Can DSS improve strategic planning?

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Decision support (DSS) can improve strategic planning and strategic control. Many organizations have not defined performance objectives and that limits possibilities. Setting measurable performance objectives is the first step toward using information technology to improve implementation of strategic plans. Then managers need to use analytics and decision support to monitor and track the objectives. Research indicates data-driven or data-informed organizations improve decision-making, increase profitability, and drive innovation.

During the past 35 years, my research has investigated business planning and decision-making processes and the use of information technologies to support and enhance those processes. In the early years, the overlap between planning and information technology was small, but many expected that information technologies could and would have an increasing impact on strategic planning and strategic decision making. Call it technology optimism or a technology imperative, but today "best practice" in strategic planning is making greater use of decision support and information technology. Computerized decision support can improve strategic planning, strategic control and strategic decision making.

In the mid-1990s, it appeared that strategic planning was a misunderstood concept and that attempts to increase rationality and planning in organizational management had failed. Henry Mintzberg was leading the charge to "unfreeze" our views on strategic planning. Sadly some managers thought formal strategic planning involving identifying explicit strategies and substrategies, stating measurable objectives, developing programs, and creating budgets was no longer necessary or important.

Basically Minztberg (1994) was concerned that a bureaucratic, analytical planning process deceived managers into thinking that they were planning strategically and hence improving future organizational performance, when that was not the case. While some of Minztberg's concerns are valid, he generally overstated the problem and was confrontational and simplistic in his critique rather than constructive. Planning must involve both analysis, critical thinking and formal processes. Reconceptualizing strategic planning won't improve poor processes.
Mintzberg raised a valid concern, but he failed to offer any real solutions. Formal planning processes with computerized support can reinforce and enhance planning in organizations, but poorly designed processes can be and usually are detrimental to effective planning.

Fortuitously, Kaplan and Norton (1996) injected new life into strategic planning with their balanced scorecard approach. According to balancedscorecard.org, "The balanced scorecard is a management system (not only a measurement system) that enables organizations to clarify their vision and strategy and translate them into action. It provides feedback around both the internal business processes and external outcomes in order to continuously improve strategic performance and results." This perspective led to developing computerized tools to supporting the balanced scorecard approach. Strategic management and planning were in vogue again.

According to Steiner, strategic planning involves anticipating the future environment, but decisions or plans are made in the present. The following are nine characteristics of exemplary strategic planning processes based on Steiner's (1969) views with an assessment of how analytics and computerized decision support can help:

1. Strategic planning is both continuous and irregular in response to non-routine stimuli.
   
   Document-driven DSS can speed-up access to plans and a computer-based strategic planning work flow process can improve responsiveness to non-routine stimuli. A document-driven DSS integrates a variety of storage and processing technologies to provide complete document retrieval and analysis.

2. The problems confronted by strategic planning are unstructured and usually unique.
   
   Data-driven DSS intended for performance monitoring can help identify problems that require strategic analysis. Also, unstructured problems can sometimes benefit from structuring them using general purpose decision analysis tools.
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3. Strategic planning tends to encompass the entire scope of activity of an organization.

The larger an organization, the more important computerized decision support of various types become to insuring the success of strategic planning processes. Information technologies can help manage planning processes that extend across the functions of a large, geographically distributed organization.

4. Strategic planning requires large amounts of information.

The only effective means to manage large amounts of information is with information technologies. Kaplan and Norton argued effectively that strategic planning and control requires information about "How the organization will sustain its ability to learn and grow?", "What business processes we do and must excel at?", "How we do and should appear to our customers?", and "How we do and should appear to our shareholders?" Data-driven DSS with scorecards can store this diverse range of information in a manageable format that is accessible to senior managers.

5. Strategic planning is heavily dependent upon subjective assessments.

Model-driven decision support can help managers capture and analyze subjective assessments quickly and meaningfully, but senior managers must be willing to record their subjective assessment using computer-based systems.

6. Strategic planning usually involves making a choice among a range of alternatives.

Whether the choices are associated with strategy content or resource allocations, decision tools can help managers make such choices. Computerized
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Brainstorming using group DSS has been available for 30 years and such systems have become Web-based in recent years.

7. Uncertainty and risk is high in strategic planning.

Computerized model-driven decision support can include risk and uncertainty in calculations. Excel add-ins like Crystal Ball can assist in analyzing risk in special studies related to strategic planning.

8. Strategic planning usually covers a long time period.

Model-driven DSS can simulate results for many periods into the future. Also, prior plans can be monitored, revised and reassessed more quickly in a computerized planning and decision support environment.

9. Strategic planning should guide tactical planning.

Computerized decision support can facilitate sharing of planning information, support collaborative planning and link strategic and tactical planning processes.

Information and decision support systems help managers develop a strategic information repository that can provide information to support the firm's competitive strategies. A organizations’ database should be used to support strategic planning, marketing, and other strategic initiatives.

What are some DSS and strategic planning case examples?

The National Nuclear Security Administration's Office of International Material Protection and Cooperation (IMPC) needed to...
identify, quantify, and track its progress in accomplishing its overall mission and goals as well as planning and predicting future progress a decade into the future. Project Performance Corporation met this need by "supporting a program-wide strategic planning initiative and developing and deploying a web-enabled metrics tracking system."

At Electrogrid, according to McCall and Young (2006), thirty-six directors gave their input in an online survey and an online discussion forum for a strategic planning process. Then sitting in a conference room, "managers entered comments concurrently into their computers, quickly exchanging and documenting ideas on electronic flipcharts. With anonymity ensured, they wrote frankly and read with an open mind. Within thirty minutes, the Environmental Scan produced two hundred well-documented issues of concern to the organization."

American Savings Bank uses BusinessObjects Budgeting and BusinessObjects Plan Reporting to give the bank's 100 business managers control over the budgeting process. Telindus integrated BusinessObjects Budgeting and BusinessObjects Plan Reporting software to eliminate the gap between its human resources and financial systems in its 20 locations throughout Europe and Asia.

Where is Strategic Planning headed?

Richard T. Roth of The Hackett Group identified several key trends that will drive World-class business performance in the future, including 1) "collaboration" will become the watchword to planning; 2) companies will continue to de-emphasize the traditional static budget in favor of driver-based rolling forecasts; 3) increased focus on more dynamic planning processes that allow organizations to anticipate and adapt when events happen rather than waiting for the roll of the calendar; and 4) technology advances will bring tantalizingly close the possibility for real-time decision support.

In summary, what are the prerequisites to effective strategic planning:
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1. Effective communication and decision support

2. Extensive senior management involvement

3. A comprehensive, rational planning process

4. A widespread perceived need for strategic planning

Computerized decision support is part of the solution for better planning and control, especially in larger, more diverse organizations.

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