



TOOLS FOR NAVIGATING COMPLEX DECISIONS

# Information Technology Alignment in Higher Education

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KEY FINDINGS

- ▶ 76% of respondents identified IT alignment as a top reason to engage in strategic planning.
- ▶ 74% said IT planning has considerable impact on the level of IT alignment achieved.
- ▶ 78% of respondents with IT plans said they explicitly link these plans to their institutional budgetary process.
- ▶ Only 56% agreed that their IT governance process is effective; only 45% said that it is well understood.
- ▶ 82% of institutions that report effective IT governance are more likely to report effective IT strategic planning.
- ▶ Institutions that produce an IT plan are more likely to include measures with their IT initiatives as well as publish performance expectations for existing IT services.

Clarity of Institution Vision	Clear	9 (2.2%)	324 (81.2%)
	Unclear	25 (6.3%)	41 (10.3%)
		Weak	Strong

**Central IT Is Aligned with Institutional Priorities**

Institutional Vision and Central IT Alignment (N=399)

Alignment, as defined by the Merriam-Webster Dictionary, is “the proper positioning or state of adjustment of parts, or an arrangement of groups or forces in relation to one another.” For an information technology (IT) organization, “proper positioning” within an institution becomes inherently more important as technology facilitates many collegial and institutional activities. With median funding levels for institutional central IT organizations reaching \$2.13 million in 2002,<sup>1</sup> proper alignment ensures that institutional and IT leaders agree on the optimal use of IT resources—and recognize technology’s intrinsic value to the institution.

The heart of IT’s alignment with an institution is a common understanding of that institution’s priorities, which is derived from an inter-connected web of strategic leadership activities—IT strategic planning, IT governance, communications, and measurement/assessment. The EDUCAUSE Center for Applied Research (ECAR) examines this critical yet complex process in its study, *Information Technology Alignment in Higher Education*. Our research shows that alignment’s benefits are clear. It is an important process for gathering campus information; situating this information in the broader context of IT, the campus, and external trends; and garnering resources to accomplish initiatives supporting the institution’s purpose and goals. Higher levels of perceived effectiveness in the core activities of planning, governance, and communication do indeed result in higher levels of perceived alignment between IT and the institutional purpose.

*This ECAR Roadmap synthesizes the results of a survey of 483 EDUCAUSE voting representatives conducted in October 2003 and derives from the June 2004 ECAR report, Information Technology Alignment in Higher Education. Most survey respondents are senior information technology officials. To order the full study and learn about subscribing to ECAR, visit the ECAR Web site at <<http://www.educause.edu/ecar/>> or contact us at <[ecar@educause.edu](mailto:ecar@educause.edu)>.*

## KEY REPORT CONCEPTS

### Alignment Checklist: Which Institutions Report More IT Alignment?

Institutions that ...

- ▶ clearly articulate campus vision and/or priorities
- ▶ consider planning important and closely linked to the institutional budget
- ▶ publish an institutional or a campus IT plan or engage in planning activities continuously
- ▶ report dynamic or stable environmental climates (as opposed to turbulent or volatile climates)
- ▶ perceive their IT governance process to be effective
- ▶ perceive their IT strategic planning process to be effective
- ▶ have greater communication with and involvement of key constituents, especially faculty and deans
- ▶ clearly document objectives at the time IT initiatives are approved

Yet alignment can be difficult for higher education leaders to achieve. Higher education's idiosyncrasies can often cloud the alignment process. Individual colleges, for example, frequently operate as independent entities. Contradictory priorities may exist at the institutional and technology level. So how does an institution achieve IT alignment? ECAR's Alignment Checklist provides further guidance.

ECAR's research found several similar characteristics among institutions that agreed that their IT organization is aligned with campus priorities. A closer look reveals the intertwining roles IT strategic planning, IT governance, communications, and measurement/assessment play in achieving IT alignment.

#### Articulate Campus Vision and/or Priorities Clearly

There is no doubt that an overall campus vision is important. Seventy-four percent of respondents agreed that the institutional vision at their campus is clearly articulated, and 66 percent agreed that institutional priorities are clearly articulated. The link between IT alignment and institutional vision and priorities was a recurring theme in both our survey data and interviews. Interviewees told us that they were extremely aware of the importance and usefulness of their campus vision and priorities in bringing about IT alignment. The ECAR survey shows that those respondents who perceive a clear institutional vision reported more central IT alignment than those who did not perceive a clear institutional vision.

#### Consider Planning Important and Closely Linked to the Institutional Budget

The budgetary process is well recognized as a powerful tool for alignment. Our study substantiates this common wisdom, finding that most institutions explicitly link their IT plans to the institutional budgets (78 percent). Eighty-three percent of institutions that agreed their central IT priorities are aligned also link their IT plan to the campus budget.

#### Publish an Institutional or a Campus IT Plan or Engage in Planning Activities

Colleges and universities are planning in earnest. Today, 90 percent of responding institutions said planning is important, and 81 percent have created an actual overall institutional plan. Most importantly, it appears that institutional planning may pay off in terms of IT alignment with institutional priorities. Those campuses that place importance on planning produce an institution-wide plan, or continuously engage in planning activities also reported more IT alignment. This trend continues into the IT arena. Fifty-seven percent of respondents reported that they already have an institution-wide IT plan in place, with another 25 percent currently developing their first IT plans. These IT plans are most likely to be found at the institutions where there is already an overall campus plan.

#### Report Dynamic or Stable Environmental Climates

Respondents characterized their institutional organizational climate as dynamic, stable, turbulent, or volatile.

## METHODOLOGY

- ▶ A literature review to identify issues and create a working set of issues to be tested
- ▶ A qualitative online survey of 483 EDUCAUSE member higher education institutions
- ▶ Qualitative telephone interviews with 22 higher education IT executives
- ▶ An in-depth review of 57 IT plans found on the Web
- ▶ Four case studies from on-site visits to Calvin College, the University of Cincinnati, the University of Delaware, and The University of Memphis

Our data suggest meaningful differences among these populations with respect to planning and IT alignment. Eighty-six percent of respondents reporting stable or dynamic environments said that IT is aligned with institutional priorities (compared to only 69 percent of those in turbulent or volatile environments). This finding is important. Few institutions will escape a period of turbulence. So we have a contradiction—planning and alignment appear to be both more critical and more difficult in unfavorable organizational climates.

### Oversee IT Governance Process Effectively

Close relationships between IT and non-IT organizations and staff are key enablers of IT alignment. Survey respondents and interviewees emphasized the centrality of involving key constituents in meaningful and creative ways—to gain input for determining IT directions, initiatives, and priorities and to maintain ongoing communications about IT progress and achievements. Interviewees said that this is at the forefront of their thinking as they design IT governance, planning, and implementation processes. Our data also suggest that formalization matters. By far the most common IT process identified by respondents for gaining advice on IT policy and programs is an academic IT advisory committee (67 percent) or administrative IT committee (63 percent). Further, 45 percent of institutions involve students on their IT committees.

### Plan for IT Strategically and Effectively

Respondents are also only partially satisfied with their IT strategic planning—66 percent of respondents said that their IT strategic planning process is effective. Where IT leaders have a clear institutional vision and priorities to guide them and where the IT plans are integrated into the institutional budget, respondents were more positive about their IT strategic planning. Institutions reporting effective

IT governance were much more likely to report effective IT strategic planning (82 percent) than those who do not report effective IT governance (31 percent).

### Have Greater Communication with and Involvement of Key Constituents

Our study underscores the importance of the involvement of campus leaders and constituents in the process. Approximately half of central IT organizations “almost always” or “always” ask the chief administrative officer, the provost/academic vice president, and the chief financial officer for input. Though 69 percent of respondents agreed that their IT priority setting process is broadly inclusive, we see communication focused on senior administrative executives, with fewer respondents adamant that they communicate with deans and faculty.

### Clearly Document Objectives at the Time IT Initiatives Are Approved

IT performance assessment is not yet widespread across higher education. Measurement of IT is complicated by the fact that so much of its value comes from intangible benefits that are nearly impossible to quantify. One-third (33 percent) of institutions said they include measures in their IT initiatives at the time they are approved. Institutions that produce an IT plan are more likely to include measures with their IT initiatives as well as publish performance expectations for existing IT services. Institutions that measure most often use “softer” methods such as self-assessment (74 percent “usually” to “always”). Just half use customer satisfaction analysis and surveys “usually” to “always.” Only a handful of institutions use full methodologies such as the Malcolm Baldrige process or the Balanced Scorecard. Further, it appears that performance dashboards (9 percent use “usually” to “always”), although relatively new, are gaining popularity.

## RECOMMENDATIONS

### 1. Create a unique institution-wide vision.

A clear and formal institutional plan lays the groundwork for IT planning activities. But just as important is to recognize that in higher education, “one size fits one.” An effective planning process must take into account both the unique character of the institution as well as the breadth of planning processes and methodologies available to establish buy-in.

### 2. Create a formal and inclusive IT planning process.

The involvement of key constituents, especially the president or chancellor, is critical to creating support for IT strategic planning and alignment. Indeed, unless a plan is shaped by many and known by all, the view of IT may be incomplete, incorrect, or incoherent. Many respondents reported their presidents were active champions or cheerleaders of technology, which creates an institutional culture that is receptive to the IT planning process and recognizes the value of its institutional technological investment. In addition, respondents reported that where the senior IT leader has a seat on the cabinet, top administrators are more frequently solicited for input into central IT initiatives. Survey respondents and interviewees also emphasized the centrality of involving other key constituents—administrators, faculty, students, and, at a few institutions, parents and alumni—to gain input for determining IT directions, initiatives, and priorities and to maintain ongoing communications about IT progress and achievements. While planning facilitates alignment in stable and dynamic environments, its importance cannot be underestimated in turbulent and volatile times.

Just as important is to have a formal process. Most respondents did not show great satisfaction with IT governance, but, for example, respondents at institutions with an academic advisory committee indicated greater IT alignment.

### 3. Provide concrete links and measures that foster and monitor IT alignment.

As institutions and technologies evolve, so do the criteria and circumstances for IT alignment. Therefore, it is important to recognize that IT alignment is not one specific project but an ongoing process. Linking IT plans to institutional budgets, including measures in IT initiatives, and instituting both “soft” and methodological performance measures are ways to monitor IT alignment continually. Equally important is communication of IT priorities and performance—not only to senior administrative executives but also to deans, administrators, faculty, and students. An inclusive planning process is the initial step, but ongoing communication reinforces buy-in. Respondents and interviewees relied on the personal touch, using scheduled meetings with cabinets, councils or senates, and individual institutional leaders. Broadcast e-mails, Web sites, annual reports, and newsletters are popular communication methods that supplemented individual efforts.

## Endnotes

<sup>1</sup> EDUCAUSE, Core Data Service, 2002 Summary Report, available at <<http://www.educause.edu/ir/library/pdf/pub6005d.pdf>>.