Why Not SISP Too?

CASE tools are slowly working their way into many organizations. Primarily they are finding usage in database and applications analysis, design, development and maintenance. Typically overlooked is their potential contribution to strategic information systems planning (SISP).

SISP is the process of identifying a set of databases, applications, and hardware that will meet the long-range business goals of the organizations. To do so, planners typically produce an enterprise model describing the organization’s environment, an enterprise information architecture describing a proposed information technology environment, and a strategic IS plan of prioritized database and application development. CASE tools have become available to support it and are being adopted. However, this is happening even more slowly than CASE tools for analysis, design, development, and maintenance are coming into use.

With one particular CASE tool and one particular predefined SISP methodology in mind, we describe how a CASE tool can facilitate SISP. We do so by depicting a typical set of tasks that an organization would carry out in order to develop its strategic information systems plan of databases, applications and hardware as well as the priorities with which they would be implemented. We do so in the hopes of educating more database experts about such CASE tools in order to inspire further usage or study of the tools.

The SISP exercise would typically require eight steps.

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**Step 1: Initiation.**

Senior management sets up a planning team and a schedule for the planning study. The CASE tool generally plays no role in this step.

**Step 2: Strategy Analysis.**

The planning team identifies the organization’s critical success factors and uses the CASE tool to document and prioritize them. The CASE tool stores them in a computer-based file for future analysis and retrieval. The team does likewise with the organization’s critical assumptions about the enterprise, business environment, and competition as well as with top management’s goals and information needs.

**Step 3: Assessment of Current Information Systems.**

The planning team studies the current IS environment. It identifies problems in this environment and defines projects that can bring short-term improvement to existing systems. The team uses the problems to identify the projects. In doing so it uses the CASE tool to store information about each problem (e.g., its name, text definition, cause category, and start date) and each project (e.g., its name, definition, priority, and ranking).

**Step 4: Operations Analysis.**

The planning team documents operating level strategies, processes, and information requirements. The team uses the CASE tool to document the organization’s processes and mechanisms (i.e., the methods by which the processes are executed). The tool stores the name, definition, frequency,

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1 Sterling Software’s KEY: Plan and Ernst & Young’s Navigator are the CASE tool and SISP methodology models for this report.
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