Increasing decision-making effectiveness should be the major objective for any DSS project. Stabell (1983) argues "analysis and diagnosis prior to design are key activities in a decision-oriented approach" for actually building an effective DSS. Diagnosis of current decision-making and the specification of changes in decision processes are the activities that provide the key input to the design of a computerized DSS.

Conducting a decision process audit is a decision-oriented approach to evaluating decision support needs. In general, auditing operational and managerial decision processes can be very informative and useful. Describing and explaining a specific decision process can be difficult however because of problems in defining the boundary of the process. A decision process refers to the steps, tasks, methods, procedures, events and/or analyses that lead to a result, a decision. Many decision processes are part of larger processes.

An example of a decision process is in Hammer and Champy (1993). They describe a process at IBM Credit that is a classic example of a poorly designed decision process. After receiving a call from a salesperson requesting financing, the request is logged on a paper form. After moving that paper around in four more steps, a decision to approve or not is finally made. The entire process "consumed six days on average, although it sometimes took as long as two weeks (p. 37)". The example also illustrates that reengineering can improve decision processes. The structure of the process was changed, improved decision support was developed and the turnaround on a request for financing was reduced to four hours. Productivity improved dramatically.

A decision process audit is a first step in identifying opportunities to redesign decision processes and include new decision aids and decision support systems in business processes. In some situations, an audit suggests changes in decision technologies that can improve performance and reduce costs. An audit is an evaluation of the process. This type of audit is similar to a quality audit. Quality audits 1) assess how successfully processes have been implemented, 2) judge the effectiveness of achieving any defined target levels, 3) provide evidence concerning reduction and elimination of problem areas and 4) are a management tool for achieving continual improvement in an organization. When we complete an audit the central questions are: how can we perform the task and process better? and what changes if any should have the highest priority?

Five steps should occur in a company-wide decision process audit:

Step 1. Define the decisions, decision processes and related business processes that will be audited. Define the authority of the auditor, purpose of the audit, scope of the audit, timing of the audit, and resources required to perform the audit. Identify the owner and primary contact for each major decision process.
What is a decision process audit?

Step 2. Examine the formal design of each major process. Diagram each process and specify the decision criteria currently used.

Step 3. Examine the actual use of the decision process. Observe the process. Interview decision makers and collect data. Is the process implemented and used as it was intended?


Step 5. Reporting and recommendations. Summarize steps 1-4 in a written report. Discuss what is working well and what needs to be improved. Develop recommendations for improving major decision processes. Hold an exit meeting with decision makers.

Both managers and MIS staff need to work on completing this diagnostic task. In most situations an audit does provide sufficient information for specifying a DSS solution.

References


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