation is bleak. We were unable to find a single published study that presented an empirical test on the value of formal planning for marketing. In other words, there were no studies that compared formal and informal processes to determine which led to the more successful performance by a firm.

Possibly our search has not been adequate. We were, however, aided by experts in the field, we made a library search at the University of Pennsylvania, early versions of this paper were circulated to the people cited in Table 2.1.2, and, a version of this paper was presented at the University of Illinois conference on marketing planning in April 1982. Numerous leads were provided but few of them contained empirical evidence on the value of formal planning. Furthermore, Stasch and Lanktree (1980) reached a similar conclusion when they studied the process used to develop the annual marketing plan.

An alternative position, one that seems reasonable to us, is that marketing merely represents a subset to the decisions examined by corporate planners. (This viewpoint is shared by many practitioners; see Hopkins, 1981, Tables 1 and 3.) The research on planning provides no reason to expect that the process for formal strategic planning should differ if one examines only that subset of decisions involving marketing strategy.

To assess the extent to which authors drew upon the research on planning from corporate strategy and organizational behavior, we used the review in Armstrong (1982) and asked what percentage of the 26 field studies in corporate strategy and the 24 studies in organizational behavior were cited by each author advocating formal planning for marketing. The results were striking: None of the sources in Table 2 cited a single study containing empirical validation!

Research Needs: The Arrowsmith Dilemma

Consider an analogy to medicine. Doctors are preparing a treatment that they claim will cure the plague. Although they have not tested it, the treatment sells well, especially when the plague is rampant.

Martin Arrowsmith (Lewis, 1925) was a doctor who proposed that research be conducted to test the value of a medical treatment. Arrowsmith became unpopular. The beliefs were: 'The drug either works or it doesn't work.'

If people buy it, it must work. Arrowsmith is being negative'. The choice faced by Arrowsmith was whether to abandon his research on the value of the treatment, or to continue his research and become ostracized from the establishment.

Does this analogy fit the field of marketing planning? Is it possible that strategic marketers are preparing ever more complex treatments without bothering to test them for efficacy?

We are hesitant to suggest that formal planning has no value for marketing because much of the advice on formal marketing planning has face validity. More importantly, some of it is consistent with the research from corporate strategy and organizational behavior. However, one can also suggest plausible hypotheses against the use of formal planning for marketing strategy. For example, it might hamper creativity, reduce flexibility, or lead to apathy among those excluded from the planning process. It seems desirable, then, to obtain evidence on the value of planning.

Validation research is needed to determine whether formal planning is useful for strategic decision-making in marketing. If it is useful, then additional questions are relevant:

- (1) Which stakeholders benefit from such planning (and which lose)?
- (2) Which steps in planning are most useful (and how should effort be allocated among these steps)?
- (3) Which stakeholders should be involved in each step of the planning process?
- (4) In what situations is formal planning most useful?
- (5) What are the costs of the various planning methods?

A variety of approaches might be used to study these issues. These include surveys of planning practices, observation of -the processes, or experimentation with different planning processes. Based on our review of the previous research in corporate strategy and in organizational behavior, we offer opinions here on the relative merits of each research method. First, we describe some criteria by which to judge the various research methods. Then we examine each of the methods against the criteria.

Criteria

We propose nine criteria for evaluating the approaches to research. Some of these criteria may be more important than others and this will undoubtedly depend upon the situation. The criteria are as follows:

- (A) '*Feasibility.*' Will organizations permit the research? In some cases the firm may believe that the data, procedures, or strategies are confidential. In other cases it may be difficult to locate the people who have relevant information about the planning process or planning outcomes.
- (B) '*Realism.*' Is the situation realistic? Evidence is preferred from situations that closely approximate actual situations faced by firms. Realism would add to the validity of the findings.
- (C) '*Relevance.*' Is the test situation one where formal planning might be expected to be worthwhile? Are the subjects representative of the different types of decision-makers?
- (D) '*Variation in the planning process.*' Does the planning process vary substantially among firms (i.e. are some highly formal and others highly intuitive)? Does it vary over time (i.e. do some firms adopt a more formal approach at some point)? Comparisons are easier to make when comparing highly formal planners with intuitive planners.
- (E) '*Measurement error: process.*' Can the planning process be accurately described? In other words, good measures are required for each step in the process that was actually used.
- (F) '*Measurement error: outcomes.*' Can the costs and benefits of the planning process be measured? For example, what was the impact of the planning process on profits, customer satisfaction, or employee welfare? It is important to be able to measure the impact of planning on each element in the system.
- (G) '*Control group.*' Is there an equivalent control group to serve as a basis for the study of the impact of planning? Ideally, the control group would be selected by probability sampling.
- (H) '*Cost.*' How much does it cost to use each of the research methods?
- (I) '*Time.*' How long will it take to complete the research study (i.e. calendar time)?

Research methods

This section examines three major approaches: surveys, observation, and experimentation. Within each of these we examine specific research methods.

Surveys of experts might seem attractive because they are feasible and inexpensive. But the shortcomings of the expert survey are serious. This approach lacks a control group and it provides inadequate information on the process and the outcomes. It is not likely that we can learn much about the value of formal planning by surveying experts. Expert surveys have not been used by those doing research on the value of corporate planning, nor should they have been used, in our opinion.

Surveys of planners can be helpful in identifying which firms plan and which do not. Results can be contrasted between formal and informal planners. This approach has been a popular one in studies on the value of formal corporate planning (Armstrong, 1982). It was used effectively in the study by Ansoff et al. (1970) as they examined a situation, major acquisitions, where formal planning should be helpful. But most of the surveys of corporate planners failed to obtain adequate information on the planning process, the situation, or the effects of planning on the whole system. As a result, these studies were of much less value than they might have been.

Observation provides another approach to research on planning. One could observe the prescribed process, the actual plans, or the planning process. The major difficulty in observing the *prescribed process* (as done in Hopkins, 1981) is that one cannot be sure whether the actual process corresponds with the prescribed process. Furthermore, as was found with the Hopkins sample, it is difficult to obtain a sample of firms in which the prescribed process differs significantly in the degree of formality.

Observation of the *plans* themselves offers advantages beyond merely looking at prescriptions because prescriptions are often ignored. One can try to infer the degree of formality by looking at these plans. For example, coders might be used to classify the various plans according to the formality in each step of planning.

Alternatively, one can observe the *actual planning process*. With this approach, substantially more time would be required, as it would be years before the results were available. We are not aware of any validation studies that were based on observation of the planning process but we see some promise in this approach. It would make the most sense in a situation where formal planning would be expected to be important, such as for the introduction of a major new product. Cases must then be found to allow for a comparison of formal and informal planning.

Experimental studies offer substantial promise. Although *laboratory experiments* suffer from a lack of realism, they offer the best way to assess the relative contributions of the various steps in planning. Research in this area has been growing rapidly since 1970, as summarized in Armstrong (1982). An example was provided by Montanari et al. (1980) with the 'Space Tower Exercise'. Management games might be used as a basis for such experiments.

Experimental studies of cases have not been used as far as we can tell. Here, the success of experimental groups, trained in formal planning, would be contrasted with the success of untrained control groups who solve the same case. Coders who are blind to the hypotheses would be asked to rate the extent to which each subject (or group) actually used the formal planning guidelines. A number of expert coders, also blind to the hypotheses, but knowing the outcome, would rate the degree of success that each plan might have achieved. This approach might be used during courses in marketing strategy. Cases should be selected for situations where formal planning would seem relevant (e. g. large and complex changes, such as with new product introductions). Also the cases should have known outcomes. The study that comes closest to this experimental case study is Nutt (1977), except that there was no known outcome.

The field experiment would provide the most valid and reliable results. These should be long-term studies involving pre- and post-measures, as well as comparisons between formal and informal planners. The field experiment is also appealing because of its realism. The study in corporate planning that comes closest to this ideal

is Van de Ven (1980), which used a quasi-experimental design to study the value of formal planning for the introduction of community child care programs.

Table 3 summarizes each of the research methods and provides our subjective ratings of each method against each of the nine criteria. Of the methods examined, the experimental study of cases has the fewest shortcomings; no criteria scored lower than 3.0. Laboratory experiments, which also scored well, would serve as a complement to case experimentation. As a start, surveys of planners offer an inexpensive and realistic approach. The most serious shortcomings occurred with surveys of experts and with field experiments.

Obviously the ratings are subject to question. To improve the reliability, each of us did the coding independently at two different times, approximately 2 months apart in each case. Test-retest reliability was high, as the two ratings by each author were within one point of each other for 87 percent of the items. Interrater reliability was also high as 83 percent of the composite ratings for each author were within one point of the other author's ratings. (By chance alone, one would expect agreement for only 29 percent of the ratings.) The four ratings for each item were then averaged and rounded. (If the rating ended in 0.5 it was rounded toward 3.0.)

Table 3. Methods to study formal planning of marketing strategy
(1 = unfavorable to 5 = favorable)

Research method	Feasibility A	Realism B	Relevance C	Variation in Process D	Measurement Error		Control Group G	Cost H	Time I
					in Process E	in Outcomes F			
<i>Surveys</i>									
Experts	5	4	3	2	2	2	1	5	5
Planners	5	5	3	2	3	2	2	5	5
<i>Observation</i>									
Prescriptions	4	3	3	2	2	3	2	3	4
Plans	3	4	3	2	3	3	2	3	4
Process	2	4	3	2	3	3	2	3	2
<i>Experimentation</i>									
Laboratory	5	2	5	5	4	4	5	3	3
Cases	5	3	5	4	4	3	5	4	3
Field	1	5	4	4	4	4	4	2	2

Conclusions

The formal planning process consists of five steps: specify objectives, generate strategies, evaluate strategies, monitor results, and gain commitment.

Marketing planners frequently ignore steps in the formal planning process. One cannot argue, then, that 'the market' accepts formal planning. In particular, marketing planning frequently lacks formal linkages to corporate planning, it is narrow in its generation and evaluation of strategies, it lacks formal schemes for monitoring the success of the plan, and formal approaches are not used to implement the plan.

Experts in marketing planning also ignore key steps in formal planning. This was more true for experts in companies than for academic experts. In general experts recommended an increase in formality for some steps, especially for the evaluation of strategies.

By far the most conclusive type of evidence is that drawn from research studies. We found no empirical evidence on the value of formal planning for marketing strategy. Nor did any of the planning advocates draw upon the existing evidence from research in corporate planning or in organizational behavior.

We suggest the following approaches to research on strategic planning for marketing:

- (1) *Surveys of planners* have proven to be a useful and low-cost approach in the study of corporate planning; it seems logical to extend this for research on marketing strategy. Such studies are

most useful when they obtain detailed information on the planning process, the situation, and the impact of planning on all key interest groups.

- (2) *Observation* of the prescriptions, the planning process and of the plans might be useful for organizations facing large changes, if it is possible to also obtain a control (informal planning) group.
- (3) *Experimental studies of cases* would be desirable. Groups trained in formal planning procedures would be matched against informal planners on cases where the outcomes are known to the experimenters.
- (4) *Laboratory experiments* are especially useful in studying which aspects of the planning process are most useful.

Hopefully, a variety of these approaches will be used in an effort to rule out alternative explanations of the results and to determine how much formality should be introduced for given situations. These could add significantly to our knowledge on how much planning a marketing planner should plan—if a planner could plan plans.

References

- Abell, Derek K. and John S. Hammond, *Strategic Market Planning*. Prentice-Hall, Englewood Cliffs, N.J., 1979.
- Anderson, Carl R. and Frank T. Paine, 'PIMS: A reexamination,' *Academy of Management Review*, 3 (1978), 602-612.
- Anderson, Paul F., 'Marketing, strategic planning and the theory of the firm,' *Journal of Marketing*, 46 (Spring 1982), 15-26.
- Ansoff, Igor et al., 'Does planning pay? The effect of planning on success of acquisitions in American firms,' *Long-Range Planning*, 3 (Dec. 1970), 2-7.
- Armstrong, J. Scott, 'The value of formal planning for strategic decisions: review of empirical research,' *Strategic Management Journal*, 3 (1982), 197-211.
- Armstrong, J. Scott, 'Strategic planning and forecasting fundamentals,' in Kenneth Albert (ed.), *The Strategic Management Handbook*. McGraw-Hill, New York, 1983, pp. 2-1 to 2-32.
- Boyd, Harper and Jean-Claude Larreche, 'The foundations of marketing strategy,' in Roger A. Kerin and Robert A. Peterson (eds), *Perspectives on Strategic Marketing Management*. Allyn & Bacon, Boston, 1980, pp. 84-103.
- Buijs, Jan, 'Strategic planning and product innovation—some systematic approaches,' *Long-Range Planning*, 12 (Oct. 1979), 23-34.
- Coe, Barbara J., 'Use of strategic planning concepts by industrial marketers,' in Kenneth Bernhardt et al. (eds), *The Changing Marketing Environment: New Theories and Applications*. American Marketing Association, Chicago, 1981, pp. 13-16.
- Day, George S., 'A strategic perspective on product planning,' *Journal of Contemporary Business*, 4 (Spring 1975), 1-34.
- Guiltinan, Joseph P. and Gordon W. Paul, *Readings in Marketing Strategies and Programs*. McGraw-Hill, New York, 1982.
- Hopkins, David S., *The Marketing Plan*. The Conference Board, New York, 1981.
- Jain, Subhash C., *Marketing Decision Making*. Free Press, New York, 1977.

- Janis, Irving L. and Leon Mann, *Decision Making*. Free Press, N.Y. 1977.
- Kollat, David T., R. D. Blackwell, and J. F. Robeson, *Strategic Marketing*. Holt, Rinehart & Winston, New York, 1972.
- Lewis, Sinclair, *Arrowsmith*. Harcourt, Brace & World, New York, 1925.
- Luck, David J. and O. C. Ferrell, *Marketing Strategy and Plans*. Prentice Hall, Englewood Cliffs, N.J., 1979.
- Montanari, John R., G. Moorhead and E. O. Montanari, 'A laboratory study of a strategic decision making methodology,' *Proceedings of the American Institute for Decision Sciences*, Nov. 1980, pp. 472-474.
- Murray, John A., 'Strategic Marketing,' *Long Range Planning*, 12 (Apr. 1979), 76-83.
- Nutt, Paul C., 'An experimental comparison of the effectiveness of three planning methods,' *Management Science*, 23 (1977), 499-511.
- Schanck, J. Thomas, 'Strategic planning for industrial markets,' *Industrial Marketing Management*, 8 (Spring 1979), 257-263.
- Stasch, Stanley F., and Patricia Lanktree, 'Can your marketing planning procedures be improved?' *Journal of Marketing*, 44 (Summer 1980), 79-90.
- Van de Ven, Andrew H., 'Problem solving, planning, and innovation, Part I. Test of the program planning model,' *Human Relations*, 33 (1980), 711-740.
- Webster, Frederick W., Jr. *Industrial Marketing Strategy*. John Wiley, New York, 1979.
- Wilson, Ian H., William R. George and Paul J. Solomon, 'Strategic planning for marketers,' *Business Horizons*, 21 (1978), 65-73.