Responding to Recession: IT Funding and Cost Management in Higher Education
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KEY FINDINGS

• Nearly 70% of respondents report that their total budgeted expenditures for technology are flat or had declined from FY2007–2008 to FY2009–2010.

• A slight majority (54%) expect a major or minor decrease in total central information technology (IT) budget (operating and capital) for FY2010–2011, with most of these respondents expecting the decrease to be minor.

• The majority of respondents actively engaged in reducing IT costs attempt to do so without reducing service or service levels.

• The central IT budget decreases that respondents have experienced have had only a modest impact on their likeliness to source IT services differently—whether to the cloud, to another institution, or to a noninstitutional third party.

• Most of our respondents do not believe that the economic crisis has catalyzed fundamental change in how IT is managed.

• Among all respondents, about half agree or strongly agree that their institutions are investing to lower their administrative costs.

• A majority of respondents disagree that their institutions are investing in IT as a means of reducing the costs of an education.

• Only a minority of respondents agree or strongly agree that their institutions are investing in technology as a means to increase revenue.

The global recession’s impacts have been felt in all corners of the economy, including higher education. Declining endowment values, reduced funding from state governments, and reductions in students’ and families’ capacity to fund education have reduced institutional revenues. Federal economic stimulus funds and increased demand for education have offset some of the recession’s effects. However, for the majority of institutions the enhanced revenue from these sources has not been enough to avoid the need to reduce operating expenses, delay investments, or search for new revenue.

Change in Total IT Spending and Central IT Operating Budgets, FY2007–2008 to FY2009–2010

<table>
<thead>
<tr>
<th>Change in Budget</th>
<th>Total IT Spending (All Budgets) (N = 280)</th>
<th>Central IT Operating Budget (N = 305)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease of 10% or more</td>
<td>22.5%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Decrease of 5–9%</td>
<td>14.3%</td>
<td>15.4%</td>
</tr>
<tr>
<td>Flat to 4% decrease</td>
<td>35.4%</td>
<td>30.2%</td>
</tr>
<tr>
<td>Increase of 1–4%</td>
<td>13.2%</td>
<td>15.7%</td>
</tr>
<tr>
<td>Increase of 5% or more</td>
<td>14.6%</td>
<td>15.4%</td>
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</tbody>
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This ECAR roadmap synthesizes the important issues and recommended actions drawn from the study Responding to Recession: IT Funding and Cost Management in Higher Education, by Philip J. Goldstein. The study is based on a survey of 319 EDUCAUSE member institutions conducted in November 2009, as well as qualitative interviews with 20 IT leaders to deepen our understanding of survey findings in critical areas. It also included an online, real-time Delphi process that solicited the opinions of a panel of experts on how the recession has impacted IT organizations and the potential of technology to transform higher education’s future costs and revenues.
The recession spurred a range of changes in IT organizations. Some of the most frequently adopted cost management tactics are one-time measures that will be difficult to sustain without degrading institutions’ IT capabilities. There was also an increased willingness to take on difficult challenges such as rebalancing common and distributed IT services and increasing adoption of alternative sourcing strategies such as cloud computing or outsourcing. Most institutions have not fundamentally changed how IT is managed or substantially reduced its cost, however. Most are also not investing in technology as a means to reduce the cost of an education or to support efforts to generate new revenues. Absent a change to IT’s cost structures or a substantial recovery of funding levels, IT leaders believe their organizations will be hard-pressed to meet new needs or support strategic technology goals.

ECAR designed this study to assess the impact of the recession on higher education’s IT organizations and to identify the strategies and practices that were implemented to reduce IT costs.

**State of IT Funding**

While many institutions have experienced budget pain, we were surprised by the shallowness of budget cuts that most respondents reported. A small majority of respondents (53%) reported a decrease in their central IT operating budgets from FY2007–2008 to FY2009–2010. However, nearly a third of respondents (30%) reported a change of between 0% and –4%. Even more surprisingly, a similar percentage of respondents (31%) reported that their central IT operating budgets had increased over this same time period, including 15% who reported increases of 5% or more. Overall, only about 1 in 4 institutions reported reductions of 10% or more to the central IT operating budget, and 1 in 10 experienced a decrease of 15% or more. It is possible that institutions suffering deeper budget cuts did not complete our survey. It may also be that for some institutions the recession’s impact was offset in part by the effects of government stimulus spending or increased enrollments.

We may have only captured an initial wave of budget cuts, which could be followed by additional years of flat or declining budgets. When we asked respondents to state their expectations for FY2010–2011, a slight majority expected a decrease in the total central IT budget, with most expecting the decrease to be minor. Only 9% of those who experienced a decrease over the past two years anticipated an increase in the coming fiscal year.

As for the 3 in 10 institutions that enjoyed central IT budget increases, it appears that many of them were benefiting from multiyear investments approved and funded prior to the economic downturn. The most frequently selected reasons for budget increases were the need to sustain basic IT infrastructure, support projects already under way, and resource an increase in the scope of central IT responsibilities.

**IT Cost Management**

The great majority of respondents (84%) reported that, since FY2007–2008, their central IT organization had been engaged in efforts to reduce IT costs. At the same time, they faced a key constraint: two-thirds described their approach as reducing costs without reducing services or service levels, and the most frequently cited barrier to cost reduction was the unacceptability of reducing service levels. Furthermore, almost a third of respondents who faced declining
central IT operating budgets said they were hampered by
the inability to make one-time investments that would
result in recurring cost savings.

To understand how institutions achieved cost savings,
we asked those respondents engaged in reducing IT costs
to tell us about their adoption over the past two years of 37
cost-management actions organized into five categories:

• **IT Personnel Management:** The most common
actions were reductions to travel and freezing/
eliminating open positions, each adopted by 75%
or more of respondents. Adoption was lowest for
the most difficult changes, such as staff layoffs and
consolidating departmental IT organizations.

• **IT Financial Management:** Majorities reported
increased use of university-wide purchase agreements,
renegotiation of corporate contracts, and the
deferment of capital expenditures.

• **IT Project Portfolio:** Nearly two-thirds reported
that their institutions were placing a higher priority
on projects that have a higher potential return on
investment.

• **IT Management:** Actions adopted by half or more
of respondents included increased use of virtual
servers, greater use of standard hardware, extending
hardware replacement cycles, increased use of open-
source software, and deferred maintenance on major
systems/infrastructure.

• **IT Support Services:** The most commonly reported
action was to increase the use of tools to automate
support (55%). Only about a fifth of respondents had
reduced service levels.

When we asked respondents to identify which
categories provided the largest proportion of IT cost
reductions achieved in the past two fiscal years, no
single category dominated. Personnel management
and financial management were each selected by about
a quarter of respondents, and the three remaining
categories were each selected by about 15%.

**Crisis or Opportunity**

Most respondents did not believe that the economic
crisis had in fact catalyzed fundamental change to how
IT is managed. Respondents also disagreed on average
that their institutions had significantly reduced the cost
of IT operations or implemented IT that had signifi-
cantly increased revenue. Institutions that experienced
a decrease in their central IT operating budget agreed
more strongly on average that they had fundamentally
changed how IT is managed and significantly reduced
the costs of IT operations. However, the mean responses
were still between disagree and neutral.

Perhaps the magnitude of the fiscal challenges most
respondents faced never became great enough to require
fundamental change as a response. As bad as things were,
they may not have been bad enough to overcome higher
education’s innate resistance to change that comes too
fast or looks too radical. It may also be a sign that some
IT leaders are still searching for strategies that could
substantially reduce IT costs. Cloud computing, software
as a service, and multi-institutional collaborations promise
savings through economies of scale. But their track records
are relatively short, some are difficult to implement, and
all carry risks that must be managed.

**IT as an Investment**

We asked respondents whether their institutions
were investing in IT as a means to reduce the costs of
an education, lower administrative costs, or increase revenues. Respondent perceptions seem to lean against the notion that institutions were treating IT as an investment in these areas; only the item about investing in IT to lower administrative costs averaged an above-neutral response, and none rose to the level of a mean response of “agree.” Among all respondents, about half agreed or strongly agreed that their institutions were investing to lower administrative costs. Comparatively, 20% agreed or strongly agreed that their institutions were investing in IT as a means of reducing the costs of an education. Likewise, only a minority of respondents (32%) agreed or strongly agreed their institutions were investing in technology as a means to increase revenue.

Conclusion
For many this was a period of belt tightening and not a crisis. Most institutions employed fairly traditional measures to reduce their IT operating budgets, such as hiring freezes, reduced outlays for training and travel, or deferred purchases of new hardware and software. More aggressive and admittedly less proven cost-savings tactics such as outsourcing, cloud sourcing, shared services, or organizational change were pursued less frequently. As a result, most respondents felt they had reduced their costs but not substantially changed how IT is managed.

Persistent structural problems and a slowly recovering economy are likely to sustain higher education’s focus on its costs for many years to come. Higher education IT organizations should strive to sustain their focus on IT cost management and prepare for budgets that will grow slowly and may endure additional cuts. However, the coming years need not be a period of decline and retrenchment for IT. The long-term fiscal pressures institutions will face should increase their interest in using technology to address their most strategic issues. IT leaders have an opportunity to convince their institutions that technology is an area of investment and not just a cost to be minimized in tough budget times.

RECOMMENDATIONS

Based on its findings in Responding to Recession: IT Funding and Cost Management in Higher Education, ECAR offers the following recommendations:

1. Embrace transparency.
Operate the IT organization with maximum transparency to build understanding of the cost of technology services and enhance the credibility of institutional IT organizations.

2. Reshape the institutional IT agenda.
Shift priorities for technology toward investments that enhance the institution’s short- and long-term financial footing. Place greater priority on technology projects that improve student retention or reduce the time to graduation, provide infrastructure or analytical capacity to support strategies to enhance revenues, or generate operating efficiencies.

3. Develop long-range financial plans.
Engage IT governance groups in the development of multiyear financial plans for IT that identify the resources required to sustain technology and foster innovation, frame the competing demands for scarce resources, and establish the opportunities to stretch IT investment dollars by altering how IT is delivered.

4. Restructure IT cost models by thinking differently about commodity technologies.
Move more rapidly to source commodity IT services to the cloud, traditional outsourcers, or multi-institutional collaborations in order to preserve time and resources for investment in strategic technologies and services.

5. Reorient the skills and focus of the IT organization.
Adapt the skills sets and structures of the IT organization to prepare for the increased use of alternative sourcing strategies and a heightened focus on IT services that support institutional efforts to reduce costs, improve decision making, and increase revenues. Introduce new services that help the institution make more effective use of technology.