

# Developments In Business Simulation & Experiential Exercises, Volume 17, 1990

## APPLICATION OF A REAL-WORLD STRATEGIC MANAGEMENT MODEL IN THE CLASSROOM

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### ABSTRACT

This paper is devoted to addressing strategic management as an integrative function and how it can be taught in an experiential environment. Successful strategic decisions are the result of experience, analysis, judgment, and values. Moreover, the primary features of these decisions are uncertainty, incomplete information, complexity, novelty, iterativeness, and judgment. A model incorporating these features in a classroom setting is presented. Then a technique for using the model in a simulated business setting is explored along with the application of real-time cases. Finally, results from past experience in using this application are discussed.

### INTRODUCTION

As students begin the investigation into the world of strategy, it is important to highlight what this course is all about - managing the whole organization, not just a part of it. Up to now business students have focused in a specialized way on particular parts of an organization like marketing, finance, accounting, production, personnel, and so forth. Now it is time to consider how they all fit together.

A Chief Executive Officer (CEO) today is faced with the nearly Herculean task of managing an enterprise in a turbulent world. The challenges for a top manager are formidable. It has often been said that managing an organization from the top is often so uncertain its "like trying to nail jelly to a tree." Just when you think you've made progress, something new emerges to confuse the issue. In order to deal with the uncertainties of top management, a CEO as well as any other top manager in a variety of disciplines has, at his or her disposal, methods to deal with an uncertain future. More over for the most part, these techniques are not mystical and can be taught in such a way that the most important features of top management are understood.

What is presented in this paper are the basics. To become an expert in the future, there is no substitute for experience as a strategic decision-maker. Along with this seasoning, the concepts and prescriptions offered here will go a long way in helping students become leaders for the future.

### THE STUDY OF STRATEGIC MANAGEMENT

#### Why Study Top Management?

At the outset, it is important to say that while many different levels of managers are involved in the management of strategy, the final accountability and responsibility rests with the top decision-maker. Insofar as someone should be able to

deal with the most important aspects of managing an organization, that function is the job of the top leader and his or her assembled team. The success of organizational performance is not only dependent upon environmental, structural, and strategy factors, but also the process by which these variables are acted upon. Specifically, the charter of this paper argues that the core element for successful organizational performance in an uncertain environment is effective strategic decision-making (by top managers and their delegated representatives).

#### Basic Definitions and Concepts

What is a decision? What is the concept of a strategy? These are questions to answer along with the definition of strategic management. Each field has its own language and these basic terms must be grasped early, in order to understand and follow the language in the rest of the course. What follows is a discussion of the most important ones.

What is a Decision? When a manager makes a decision, he or she commits resources by making a choice of a course of action from among the alternatives available. Therefore, a decision is both a choice and a commitment to follow a particular strategy. A decisional orientation is followed throughout this course.

What is a Strategy? The concept of a strategy has been troublesome in the past, because of the multiple meanings of the word. In common terminology a strategy is a plan. Strategies are courses of action from which to choose and include predictions about the future. A strategy can also be thought of as a pattern of decisions. In its simplest form, a strategy is a way to get from point A to point B. This is true, whether or not a formal strategy has been stated or a pattern detected. In essence, a strategy is a means to an end.

What is Strategic Management? Many definitions have been proposed for this function. Table 1-1 lists several experts and their views on the subject. Traditionally, strategic management, strategic decision-making, and strategic planning have been used interchangeably. This is not an accurate way to view strategic management. Considering all the definitions listed in the table, strategic management has been defined both generally and specifically.

The approach preferred by many, and the one taken here, is that strategic management is an overall process encompassing strategic decision-making, strategic planning, strategy formulation, strategy implementation, strategy evaluation, and strategic control. Strategic management includes goals, plans, actions, internal functions, and external concerns all in the pursuit of higher organizational performance as well as the satisfaction of all stakeholders concerned (e.g., employees, customers).

## Developments In Business Simulation & Experiential Exercises, Volume 17, 1990

TABLE 1-1. Strategic Management Definition

Digman, (1986)	Continuous process for advantageously matching an organization with its changing environment.
Freeman (1984)	A combination of strategic direction, program formulation, budgeting, control, and structure.
Glueck & Jauch (1984)	Stream of decisions and actions for developing strategies for reaching objectives.
Guth (1985)	Management analysis, planning, and decision making.
Harvey (1982)	Effectiveness through goals, plans, and actions.
Pearce & Robinson (1982)	Decisions and actions formulated and implemented to reach objectives.
Schendel & Hofer (1979)	Process in which a strategy is developed and utilized to guide the organization's operations.
Steiner & Miner (1982)	Corporate strategy formulation and its implementation in private and public organizations.
Wheelen & Hunger (1984)	Strategy formulation, implementation, evaluation, and control processes for long-run performance.

### Strategy Types and Levels

It is important to note that strategic management is not just reserved for cop management. There are different types of strategy that are made at different levels of an organization. For example, take the case of a large, complex firm like GENERAL MOTORS CORPORATION. How can the CEO (i.e., Roger Smith) possibly make all the decisions when the organization is so big and has hundreds of thousands of employees? The answer is simple - he can't! Fortunately, we have the capability of delegating to others managerial authority, although our responsibility remains intact. As such, there are five basic types of strategy (e.g., Schendel & Hofer, 1979) to discuss enterprise, institutional, corporate, business, and functional. These choices are hierarchical, moving from the highest Levels to the lower management levels within a firm. Thus, each higher level constrains all the others.

Enterprise Strategy. Most writers ignore this type of strategy, probably because it concerns integrating the firm with its broader noncontrollable environment. An enterprise strategy is one that deals with questions or governance of the firm and the manner in which it is allowed to exist in society. Consequently, the focus of this strategy is on social-legitimacy concerns.

Institutional Strategy. The next strategy has also been

overlooked by most writers as well, but it is a very important type. An institutional strategy takes us from simply being allowed to govern and exist, to a vision for the future. In effect this strategy concerns the general direction of the firm. It is similar to enterprise in its overall scope, but next in the hierarchy due to being more specific and, therefore, easier to understand and manage. This strategy goes beyond giving legitimacy to an organization. It provides people with a path to the future.

Corporate Strategy. Quite often, the first question to ask is what business (es) should we be in? Rather than being concerned only with a general direction issue, a corporate strategy focuses on the selection of a business, or in the case of nonbusiness organizations, the selection of what services to perform. This is a basic question that organizations face periodically, especially when they are involved in multiple activities. In this age of mergers, takeovers, and acquisitions, there is little doubt that this strategy is quite important and frequently addressed in boardrooms.

Business Strategy. Whether or not an organization makes a corporate strategy decision, a business strategy decision will have to be faced. A business strategy focuses on how an organization will compete within a particular business. This is the backbone of strategic management, because usually organizations are already operating, and developing better competitive strategies quickly catches everyone's attention. It is even possible to be concerned with this question before you have made the corporate strategy decision, especially if there are multiple choices available. In fact, a manager should be concerned with this decision early for comparison purposes.

Functional Strategy. This last basic type of strategy is more involved with 'nuts and bolts' issues within an organization. Functional strategies are the means through which the various functions of a firm like marketing, finance, personnel, and production get their respective jobs accomplished. These strategies are used to integrate the functional areas of the organization and it is critical that they work in conjunction with business and corporate ones as well as support the firm's institutional strategy.

### NATURE OF THE TASK

Having examined some basic concepts concerning strategic management, the nature of the strategic decision-making (SDM) task needs to be clarified. SDM can be thought of as the most important task facing top management in organizations today. The business climate of the rest of the 20th century will introduce many new challenges for managers to face. Even now the strategist of today is confronted with environmental changes that are unpredictable at times. Yet, corporate success is highly dependent upon the quality of decisions. In essence, it becomes the task of top management to be able to adapt to unpredicted changes in a strategic manner. Inadequate decisions can result from poor analysis, unrecognized problems, and risk avoidance. It is clear that SDM or choosing a course of action is not likely to become any easier in the future.

### Strategic versus Operational Decisions

It is generally accepted that strategic decision processes are diverging from operational ones. This has resulted in the promotion of a whole new professional management field - strategic management, to which the decision process is fundamental. Strategic decisions differ from operational ones in several unique ways. Their most important

## Developments In Business Simulation & Experiential Exercises, Volume 17, 1990

Characteristics are higher degrees of uncertainty, incomplete information, complexity, novelty, iterativeness, judgement, and perceptual ill-structure (Taylor, 1987). In effect, these are a series of constraints which managers must learn to overcome.

Uncertainty and Risk. Probably, one of the most distinguishing features of the SDM task is the prevalence of higher degrees of uncertainty than what are normally found in operational tasks. Strategists have to contend with how to manage uncertainty and deal with a certain amount of ambiguity. In essence, managers have to weigh risks with rewards and decide what levels of risks they are willing to take to achieve success.

Uncertainty is a dual-edged sword. While it stimulates and excites us to perform, it also creates a certain amount of anxiety that worries. One thing is certain – successful top managers take more risks than others. In a twelve year study (MacCrimmon & Wehrung, 1986) of over 500 top executives, it was found that individuals at the senior levels (V.P. and above), in fact, are the greatest risk takers of all. Clearly, it is an uncertain task to make predictions about the future and risk resources, with the hope that you are right and not disastrously wrong.

Incomplete Information. A second feature of the SDM task is prevalence of higher degrees of incomplete information than typical operational decisions. This is partially due to the rapid changes occurring in the current world marketplace. A manager simply does not have enough time to search for and analyze all the information, even if it is readily available. Therefore, decisions have to be made with less than optimal information. In operational cases, decisions can often be made with relatively complete information about a production process, for example. This is just not the case in strategic management. It would be nearly impossible to even attempt to gather information that is complete, because the variables to consider are constantly changing.

Complexity. Another of the important features of making strategic decisions is their higher degree of complexity when compared with operational decisions. There are simply too many variables involved regarding both internal organizational factors and environmental factors for these decisions to be simplistic. What is important about complexity is that some relationships that are accepted as given in operational tasks, clearly are not true in complex tasks. One notable example is the relationship between both difficulty and performance (e.g., Taylor 1987). In simple, easy tasks, harder goals lead to higher levels of performance. But, in completely different tasks like SDM, the opposite may be true.

Novelty. It would be nice if managers could make decisions in a world where all the variables could be learned quickly and never changed. Unfortunately, this is not the case. Strategic decisions are typically surrounded by new information in an everchanging environment. Some of these decisions are made for the first time. In other words, they can be novel and nonroutine in their scope, signaling further complexity. Actually, for most people, this is probably an advantage, because their interest is kept high. Therefore, higher degrees of novelty is a welcome feature for most top managers.

Iterativeness. This feature concerns the step-by-step nature of SDM. A time element enters the process, due to the fact

that even though some novelty emerges, learning can take place over time, through step-by-step processes. This feature is similar to operational decision processes. What is different is that it takes longer to learn when uncertainty, complexity, and a lack of information prevails.

Judgement. Judgement also plays a significant role in SDM. Making strategic decisions is a process, whereby predictions are made about an uncertain future. This differs from the operational decision process in an organization, because less is known about what will happen in the future. At the very least, a manager's risk and anxiety level is normally higher when the situation is more ambiguous. Therefore, judgement plays a greater role than it does in operational situations.

Perceptually Ill-Structured. Several experts (i.e., Cosier, 1983; Schwenk, 1983) have raised the debatable question of whether a problem's structure or lack of structure rests within the problem itself or in the decision-maker's perceptions of it. They argue that perceptions of structure is the most interesting and important feature of SDM, regardless of the actual structure. In effect, problems are ill-structured if individuals perceive them to be.

If one of the central characteristics of SDM is its perceptual lack of structure, it is likely due to higher degrees of incomplete information, uncertainty, complexity, novelty, iterativeness, and judgement than what are normally found in other types of decision processes (i.e., operational). The prediction is that in the future strategic and operational decisions will become further differentiated from one another on issues like level of importance (Mintzberg, Raisinghani, & Theoret, 1976) to the organization, among others. It may be that the most important decisions within an organization will be those that are strategic, as long as they are not divorced from the strategic planning process.

### Success Criteria

Given the volatile nature of decision-making in strategic management, how can a manager expect to perform well under these conditions? The answer lies in understanding and accepting the fact that successful decisions are the result of experience, analysis, judgement and values (Harvey, 1988).

As one gains experience in making these decisions, more is learned about how to maneuver within an uncertain environment. While it is true that a certain amount of analysis is necessary for predicting the future, it is also a fact that good judgement will be a prime factor for success. All the analysis in the world will never replace judgement. Finally, success comes from knowing the people with whom you are working. Knowing their values, in addition to yours, are a major part of success in any organization. The most important lesson here is to realize that most people are very different from one another when it comes to what they value or desire.

### A SIMPLE, INTEGRATIVE MODEL OF STRATEGIC MANAGEMENT

#### Artificial, but Helpful for Study

Models are useful tools. They help us pictorially depict decision processes. In strategic management, any model is nothing more than artificial static representations of a dynamic decision-making

## Developments In Business Simulation & Experiential Exercises, Volume 17, 1990

process. In order to study the strategic management process, we need a model to help us clearly see and understand the interrelated steps a manager has to take when dealing with strategy. Essentially, there are two ways to model the process. One can take a complex approach like Schendel and Hofer (1979) by using many processes with numerous bi-directional feedback loops. On the other hand, simple pictures may not be as inclusive as some others, but they may be easier to adapt for study. This is the approach taken in this paper reflecting the course it represents. A simple, but integrative model appears in Figure 1-1. The reader is cautioned to remember that diagrammatically representations in strategic management serve as artifacts for

FIGURE 1-1. Strategic Management Model.



study and *not* complete illustrations of the entire management process.

### How the Steps are Integrated

There are five integrated steps in the model. Before examining each step, it is important to reiterate that these steps do not exist in isolation. In fact, while they may appear to be evolutionary in nature, they are, in many cases, decision-making activities that are done simultaneously and continuously as well. It is quite likely that most top managers and their delegated representatives are involved in all these processes at once in an ongoing viable organization. Nevertheless, in order to study the strategic management process it will be divided artificially into five interrelated practices: goal setting, competitive environment analysis, strategy evaluation, strategy implementation, and strategic control.

Goal Setting. Goal setting is a management technique designed to provide both general and specific directions and targets for which the organization can aim. This starts with

developing an overall vision for the firm as a whole. This is done through developing a mission, a set of feasible goals and specific objectives for use by the internal stakeholders (e.g., executives, employees) of the company. Moreover, the external stakeholders (e.g., customers, shareholders) can be made more comfortable by knowing that their company has a clear and well thought out vision. This is the step in the process that must be accomplished in order to promote an overall strategic direction and build a healthy reputation.

Competitive Environment Analysis. The second step in the model concerns recognizing and analyzing important aspects of the environment and those organizations with which you must compete. The three processes of analyzing the environment, the competition, and your capabilities are conducted here. Many times an organization may find itself involved in this activity before setting goals. In addition, there are several proven methods to conduct these analyses, both internal and external to the respective organization.

Strategy Evaluation. In a logical, evolutionary way, after goals have been set and the competitive environment analyzed, an in-depth analysis of alternative strategic choices must be accomplished. In this function, types of strategies are explored along with criteria for evaluating them. Comparison methods are surveyed in conjunction with problems in their use. It is important to recognize that in this step a strategist has to develop measurement criteria that can be adapted to different strategies. The point of this is to develop a way the benefits and problems with each strategy can be related to the other choices available.

Strategy Implementation. This step of the model called execution is, arguably, the one that dominates most of a manager's time. While it is true that CEOs spend a great deal of time at strategic planning, it is also true that day-to-day activities of trying to promote a strategy occupy a majority of what goes on in their lives. The importance of implementation and its increased emphasis in strategic management in the future cannot be understated.

Strategic Control. In this last step in the model, strategic control or governing is the focus. It is in this step that we actually can easily see how an integrative model works best. For example, how can a strategy be evaluated and controlled if well-accepted goals are not in place, performance measured, and changes made? Hence, the need for feedback loops promoting the continuous and simultaneous nature of strategic management functions is well established.

### Revisiting the Model each Step of the Way

Throughout the course reported in this paper, the model just presented is revisited as each step of the model is discussed. It is important to understand that these activities happen in conjunction with one another; it makes little sense to artificially break up the strategic management process without putting it back together within an integrated framework. Any top manager would agree that these processes go together and, therefore, should be examined that way. Thus, every attempt is made in this course to treat the model both in a micro fashion broken into five steps, and in a macro manner by making sure that the pieces of the puzzle always fit. This may be difficult for managers to carry out, but is necessary due to the general nature of leading an entire organization down the path chosen for it. This is the essence of an integrated model.

## Developments In Business Simulation & Experiential Exercises, Volume 17, 1990

### “IT’S LIKE TRYING TO NAIL JELLY TO A TREE”

Earlier, the strategic management process was described as “its like trying to nail jelly to a tree.” A catchy phrase for sure, but what does it really mean? There are really two issues at work here. Strategic management is now counted as the technique for small, medium, and large complex organizations to deal with an uncertain future. Hence, the American Assembly of Collegiate Schools of Business (AACSB) requires that this body of knowledge be taught for accreditation. In addition, management consultants and Increased academic interest have both stimulated and responded to increased managerial interest in the subject.

Conversely, it is precisely this interest that has promoted the search for techniques to reduce the uncertainty for operating in this type of environment. The dilemma that emerges when courses in strategic management are taught or when top managers make strategic decisions is that the best one can ever hope to accomplish is a good understanding of how to diagnose strategic problems and create their own customized cures, if possible. In other words, managers can only hope to learn what works or does not work for them in their own unique experiences. Generalizing what works in one situation Co another is problematic, but may in some cases be valuable.

Therefore, students are warned not to expect too much from strategic management as a formal field of study and endeavor. While this course serves as a guide to understanding the concepts and methods in strategic management, the field is constantly in a state of flux, with new fads for how to succeed in business popping up almost every day. Remember, what works for one CEO may not work for someone else. The best we can hope for is to learn how to cope with uncertainty and ambiguity In a systematic way.

### EXPERIENTIAL EXERCISES

#### Simulation

The first pare of this course that involves experience, analysis, judgment, and values is participating in a computer decision simulation Game The one currently in use is The Executive Game (Henshaw & Jackson, 1984). While this author is presently engaged in developing a brand new game for strategy courses, this particular game can be relevant for simulating the model, providing the instructor is careful to incorporate all five activities (i.e., goal setting, competitive environment analysis, strategy evaluation, strategy implementation, and strategic control).

Capture The SDM Features. The point of using the game is to capture the salient features of SDM, namely uncertainty, incomplete information, complexity, novelty, iterativeness, and judgment. Collectively, when the student is exposed to playing the game in class where these features are present in the process, a feeling of perceptual ill structure emerges. Moreover, students gain experience throughout the game, conduct analyses, make judgments, and deal with other students’ values in the process.

Capture The Model. Students in this course are required to

submit a one-page goal setting summary at the beginning of the game highlighting their mission statement, strategic goals for the entire goals, and specific objectives for the first quarter. Then Throughout the game, they must submit quarterly objectives for each decision period and any changes in strategic goals the may emerge.

Next, students have to build a strategic planning notebook throughout the game, broken down by each decision period. Each section contains spreadsheet analyses, graphs, and any other documents that demonstrate skills at competitive environment analysis and strategy evaluation. Finally, strategy implementation and strategic control are evaluated through performance and effective changes over time.

Reward Performance. An extremely important part of the course is the evaluation system. It must promote the model and the process of SDM. Essentially, in order to emphasize level of importance in the process, 30% of the student’s grade rests upon objective performance as measured by ROI ranking at the end of this particular game. This means that regardless of effort and attention given to playing the game, the highest objective performers are rewarded the most. On the other hand, it has always been the case for the past 10 years or so of conducting the course in this manner that the winners were always the better users of the model. Moreover, the losers who were good users of the model lost because their strategies were not as effective or not executed as well the winners. In the end, this category of loser knew why and learned a great deal from the experience. After all, in the real world of business it’s not 30% that is resting on decision quality - it is 100% This author has experimented by changing the percent from 10 to 50 and has found that 30% has been the best overall for both seniors and MBA students in the capstone business course.

### REAL-TIME CASES

A second part of the course that makes use of the strategic management model reported here is real-time cases, as opposed to cases out of a textbook. How this is done is as follows. Each semester a new industry is selected for analysis. The number of cases assigned depends on the number of students in the class. Take the microcomputer industry, for example. In a very small class that has only four teams, four companies could be selected with each team doing all four cases. One might choose IBM, COMPAQ NEXT, and APPLE as representative firms in this industry for analysis.

What happens is that each team investigates the current state of each firm using the model. This means that each analysis examines goals, competitive environment analysis, strategy evaluation, strategy implementation, and strategic control in a real-world context. Then they make recommendations regarding each firm’s future and whether or not they would be willing to purchase stock in the firm. Many spirited debates emerge from this process. In addition, the students report they enjoy this part of the course, in conjunction with the game, because it gives them a feeling that they are examining as well as experiencing real-world features. The to casework is to pick familiar companies so students can identify with them. And, just like in the simulation they must be rewarded based on performance.

## Developments In Business Simulation & Experiential Exercises, Volume 17, 1990

There are several results from experience in teaching the strategic management course to report. First, student performance has dramatically improved. The course began 10 years ago with a typical "canned case" scenario coupled with exams. The type of exam has not significantly changed over the years, but test performance has. The first major change was the introduction of the game. A critic might argue that this particular game was not written for capstone courses in strategy. This is true, but when other requirements are introduced like strategic planning the game becomes more relevant. Another major change was the addition of real-time cases. This has been recent, but the early results are quite favorable. Students report an increased desire to participate in these cases as opposed to the familiar "canned" ones. Moreover, performance on cases has dramatically improved especially the writing category. Better writing is a goal for all of us to motivate our students to achieve.

The second conclusion to report is that instructor performance has dramatically improved. It seems that student evaluations of this author -to be tied to changes in the course. Whether or not higher evaluations are justified objectively depends on your perspective. The bottom line is that higher student performance and higher student evaluations of the course have increased without grade inflation. Thus, this application is valuable.

### REFERENCES

- Cosier, R.A. (1983). Approaches for experimental examination of the dialectic. *Strategic Management Journal*, -, 79-84.
- Digman, L.A. (1986). Strategic management: concepts, decisions, cases. Plano: BPI.
- Freeman, R.E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Glueck, W.F. & Jauch, L.R. (1984). Strategic management and business policy. New York: McGraw-Hill
- Guth, W.D. (1985b). Central concepts of business unit and corporate strategy. in W.D. Guth (Ed.). Handbook of business strategy pp. 1-1 to 1-9). Boston: Warren, Gorham, & Lamont.
- Harvey, D.F. (1988)- Strategic management and Columbus: Merrill.
- Henshaw, R.C. & Jackson, J.R. (1984). The executive Game. Homewood: Irwin.
- MacCrimmon, K.R. & Wehrung, J.A. (1986). Taking risks: The management of uncertainty. New York: Free Press.
- Mintzberg, H., Raisinghani, D., Theoret, A. (1976). The structure of "unstructured" decision processes. *Administrative Science Quarterly*, 21. 246-275.
- Pearce, J.A. LI. & Robinson, R.B. jr. (1988) Strategic management. Homewood: Irwin.
- Schendel, D.E. & Hofer, C.W. (1979). Strategic management: A new view of business policy and planning. Boston: Little, Brown and Co.
- Schwenk, C.R. (1983). Laboratory research on ill-structured decision aids the case of dialectical inquiry. *Decision Sciences*, 14, 140-144.
- Steiner, G.A. (1969). Top management planning. New York: Macmillan.
- Steiner, G.A. & Miner, J.B. (1982). Management policy and strategy. New York: Macmillan.
- Taylor, L.A. III. (1987). Decision quality and commitment within a probabilistic environment. *Organizational Behavior and Human Decision Processes*, 39, 203-227.
- Wheelen, T.L. & Hunger, J.D. (1984). Strategic management. Reading: Addison-Wesley.