CORPORATE PLANNING MODELS

Nearly two thousand firms in the United States, Canada, and Mexico are either using, developing, or experimenting with some form of corporate planning model. Computer based planning models represent an attempt to describe the complex inter-relationships among a corporation's financial, marketing, and production activities in terms of a system of mathematical and logical relationships which have been programmed into a computer.

In 1969, there were less than one hundred firms which were actually using corporate planning models. Two questions emerge when we consider the aforementioned data. Why has the number of corporations employing computer based planning models increased so dramatically? Why corporate planning models?

Lewis Young, Editor-in-Chief of Business Week has suggested that "Corporate planning models and management science are substitutes for good management." On the other hand, one of the advertisers in Business Week, the International Business Machines Corporation, frequently devotes the major portion of its two-page advertisements to only two words -- "What if?" In the lower right hand corner of these ads one reads:

Planning will never become an exact science
But it can now be less of a venture into the unknown.
The Future is a moving target.
Computers can improve your aim.

This tutorial is about computer based planning models and how these models can be used to "improve your aim."

The essence of corporate planning is when corporate management is faced with risk and uncertainty. If management knows (1) what its competitors are going to do; (2) what legislation will be passed by Congress or the state legislature; (3) what policies will be enacted by the Federal Reserve Board; (4) what the pricing and supply policies of the Organization of Petroleum Exporting Countries (OPEC) will be; and (5) what the Chinese, Russians, Arabs, and Israelis are going to be doing, then planning is a technical exercise and management need not resort to the use of any computer based planning model to plan its course of action. But rarely is management armed with even partial information about important events of the type described above. It is more likely that management will be confronted with a high degree of risk and uncertainty concerning major external events of this nature.

The rationale underlying the use of computer based planning models is identical to the rationale underlying corporate planning. Corporate planning models cannot predict the future, but they can be used to help management get a handle on risk and uncertainty. Forecasts generated by corporate planning models are no better than the assumptions on which they are based, but computer planning models can improve management's ability to cope with a wide variety of problems and opportunities whose impact on the company may be fraught with risk and uncertainty.

Below is an outline of the topics covered in this tutorial.

I. Why Strategic Planning?
A. Energy Problems
B. Shortages
C. Inflation
D. Liquidity Problems
E. Government Regulations
F. International Competition
G. Economic Uncertainty

II. Why Corporate Planning Models?
A. Strategic Alternatives
B. Current Concerns
C. Historical Problems

III. Review of the Planning Environment
A. Organizational Structure
B. Management Philosophy and Style
C. Business Environment
D. Planning Process

IV. Specification of the Planning Requirements

V. Definition of the Goals and Objectives for Planning

VI. Determination of Planning Resource Requirements
A. Data Bases
B. Forecasts
C. Models
D. Reports
E. Software
F. Human Resources

VII. Design of an Integrated Planning and Modeling System

VIII. The Politics of Corporate Planning and Modeling

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Duke University - Professor of Economics
SSI - President

Winter Simulation Conference 25
IX. Why Some Planning and Modeling Systems Have Failed

X. Actual Case Studies
A. Electric Utility
B. Diversified Holding Company
C. Multi-National Pharmaceutical Company
D. Petroleum Company
E. Paper and Container Company
F. Consumer Products Company
G. Regional Bank and Bank Holding Company

BIBLIOGRAPHY


