

A Management Approach to a Strategic Financial Planning System

Joseph H. Schmaltz

Esmark, Inc.

Although computers have been indispensable to managers in making operational and tactical decisions, they have played a conspicuously small role with respect to strategic decisions. In this article, the author suggests that there is no reason why the programs used at the operational level cannot be used to generate accounting models relevant to future performance as well. He substantiates this position with a case study of a very successful implementation of such a system. Esmark, Inc. has managed to impose a planning discipline on its subsidiary companies that consistently produces estimates of financial performance good enough to be used in a system that supports the full range of financial planning decisions made at the strategic level. Ed.

An indispensable tool at the operational and tactical levels of management decision making, the computer has played a conspicuously small role at the strategic level. The reason often given for this state of affairs is that strategic management is concerned mostly with financial planning decisions, which are highly intuitive. What is generally meant by the word intuitive in this explanation is that the logic of the decision-making processes has not been defined at a level appropriate for computer programming, and that many of the inputs to the processes consist of information about the outside world that is incomplete, imprecise, or unavailable. While this is true, it also is true that at certain levels of strategic decision support, these characteristics have nothing to do with whether a computer can or cannot be used to advantage.

One such level involves using a computer to show the financial implications, in standard accounting terms, of alternative strategies. More specifically, computers certainly can be used to show what effects different decisions concerning resource allocations and capital structure will have on earnings, financial positions, cash flow, return-on-assets, and all the standard ratios used to monitor the financial health of an organization. The logic needed for that analysis has nothing to do with how the decisions are made, but rather relies simply on standard accounting practices. Those practices hold few secrets that have not already been reduced to computer programs used routinely to produce standard financial reports on past performance. There is no particular reason why the same programs cannot be used to build an accounting model that will put future performance into the same perspective.

The data input for a decision support system of this type is somewhat more of a prob-

lem, though far from an insoluble one. Since the data that must be generated for the system consists of the types of numbers found on balance sheets and income statements, it is just as familiar as the system logic. The problem lies in the fact that such numbers must be generated for every capital request. While admittedly this amounts to a sizable effort, it certainly does not stretch the limits of feasibility in corporations large enough to require formalized planning. In fact, it would not be unreasonable to say that plans that have not been developed to the point where they can be expressed in the standard financial terms of management represent too great a risk for serious strategic consideration. Certainly, planning estimates of this type are not a novelty, and are well within the range of capabilities possessed by managers with profit center responsibility.

Yet, relatively few decision support systems of this basic type are used in strategic financial planning. Of those that are, few have the broad functional capability and comfortable operational simplicity needed to make them fundamental and routine parts of the decision-making process.

If there is any single reason for this failure to exploit an obvious computer capability at the strategic management level, it probably lies in the input-data requirements of such systems. Though meeting those requirements is clearly within the capabilities of all organizations big enough to justify formal financial planning procedures, most companies obviously find it difficult to harness those capabilities.

One part of the difficulty seems to be that translating capabilities into hard data for the computer to manipulate calls for a greater degree of planning discipline than most companies generally impose. Another part of the difficulty is that the problem cannot be

Joseph H. Schmaltz is Director of Financial Planning at Esmark, Inc. Dr. Schmaltz holds the S.B. degree from M.I.T. and the M.B.A. and the Ph.D. degrees from the University of Chicago. His present responsibilities include the development and operation of financial planning models and the analysis of potential acquisitions and divestments, as well as providing generalized computer analysis capabilities to Esmark. He was previously a consultant for MATHEMATICA, Inc. in the MATHTECH Division.

solved merely by generating numbers; the numbers must be realistic enough to give the computer's outputs some validity. There is nothing to be gained, and much time, money, and effort to be lost, by putting plans into a financial perspective that has little relation to reality.

Formidable as they may seem, these difficulties can be overcome without resorting to Draconian measures. Esmark, Inc. has managed to impose a planning discipline on its subsidiary companies that consistently produces estimates of financial performance good enough to be used in a system that supports the full range of financial planning decisions made at the strategic level. Though we have had to work at it, the effort required has turned out to be minimal when compared with the impact the system has had on the management decision-making process. The theoretically simple ability to translate hypothetical financial strategies into the standard measurements of organizational performance has reduced significantly the degree of uncertainty associated with the process, and has increased, even more significantly, the number of strategic directions that can be explored.

A Need for Numbers

While the Esmark financial planning system was begun in 1971 and produced valuable outputs in that year, added impetus for the system came from the decision, implemented in 1973, to transform Swift & Co. into a financial holding company. The result was Esmark, a company philosophically committed to diversification. A \$6 billion corporation, its current holdings consist of Swift & Co.; Estech, Inc.; Vickers Energy Corp.; International Playtex; STP Corporation; and International Jensen, Inc. Also committed, just as strongly, to decentralization, Esmark limits its corporate role to deciding what strategic policies, resource allocations, and capital structure will provide the optimum environment for continued

growth. All other decisions are left to the management of our subsidiary companies.

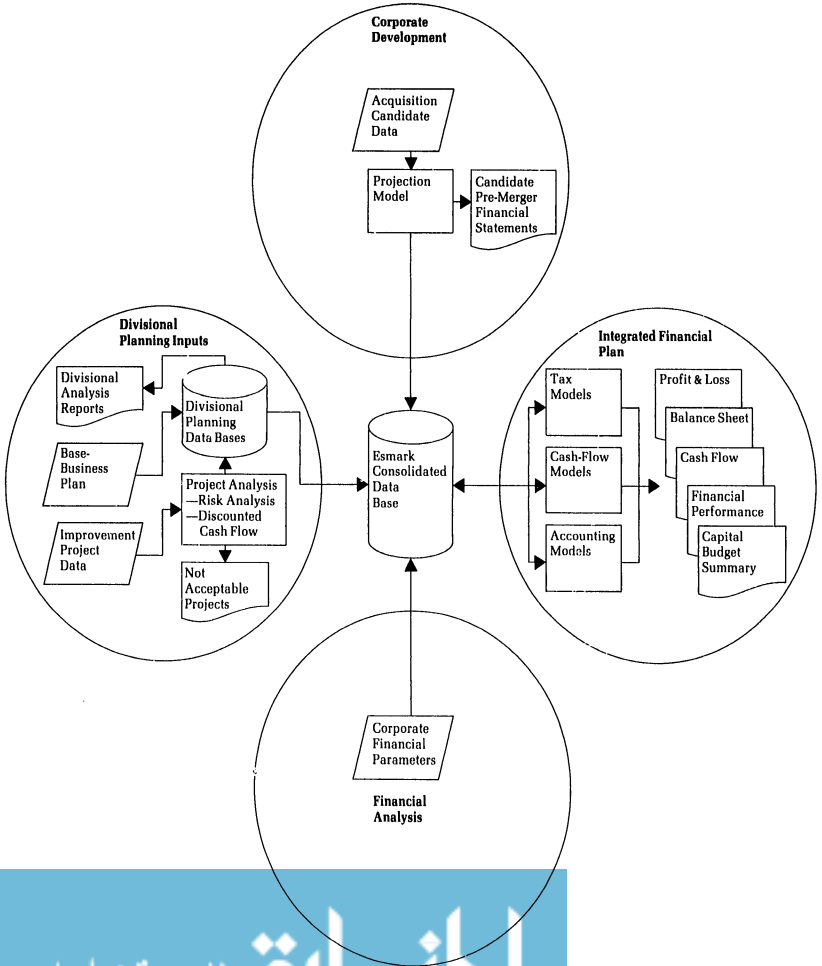
The commitment to this management philosophy carries with it certain constraints, stemming from Esmark's self-imposed isolation from operational matters. One constraint involves communications: an important way Esmark management can get the insights needed to make risk-benefit judgments about the spending proposals submitted to them is through detailed planning data and supporting narrative. The second constraint is a matter of perspective: removed from operating details, Esmark management's view of their holdings tends to be a financial abstract of reality. This forces them to judge spending proposals largely on financial merit and to concentrate their efforts on exploring alternative financial strategies.

All of this generates a critical need for numbers, a need the financial planning system is designed to fill. By providing management with both the planning data and the ability to perform the manipulations and calculations needed to project the implications of a wide variety of financial strategies, it permits them to maximize their exploratory range without compromising their judgment.

The system (Figure 1) is composed primarily of a series of accounting models and data bases organized along the lines of the management hierarchy of Esmark and its subsidiary companies. Functionally, it breaks down into three subsystems, each handling a different level of planning data in a sequence that moves up through the hierarchy from the profit center managers to the Esmark officers.

The planning foundation is supplied by the Divisional Planning subsystem. The term divisional refers to the major organizational units within the Esmark subsidiaries. In the case of Swift & Co., for example, there are three divisions, dealing with fresh meats, processed foods, and international operations. Each of these divisions is responsible for developing a separate plan for each of their profit centers.

Figure 1 Esmark, Inc. Financial Planning System Overview



A profit center plan divides future capital requirements into three separate categories of programs: continuance, improvement, and expansion. These categories comprise a spectrum of strategies beginning with the most conservative one of limiting capital investment to what is required to continue the base business, and then moving up through the increasingly risky strategies of investing in selective improvements and expansions of the base business.

Capital requests at each investment level must be supported by a three-year projection of balance sheets and income statements, plus some miscellaneous data on expenditures that provide the detail needed to validate data and generate cash-flow projections (see sample Income Statement). Where appropriate, this view of the future must be supplemented by comparable views of the past and present: historical data must be provided for the last year and estimates for the current one. In the improvement and expansion categories, such plans are required for every program calling for an expenditure in excess of \$500,000 and for the aggregate of all smaller programs. In prior years this limit has been \$100,000 and several subholding companies may continue to input all projects down to this level.

All of this planning data goes into the divisional data base, along with the administrative costs and allocations of the division and the corporation of which the division is a part. The base business plans go directly into the data base. Plans for improvement and expansion programs may be run first through a Project Analysis model, which determines whether they meet the Esmark investment criteria. This model produces a cash-flow, internal rate-of-return, present-value, and departmental return-on-assets analysis, as well as a sensitivity-to-input-data analysis of each program and schedules of each program's assets and depreciation. The depreciation schedules are calculated on both a tax and a book basis. Programs that meet the investment criteria can then be added to the divisional data base.

Digressing slightly, it is important to

realize that the planning system is an integral part of the overall review of capital projects and programs. While approval during the planning process does not give de facto approval to spend the money, projects below certain dollar limits (currently \$250,000) do not require Esmark approvals when approved in the plan. However, projects not identified (and thus not approved) during the planning process must be submitted to Esmark if they exceed \$100,000. The actual dollar amount of a project determines the required level of Esmark approvals, such as whether the Board of Directors must approve the project. If a project requires Esmark approvals, a submission separate from the planning data is required at the time the subholding company requires the funds. This project submission to Esmark consists of a detailed business proposal, along with complete financials for the project life. It is mandatory that all projects submitted to Esmark be processed through the Project Analysis model.

Accounting models in the subsystem work from the divisional data bases to produce pretax financial projections for the divisional and Esmark-subsidiary levels of management. These projections are essentially consolidations of the appropriate profit center programs.

Programs calling for mergers and acquisitions, which may originate at any level of the management hierarchy involved, are handled by a separate subsystem. The inputs to this subsystem are the same as those for the Divisional Planning subsystem in terms of types of data, but here they consist solely of historical numbers, which are collected from annual reports, SEC filings, and other research sources. These data are used in a model that generates a set of financial projections based on different assumptions made about such factors as the growth rate, capital investment level, and profitability of the candidate. The financial performance that can be expected under these hypothetical conditions is shown in terms of cash flows and the standard financial statements. The output from the Projection model is then

19 **MANAGEMENT PLAN
FINANCIAL INFORMATION
INCOME STATEMENT**

Col. 37

BASE REVISION NO. _____
IMPROVEMENT PREPARED BY: _____
EXPANSION DATE: _____

COMPANY _____
BUSINESS _____
PROGRAM _____
UNIT NO. _____

(Note: Do not use commas in any number. For numbers requiring negative input, show a minus (-) sign preceding the number.)

	Previous Fiscal Year 19__	Current Fiscal Year 19__
INCOME STATEMENT		
REVENUE DOLLARS		
01 Inter Esmark Co.'s		
02 Intra Sub-holding Co.		
03 Intra Divisional		
04 Trade Sales		
05 Other Income		
06 Total Revenue		
07 Gross Margin		
08 Selling		
09 Advertising - Media Cost		
10 Promotions, Discounts and Allowances		
11 Local & Regional Administrative		
12 Business Unit & Divisional Co. Admin.		
Total Expenses		
Earnings Before Corporate Charges		
10 Sub-holding Co. Administrative		
11 Corporate Interest		
Total Corporate Charges		
12 Excess Cost Amortization		
18 Earnings Before Income Tax		
19 Average Assets Employed		
Return On Assets (Before Corp. Charges)		
Return On Assets (After Corp. Charges)		
REVENUE VOLUME 000 UNITS		
20 Inter Esmark Co.'s		
21 Intra Sub-holding Co.		
22 Intra Divisional		
23 Trade Sales		
24 Total Volume		
25 Industry Throughput Millions of Units		

used in a Merger and Acquisition model to explore the implications of alternative financing strategies. Working from the financial projections, the second model calculates the cost impacts of alternative financial strategies and produces a new set of financial projections that reflect those cost impacts. Both sets of projections, with and without the acquisition costs, are then stored in the acquisition data base. The acquisitions of International Playtex, Jensen, STP, and the minority interest of TransOcean Oil, were thoroughly analyzed under a variety of assumptions using the planning system. Also, several divestitures have been analyzed.

The third subsystem is concerned with consolidating, in an accounting sense, the planning data from the Divisional and Acquisition data bases, and then generating the consolidated data reports that show financial performance at the Esmark level. To do this, Esmark management must provide financial projections for their own operations and supply the specifics of dividend, debt, and tax policies.

The consolidation function at this level involves considerably more than a simple aggregation of the available planning data. Cash is reallocated to conform to tax laws, both foreign and domestic, and to Esmark's cash-flow policies. Each subsidiary company is consolidated according to the accounting base—pooling, equity, or purchase—on which Esmark carries it. Each acquisition candidate is consolidated on as many different accounting bases as Esmark management wants to consider. In fact, even outside minority interest is calculated. The consolidation model also calculates the impacts of divestments that are under consideration.

In the subsystem's second function, the output of the consolidation model is combined with the divisional and acquisition planning data. Working from this consolidated data base, an Esmark accounting model, which includes procedures for calculating taxes, produces a comprehensive picture of Esmark's financial performance after taxes over the next three years.

Though a projection, this picture reflects most, if not all, of the details of the real world. The tax section of the accounting model includes routines for estimating both deferred and current tax liabilities, investment tax credits, and specific tax payments over time; and for working out the impacts of accelerated depreciation, depletion allowances, and reserves to cover the disposal of fixed assets that already have been written off. It also applies all the proper rates and rules that govern earnings generated outside the U.S. The accounting thoroughness is carried through in the cash-flow part of the model, which calculates a true flow of funds reflecting the specific timing and magnitude of tax payments and other liabilities.

The financial picture produced also includes a retained earnings figure that reflects the dividend payout, and a short-term debt cost that is a function of the short-term notes on the balance sheet.

System Use

All this adds up to a system that, though complicated at the functional detail level, is conceptually quite simple: all it really does is collect plans, expressed in financial terms, about profit center and acquisition programs, and then consolidate them to show the financial results they can be expected to produce at different levels of the Esmark organization. But that simple combination of capabilities turns out to be disproportionately useful in the financial planning process.

The single most important use of the system is to answer the typical "what if . . ." questions that top management poses when trying to hammer out resource allocation, capital structure, dividend, and acquisition and divestment strategies. This exercise takes place in the autumn of every year, when Esmark holds a series of meetings with the management of its subsidiary companies to work out final budgets for the coming year and plans for the two years beyond.

Prior to the meetings, all the base-busi-

ness, improvement, expansion, and acquisition plans have been entered into the Divisional and Acquisition data bases. At that time, Esmark management already has used the financial planning system to consolidate the plans and generate at least two full sets of after-tax financial statements: one constructed from only the base-business plans, and the other from the full complement of base, improvement, and expansion programs.

The two sets of financial statements can be compared to see the difference between the most and least conservative strategies. The statements constructed from the base-business plans represent the most conservative strategy of limiting investment to only what is needed to continue the base business; those constructed from the full set of base, improvement, and expansion programs represent the opposite strategic position. By comparing the earnings potentials and capital requirements at the two ends of the strategic spectrum, management is quickly able to arrive at some tentative financial planning targets.

At this point, system use shifts to an Investment Analysis model, which is one of the functional components in the Esmark Planning subsystem. This model has not been discussed until now because it is not involved directly in either the collection of the planning data or the production of reports from the data.

The function of the Investment Analysis model is to help management select the mix of improvement/expansion programs that best matches their targets for earnings and invested capital. Given these targets, the model is capable of selecting a mix of programs that will either maximize earnings within the invested capital constraint or minimize the capital required to meet target earnings. It is able to determine the best time periods for program startups according to either set of management criteria.

Once a first selection of programs has been determined, the interaction between management and the system begins in earnest.

Working at refining, the strategy management poses a series of "what if . . ." questions: "What if we change the mix of programs to capitalize on this long-term trend . . . if we stay with that mix, but shift the time frame of implementation for those with a second-level priority . . . if we cut back program A and expand program B?"

Working from these hypothetical cases, staff people write a simple report generation routine that identifies the proper sets of planning data to be used and specifies any modifications that have to be made in either the data or the accounting tactics. The system responds to each case with a full set of financial statements that show the impact of the hypothetical strategy on Esmark's earnings, financial position, cash flow, return-on-assets, and all the critical ratios.

The system-management dialogue continues in the deliberations on acquisitions, divestments, and Esmark's capital structure. What kind of financial performance can be expected of an acquisition candidate at different levels of growth, investment, and profitability? What effect will such performance have on Esmark's financial condition one, two, and three years out? What is the best way of structuring the deal? Should it be a stock transaction? Would there be an advantage in using a combination of cash and bonds even if the acquisition could not be carried on a pooling-of-interest base? What effect will a divestment have on Esmark's financial position, assuming a given sale price, payment structure, and time frame? To what extent can the effect be enhanced or moderated by shifting the timing of the divestment from one quarter to another? What are the relative financial merits of debt versus equity financing to raise additional capital? Would a mix of debt and equity financing be better than either one alone? Is this mix better than that one? Would it pay to sell equity to reduce debt?

Again, the system's response to each question is a full set of financial statements that show Esmark performance under the particular conditions specified by management.

Aside from the functional ability to respond to this range of questions, one of the main features of the system is the speed of its response. In 95 percent of the cases, the entire query-response cycle, from writing the report generation program that specifies the conditions of the case to the production of the required reports, is shorter than two hours, and in most of the cases, it is measured in minutes. The slower system response associated with the other 5 percent of the cases is not a function of the system's processing capability, but of the time required to work out the accounting changes inherent in the particular hypothesis being considered. Most of these cases are related to acquisition and investment deliberations—specifically to the part dealing with the nature and magnitude of the impact of alternative financing strategies. Answering questions of that type requires the specification of not only the assumed financial structure, but also of that structure's accounting implications.

The system's speed of response enhances the decision-making process in several ways. Though response does not precisely match what might be called the real time of the decision-making process, it is rapid enough not to interfere with the sequential and cumulative nature of the process; the implications of each class of hypotheses are available within the general time period that management devotes to defining that particular facet of the financial plan, not twenty-four hours later, when the discussion has moved on to another subject. In addition, system response is fast enough to permit management the luxury of exploring just about as many hypotheses as they want.

Once all the hypotheses have been explored and agreement has been reached on a plan for the coming year, the system is used to prepare a series of reports to help Esmark management monitor the most critical aspects of expected performance. One is a Financial Review which summarizes the plan in terms of the most significant financial parameters and ratios, as consolidated at the Esmark level. Another, which provides

somewhat more detail, is a Statistical Summary that provides return-on-assets views of the plans for all subsidiary companies and their divisions. A third document, the Capital Assets Expenditures Summary, provides an aggregate view of improvement and expansion programs for each subsidiary company in terms of revenues, earnings, assets employed, return-on-assets, and program expenditures.

Though the system was developed to support the financial planning effort that takes place at the Esmark level, it is used in much the same way by the management of both the subsidiary companies and their divisions. Made available to them through the facilities of a time-sharing network, the accounting models in the Divisional subsystem are used by divisional management to look at the pre-tax financial implications of various combinations of base, improvement, and expansion programs recommended by their profit center managers. Then, once the divisional plans have been formulated and submitted to the management of the Esmark subsidiaries, they, in turn, use the same system facilities for working out the plan they will submit to Esmark.

Another standard application of the system by management below the Esmark level is the one described in the earlier discussion of the Project Analysis model. This model can be used to screen all the profit center improvement and expansion programs to make sure they meet Esmark's investment criteria before incorporating them in the subsidiary-company plans.

Beyond those standard applications, the use of the system by the levels of management below Esmark varies from one subsidiary to another. Some use it only to meet the Esmark planning requirements, while others use it to generate a variety of additional analyses and reports. The Swift & Co. subsidiary has even gone so far as to expand the functional scope of its divisional subsystems to support the management planning and control processes below the division level.

System Development

This system is very much a creature of Esmark's management. It was conceived in response to a problem identified and defined by them, though in very general terms, and its functional features represent the capabilities they consider to be effective solutions to various facets of the problem.

In keeping with these origins, the development of the system has been, and continues to be, an evolutionary process. The initial system design defined only a small part of the mix of functions currently provided; the present functional configuration was arrived at empirically, with each stage of the system's evolution providing management with the experience needed to define a new set of capabilities that would solve another aspect of the problem.

By choosing this system development approach, Esmark avoided getting bogged down — as most companies do when attempting to develop a high-level management information system — in the difficult, if not impossible, task of defining a complete set of functional system specifications without a thorough understanding of the relationship between the system and the process it is supposed to support. The approach also had the advantage of producing a rising curve of system utility that started almost at the very beginning of the project. As a result, management has found it much easier than is usually the case to provide the type of long-term support required for development efforts of this type.

The point from which the system has evolved was the general concept of using a data base containing planning information a computer could manipulate, to produce consolidated projections that would support the strategic decision-making process. At that point in time, the only thing known for sure about the nature of that support was a set of specifications for what is now called the Statistical Summary.

The very general nature of this initial concept led to a design insight that turned out to be critical: the system would have to be built

around data base management software designed to facilitate the evolution of both the data base and system functions. Such software would have to offer three basic capabilities. First, it would have to permit the physical and logical structure of the data base to be independent of the logic of the computer programs that manipulated it. Without this kind of data independence, the system's functional scope would be limited by the design of the data base, and any change in that design would require the re-writing of all the programs based on it.

Second, the data base management software facility would have to permit any combination of physical and logical file structures needed to minimize storage requirements and maximize data accessibility, while still allowing new classes of data to be added without having to redesign and rebuild the entire data base. Otherwise, cost considerations would severely limit the degree to which the data base could be adapted to respond to new and potentially useful management insights about the nature of data.

The third essential capability had to do with the system's accessibility to the user. The user's experience with the system is the primary evolutionary force. If this experience is the second-hand one of working through a programming staff, the flow of ideas for system improvements and expansion is greatly impeded by the time, effort, and information loss associated with working through intermediaries. Eventually, system utility suffers.

This can be avoided with a data base management facility that offers a user-oriented language for specifying the system's input, processing, and output functions. Ideally, this language should have a structure that can be grasped quickly and easily by the user, and a vocabulary of English words that is rich enough to permit the user to express all the functions that might be needed.

Esmark found all three capabilities in a data base management facility called RAMIS II, a system developed by Mathematica, a firm based in Princeton, New Jersey. De-

signed specifically to provide computer users with the software they need to build, maintain, and manipulate their own data bases, RAMIS II handles all of the system's data management functions and provides the language facility with which users enter data and specify system outputs. This same language also is used to specify all accounting model operations, except those involving the computation of taxes.

Within the system development framework, Esmark has been able to solve the two problems that normally make the job of building data bases of useful planning information so difficult.

The first problem is defining the contents of the data base. Esmark's initial specification called for the collection of financial data down to the level of individual plants, which is several organizational levels deeper than what is now collected. This specification produced a huge outpouring of data for the Esmark staff to validate. The process of validating the data and cleaning up inaccuracies turned out to be much too cumbersome to be done in a reasonable time frame. In the absence of any procedures to force a degree of data discipline on the managers generating the plans, a data base that size simply was not practical.

The solution to this problem turned out to be the obvious and easy one of raising the organizational depth of the data base to the profit center level. Though that still produced a sizable annual data base of some 250,000 records, it was possible to get a data base that size cleaned up and validated, using on-line methods, in a reasonable period of time.

The second problem is even more fundamental than the first. The relationship between the size and practicality of a planning data base is primarily a function of data quality: the higher the quality of the data, the easier it is to clean and validate. Improving data quality, therefore, eases the time constraint that the validation effort imposes on the size of data base that can be put to practical use. High data quality also increases the number of ways in which the data base can

be used by building user confidence in it and by deepening the level of detail at which a reasonable degree of accuracy can be produced. The problem, of course, is how to get the quality of the data up to the level needed.

Esmark has successfully solved the data quality problem with a mix of procedures and incentives. Key to the solution is the concept of holding the subsidiary companies responsible not only for collecting the planning data, but also for physically entering it into the system. This concept has a number of things to recommend it. For one, it puts the validation responsibility closer to where the data are generated, which improves control over what goes into the data base. In addition, the validation job, which can be so formidable when centralized, is broken into smaller, more manageable pieces and distributed among the subsidiary companies.

The most important advantage of the concept is that it provides a way of using the computer to impose some discipline on the data inputs. This is done in an editing facility, which runs a series of basic checks to test the completeness and consistency of the data being entered, and prevents any incomplete or erroneous data from being used in the divisional accounting models. Complementing this feature is a specification for the miscellaneous supplementary data which must be supplied for all planning programs. Designed to validate the balance sheet and income statement data, this specification provides the editing facility with a better than normal basis for measuring completeness and consistency.

The concept of holding the subsidiary companies responsible for their own data entry also has an important incentive built into it. Along with the responsibility goes the asset of having on-line access to the Divisional subsystem. The accounting models in the subsystem provide subsidiary management with a set of functional capabilities that can be used in whatever way they want to improve their own planning and control operations.

A second, completely separate incentive gives management of the subsidiary com-

panies another, much more powerful reason for making sure that data quality is kept high. The first year of the three-year plan that is finally worked out with Esmark is used to prepare monthly budgets and define performance goals for the subsidiary companies during the coming year. A bonus is paid to key managers upon achievement of these goals. Thus, the managers of the subsidiary companies have good reason to see that the planning numbers from which the goals are derived are as realistic as possible.

Continuing Evolution

Esmark's use of the computer for strategic financial planning continues to evolve. The Merger and Acquisitions model is being reworked to make it simpler to use. The ability to translate the plan for the first year into a

monthly budget, a function now performed manually, has been recently added to the Esmark Accounting model. And a second, complementary system built around an automated data base containing economic information on the external world as well as selected internal data, is under development on a minicomputer. Esmark management is still leading the way. The idea of the second system comes from them.

The development strategy for this second system is the same one that worked so well for the first. Working from the general concept that a computer can produce useful inputs to the planning process from a data base of economic projections, they are having such a data base built. Once that is done, they will work out, empirically, the system functions that will produce the most useful information. It is all really very simple. All that is needed is some time, some money, and some patience.