

IT Strategic Planning by a College within a University

Robert A. Jefferis
Case Western Reserve University
10900 Euclid Avenue
Cleveland, Ohio 44106
216-368-4436
Robert.jefferis@case.edu

Joseph T. Mansour
Case School of Engineering
10900 Euclid Avenue
Cleveland, Ohio 44106
216-368-4436
Joseph.mansour@case.edu

ABSTRACT

As an outgrowth of an assessment done for an ERP project, the Case School of Engineering at Case Western Reserve University (CWRU) worked across departments with faculty and staff to define information technology strategies consistent with the university and supportive of the goals of the college. The process used to reach agreement on those strategies is presented in this paper.

Categories and Subject Descriptors

K.6.1 [Project and People Management]: Strategic Information Systems Planning.

General Terms: Management

Keywords: Strategic, planning, collaboration, faculty involvement.

1. INTRODUCTION

The Case School of Engineering is one of eight colleges and professional schools that comprise Case Western Reserve University. Each college or management center is its own profit/loss center, similar to a subsidiary of a corporation. The colleges' income is "taxed" to fund central services, including some information technology services (ITS), but the colleges have no direct control over those expenditures. Examples of the services provided centrally are an Enterprise Resource Planning (ERP) System implementation of the PeopleSoft Financials and the PeopleSoft Human Capital Management suites of software.

Delivery of education and research is the responsibility of each college. This often leads to "gaps" in services between what is provided centrally and what is needed by the college. These gaps are typically bridged by faculty, staff, and students in various ad hoc ways that result in a silo effect of managing information technology. There is little communication, sharing, or economies of scale in this approach, which often leads to disparities in quality between the various departments in the college.

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This paper describes the process used to identify these "gaps" in information technology services and to choose a strategy for addressing them for a single college. This process is an outgrowth of an ERP assessment done by the central ITS to determine the state of technology management within each college and the ability of the college to effectively implement the ERP technology. The ERP assessment consisted of one-hour interviews with individual faculty, staff, and students, culminating in a report of the findings and recommendations for better management information technology services within the college.

2. PREREQUISITES TO THE PLANNING PROCESS

Information technology (IT) strategic planning is similar to other types of strategic planning in that decisions need to be made about persistent issues facing the organization. However, the focus tends to be on IT and the IT organization. If a college does not have any IT issues then IT strategic planning is not warranted. However, The Case School of Engineering did have several issues to face: how to effectively leverage information technology in research or education; how to address the quality of technology support disparities between departments within the college, particularly with regard to how each department handled desktop support; and how to address the gaps between central IT services and college needs.

Certain items made the process easier. The presence of a college-level strategic plan determined what was relevant to the scope of IT within the college. This helped avoid the "solution in search of a problem" scenario. In addition, major stakeholder buy-in for the need to address IT issues, if not specifically the process, lead to greater ownership of the end product.

Management and faculty, as part of this IT strategic planning process, were the major stakeholders. The Dean and staff in that office were presented with the draft of a charge and a proposed membership for an ad hoc IT strategic planning committee. The committee was to include faculty representatives for the most part, and also some key staff members. The chairperson selected was the Associate Dean for Research and Graduate Programs. One faculty member with the following characteristics was solicited from each of the seven departments. Each representative needed to be a: 1) strategic thinker who could see the big picture; 2) leader in the department; and 3) good communicator. The key staff members included representatives from the Development and External Affairs and Marketing departments, the business manager, and an IT person familiar with central IT initiatives. The final decision on membership was made by the Dean. The

executive committee of the faculty provided the faculty nominations and created the ad hoc committee.

3. DEFINING THE PROCESS

3.1 Formal charge to the committee

The Dean charged the committee. Several considerations went into the charge. Explicitly cited for consideration were the areas of research, education, and administration. This was done to ensure that all these areas were covered and none was subordinate to the others. The outlook was for the next 3-5 years, the generally accepted limits of business technology planning.

To keep the effort realistic, effective use of budgetary resources was emphasized, with due consideration of any value propositions. The entire process was to be completed within three months. The deliverable was a report of the committee to the Dean.

Created at the same time, but not formally charged by the Dean, was an operational committee that would deal with current day-to-day technology problems faced by the college.

3.2 Process

Ensuring faculty participation was a key criterion. There was concern that having a process that was too structured would alienate faculty. We used the same method commonly used for enticing students to participate: food! Biweekly lunch meetings lasting 1.5 hours were held for a period of 3 months. Phone calls to faculty just before each meeting helped attendance.

In general, the process was similar to normal group decision-making. The first step was to understand the issues and opportunities, then to brainstorm, prioritize and refine solutions and, finally, to build consensus. Between meetings the committee chairperson and IT person met to discuss where in the process the committee was, what research into various ideas needed to be done, and on what the committee should focus.

The brainstorming period included demonstration of key centrally-supported services, such as an instructional technology initiative using streaming video. This evoked some confidence in and consideration of central IT initiatives. For a brief period of time the committee was exposed to a groupware environment. Although the intention was to use the groupware to facilitate the planning process, this did not occur due to the time required to install the software and make it usable. Instead, ideas provided were included with each meeting's minutes, with attention given to each member's suggestions.

A key moment in the process was when the committee took "ownership" of the process, rather than having it directed by the chairperson or IT person. This occurred when one faculty member took over the whiteboard and created a format to organize the various ideas, with input from all of the members of the committee. Although this format was ultimately rejected as the input followed a more operations-oriented thread, the faculty had taken ownership of the process. The ideas generated were included in an appendix for future reference.

The attention of the strategic committee could be focused on the future because it was able to refer day-to-day concerns to the operations committee. Although this worked well initially,

eventually, when resources were being discussed, the committee moved towards more implementation orientation, but did retain strategic components.

An iterative process of reworking the recommendations then occurred, with consensus building. Some time was given to reviewing central IT initiatives. Compromises were made and although complete consensus was not achieved, all members supported the final product. The final step was to review the report against the original charge to ensure its fulfillment.

3.3 Committee Evaluation of the Process

At the completion of the process, a 10-question survey was given to the committee to evaluate both the process and the end product. Questions in the analysis have been separated between process and end product.

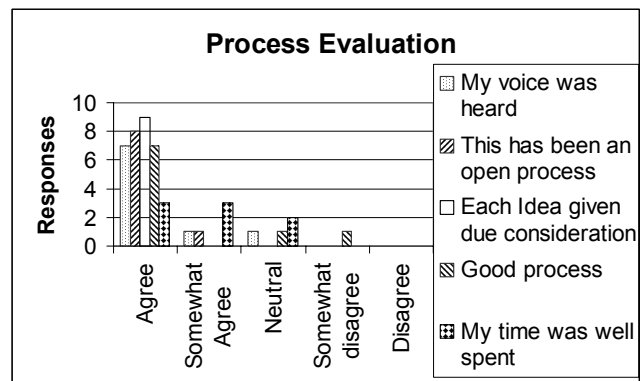


Figure 1

The results in Figure 1 show that members generally felt very comfortable with the process.

Figure 2 shows responses to statements about the end product, a strategic IT plan for the college to follow. The results, although positive, show less-strong agreement.

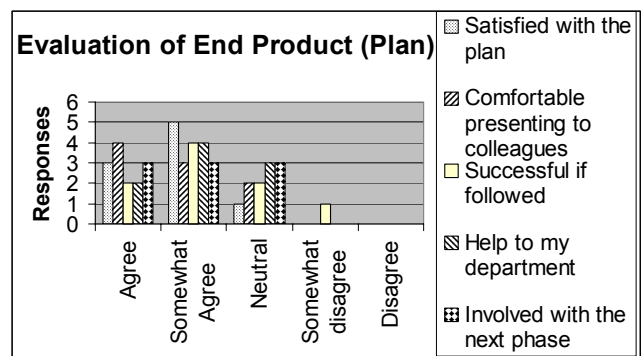


Figure 2

There are a wide variety of explanations for these results. They include possible deficiencies in the plan, unrealistic expectations, perceived inability to execute the plan, cost of implementation, and others. Also, some departments in the college have information technology support staff and therefore may see the plan as external to them. Another comment from the committee was that the recommendations were not flashy or bold, but basic answers to fundamental questions.

3.4 Product of the Process

The final product was a report of the recommended strategies for the Case School of Engineering to adopt and a presentation of those recommendations to the Dean, including recommended staffing. The intent is to review the strategies on an annual basis with a college IT oversight committee. The IT oversight committee will be focused on refining and implementing the strategies accepted by the Dean.

4. EVALUATION OF THE PROCESS

Several issues became apparent during the process. Formulating general strategies and tactics for the college was relatively easy, and generated enthusiasm among committee members. Determining staffing needs for the college was more difficult. In part this may have been due to the existing disparities in IT staffing among the departments. Some departments had staff and others did not. There was very little sharing of staff among the departments. The level of service provided by staff was also a factor. Should it be limited to basic IT maintenance, or should staff be provided to support high level implementation of interdepartmental services related to education and research support? Given the widely varying and not fully defined needs of all departments, the issue of staffing at the department level was deferred to the oversight committee. Ultimately, staffing recommendations were guided by the needs of the strategies recommended by the committee.

Group dynamics also played a major role. The faculty in general were more open than the staff in discussing, listening to, and understanding one another's idea, and developing it for consideration by the committee. Some staff were focused on specific issues and communicated with the chair outside of the meetings, both of which lead to some polarization.

Another issue was the lack of understanding of commodity-based central services. Since the School of Engineering is one of eight colleges, making changes to centralized services does not occur based on the needs of one college. The university is reluctant, appropriately, to make specialized changes for one college, when future maintenance, hence cost, may be affected. The lowest cost is to use the central services "as is", while handling specialized services at the college level.

5. RECOMMENDATIONS

Having the Dean and faculty involved in the beginning certainly played a role in moving the process forward. Although attendance was strong at the beginning, calls to remind faculty of the importance of their input became necessary. It also served to keep from repeating, for latecomers and no-shows, topics already covered and decisions already made.

For future planning sessions, two half-day offsite retreats will work better for commitment and smoother process. This may necessitate trading openness in the process for additional structure needed to facilitate the larger blocks of time.

One discussion that would have helped avoid the implementation orientation is "risk versus reward". Although everyone seeks to reduce risk, some risk may be needed to balance the necessary rewards being sought. This is culture norm and a group norm.

The importance of time-bounding the process cannot be understated. Many decisions are made in the eleventh hour no matter how long the process. The length of time needed depends on how open or transparent the process is to the major stakeholders, and how much research is needed for investigating alternatives. However long the process, ownership by the stakeholders is necessary to support the plan moving forward.

6. ACKNOWLEDGMENTS

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