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TEACHING FORECASTING, CASH BUDGETING AND INVENTORY MODEL, BUILDING USING SBTOOLS™

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## ABSTRACT

Students, entrepreneurs and small business owners have need to efficiently and effectively develop forecasting, cash budgeting, and inventory building and control models for business planning, whether for classroom or business development purposes. Efficiently being able to create different financial alternatives will not necessarily yield more effective planning results, but does allow for "easier exploration of business options. While no proof" is at hand to indicate the teaching or learning effectiveness of such exploration, intuitively, additional modeling of the options may lead to more effective decision making. Lotus 1-2-3™, has created an opportunity to develop easy to use templates. A financial template was developed to allow for more efficient modeling of cash budgeting, forecasting and inventory building and control. The computer based instruction aspects of the template involve the potential learning which occurs by shifting the burden of calculation from the planner to the computer. This paper describes the use of SBTools™ as a computer based instruction tool.

## BACKGROUND

With the advent of the personal computer in the late 70s, significant educational and commercial interest in computer based instruction developed (Niemiec and Walberg, 1987). While substantive research continues into the efficiency and effectiveness of computer based instruction (Davis and Mount, 1984; Dossett and Hulvershorn, 1983; Bracey, 1987; Kulik and Kulik, 1987; Niemiec et. al, 1986; Sterkel et. al, 1986; Miles et. al, 1986; Golden and Smith 1988), its use in the classroom has been extensive (Newman, 1988; Hu and Saunders, 1986).

Simulations and financial models utilizing the popular Lotus 1-2-3™ are numerous and diverse and include investment and portfolio analysis (Wingender and Ball, 1988); oil and gas well investment (Wingender and Wurster 1987); material resource planning (Schroeder and Gentry, 1987); cost/volume/profit relationships (Well, 1987) decision making (Prentice Hall, 1988); marketing; finance (South-Western Publishing Co., 1987); cost accounting (South-Western Publishing Co., 1985); and small business management (south-Western Publishing Co., 1985) to name just a few.

### SBTools™

SBTools™ is a partially integrated set of planning tools designed for the small business owner and manager, entrepreneur, or student. The program originated when one of the authors frequently encountered small business owners and managers who were confused by the accrual statements they were receiving from their accountants each month. The most acute point of confusion was the difference between what the accrual statement defined as profit, and what the owner knew was the cash balance in the company's checkbook (a cash measure). This confusion supported the business owner in his or her continued rationalization to not perform strategic planning. As a result, at times during the year the company would run short of cash, while at other times, cash was adequate. With an enhanced understanding of the company's projected cash flow, an owner would be better prepared for the slow periods, thus increasing the stability and the viability of the business. With this in mind, SBTools™ was written to be a computer tool managers and owners, entrepreneurs and students could use to both track and forecast their cash needs, as well as to introduce them to strategic planning in a simple format.

SBTools™ is a Lotus 1-2-3™ template. Because SBTools™ was written with its own macros, the user needs only to have access to Lotus 1-2-3™, not a working knowledge of it. The SBTools™ menu is short and easy to use.

The SBTools™ template includes the following:

- \* Cash Budget,
- \* inventory Statement,
- \* income Statement,
- \* Balance Sheet

## DISCUSSION

The authors have found the use of the template effective and efficient in terms of their business planning needs. The linkages between various parts of the worksheet allow for less expenditure of time in its use. The program also allows for the rapid development of a number of alternative options in the business planning process, thus affording the potential of more effective planning.

Students have found the program somewhat difficult to use, partially because they become submerged in Lotus 1-2-3™ and confuse Lotus commands with SBTools™ commands. This difficulty can be overcome by expending additional classroom time explaining the use of the template.

A second difficulty is that students have generally had no practical experience in building forecasts, cash budgets, and inventory models. Thus, the financial planning further confuses the student. The concept of "ramp-up is sophisticated and causes additional difficulties.

A third difficulty is caused by the enhanced efficiency of the template. The student typically procrastinates in the development of his or her budget. This creates further difficulty and is a pervasive problem in the use of microcomputers in general at the university level. Some of this difficulty can be ameliorated by altering course sequencing.

On a positive teaching note, whether for student, entrepreneur or small business owner, utilizing SBTools™ produces a more consistent financial model of the firm. Utilizing the same budgeting approach allows for a consistent planning experience. Forcing a consistent methodology on the end-user may create some distaste. the consistency makes for a more complete job.

The cost benefit in utilizing a consistent and common approach for the instructor is time saved in teaching and time saved in grading. Rather than having to deal with a diversity of financial formats, one format saves extensive grading and teaching time. Utilizing a consistent format with the entrepreneur and small business owner also saves both the consultant and the owner substantial amounts of time. Generally, the same difficulties have arisen when the template is use for planning purposes by entrepreneurs or small business owners. The difficulties have been overcome by working directly with these end users. The same positive aspects of the use of the template also are present.

Testing of the overall learning effectiveness of the template has not yet occurred. Initial testing has begun and will be the subject of a future paper.

## CONCLUSIONS

For the skilled, competent computer literate user, SBTools™ can be utilized to more efficiently, and likely, more effectively develop financial forecasts. For the less computer literate and financially unsophisticated user, SBTools™ can be used to more efficiently develop forecasts, cash budgets and inventory models. Moderate to extensive intervention is needed with the less sophisticated user. For the instructor or consultant, consistency of approach should produce a positive cost benefit.

The references will be provided upon request