Defining the Target Environment: A “Shared Vision” Methodology for Information System Planning

A Case Study

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Most information system plans include an objective description of system requirements, but fail to describe the qualitative environment they will produce. For most users the qualitative environment is what counts. Experience in one organization demonstrates that developing an explicit “shared vision” of the target computing environment can strengthen the weak link between objective requirements and subjective user expectations. The shared vision statement uses anecdotal “scenes” to portray the “look and feel” of the service environment and the precise makeup of required services. It also defines appropriate implementation priorities and contains information from which to derive a traditional system requirements definition. The authors have adopted the phrase Shared Vision Methodology to mean the process of involving a broad spectrum of those who will be affected by the introduction of a new systems environment in the definition and planning of that environment. This paper is a case study of the use of the proposed methodology.

Information system plans can be categorized by their time horizon or focus. Short term plans usually have a time horizon of one to two years, intermediate plans a horizon of two to five years, and long-term plans a horizon of five years or more. The focus of an information system plan can be operational, tactical, or strategic. Operational or tactical plans address questions like “Which project should be done next?” or “How should the envisioned hardware migration process be timed?” Strategic plans raise much broader questions, for example “Where is the organization going and how should information resources support that mission?” and “How will information resources contribute to the overall success of the enterprise?”

Typically information system planning flows from long-term strategic planning, to tactical planning, to operational planning. The hoped for result is a functioning system that efficiently meets the strategic objectives originally enunciated. It is possible to exhaust this...
hierarchy of planning activity, and successfully deliver a set of services that meets every specified technical requirement, without ever paying attention to the nature of the computing environment being created.

For example, an organization’s business strategy might dictate that financial managers will have the means at their disposal to conduct on-demand analysis of the “extended firm’s” competitive advantage. The information systems strategy to support this business strategy might state that “all interaction with the financial system will be on-line and interactive with a high degree of end-user report writing capability.” A traditional tactical plan implementing this strategy would include hardware and software specifications, capacity requirements and projections, a catalog of specific projects required to achieve full implementation, their sequence, and the like.

Rarely would the tactical plan address environmental issues like: Will electronic commuting be supported by placing workstations in employees homes? Will key executives be able to access needed financial data from varying remote locations? Will the interactive facilities be located in the comptroller’s office for all functions, or will access to the system be widely distributed by giving all pertinent users workstations and appropriate training?

One reason that questions like these are commonly overlooked in planning is that they are often dismissed as cosmetic. This is unfortunate since those questions usually illuminate important issues related to the appropriate definition of workers’ jobs, the nature of work—and change—in the organization, and the specifications that ultimately will have to be developed for computing and telecommunications hardware. The common failure of tactical plans to predict the qualitative outcome of the endeavor in terms of its effect upon the service and user environments creates a weak link in the planning process. The weak link is between the explicit contents of the plans and the implicit expectations that users arrive at and come to rely upon.

This article describes a process to strengthen that weak link. The process aims at defining, in a way that is meaningful to end users and management information system (MIS) professionals alike, the “target environment that the organization wishes to create from the implementation of its strategic plan. The term target environment refers to the setting in which information system operations are carried out, and the qualitative nature of that setting as experienced by each group of similarly situated users within an organization.”

Review of Applicable Theory

Traditional planning models have not done well with respect to strategically positioning firms in the rapidly moving information age. William H. Gruber of Research and Planning, Inc. points out that the planning task of the Information Services planner is not a routine matter that can be readily structured, but is a problem of “planning amid change,” where much of the change may indeed have been generated by the strategic possibilities of information systems themselves. Gruber notes that the classical planning methodologies fall down when the requirements for the information involved are a moving target. Planning formulas that concentrate on a single application by itself, as a onetime exercise, are no longer valid. A new
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