

The Future of Administrative IT

Expert Panel Findings and Recommendations

An EDUCAUSE Executive Briefing

Key Findings

1. **Administrative IT's value extends beyond operational efficiency and effectiveness—thanks to analytics, it is now strategic, too.**
2. **Maximizing administrative IT's value requires clarifying administrative costs and their drivers; minimizing unnecessary customization in services and systems (e.g., finance, human resources, student information) to the extent possible; establishing an institutional strategy for analytics; and sharing knowledge within and between institutions.**
3. **Our community's message should be that the status quo is unsustainable—all of higher education has to work together to realize the potential of administrative IT to reduce costs and advance the institutional mission.**

Colleges and universities are approaching a crossroads in administrative IT. Institutions cannot function without administrative systems (financial, human resources, student information, and so forth), and many current systems are nearing the end of their life cycles. The prospect of replacing these multimillion-dollar systems coincides with institutional funding challenges and demands to lower costs while improving outcomes.

On September 27, 2013, EDUCAUSE convened an expert panel on the future of administrative IT. The panel, comprising higher education chief information officers (CIOs) and representatives of the higher education chief business officer and administrative systems/services provider communities, addressed questions such as:

- What is the value of administrative systems to the institution?
- What should institutions do to maximize the value of their investment in such systems?
- What is IT's message to higher education on the future of administrative systems?

The Value Proposition

The panel identified two main sources of value for administrative systems: operational and strategic.

The Value of Administrative IT

Traditionally, institutions have valued administrative IT for operational **efficiency and effectiveness.**

Analytics has changed the game, making administrative IT **a strategic asset for improving mission performance.**

Operational

- Historically, administrative systems have enabled more efficient and effective operations. They allow institutions to better serve students, faculty,

and other stakeholders; support staff in managing and improving institutional functions; and meet legal and regulatory compliance obligations.

- From this perspective, institutions should seek to balance the cost of administration, including administrative IT, against the returns they receive in greater efficiency and operational performance, lowering costs as much as possible without sacrificing the benefits of a well-run institution.

Strategic

- Administrative systems capture a wide variety of data, much of which concern transactional records or operational needs. As institutions have implemented analytics, they have come to realize that they can mine data for key indicators of mission performance. This expands the value proposition of administrative systems from essential operational infrastructure to key strategic asset.
- A panelist summarized the point by noting that once systems have achieved transactional efficiency, they have reached their value limit in the absence of analytics, which can change the game: “[W]e’re now at a potential inflection point where the right investments in analytics could generate exponential increases in strategic returns. The question is whether institutions can make those investments.”

Maximizing Value

With this value proposition in mind, the panelists identified different options for maximizing it.

1. Clarify Costs and Their Drivers

The panel determined that balancing the cost of administration (including IT) with the operational efficiencies and performance improvements that effective administration produces requires a better understanding of administrative costs and what drives them. Key points from the discussion include:

- Institutional customization of what should be “industry standard” processes often frustrates efforts to achieve cost-effective administrative services and systems. As a panelist noted, uniqueness tends to emerge in non-unique administrative functions over time through history and culture,

How Can We Maximize the Value of Administrative IT?

1. Clarify costs and their drivers—

Higher education needs to create effective cost models for administration (and related IT) to support strategies for improving cost-effectiveness.

2. Minimize customization—

Institutions should seek to reduce cost and improve performance through reengineering and shared services (knowing that better cost models will only increase their success).

3. Get analytic—

Institutions should implement analytics to maximize the strategic value of administrative IT as indicated by key mission indicators (e.g., student retention).

4. Share knowledge—

Institutions should work individually and collectively to more effectively capture and share best practices and opportunities for shared services.

and then this “institutional identity gets coded” into administrative systems.

- The “coding of institutional identity” limits operational value by reducing opportunities for cost reduction and service improvement through standardization and shared services within and between institutions.
- Business process reengineering (BPR) can promote the standardization needed to reduce costs and improve services (through best practices and economies of scale, for example), as well as to enable shared-services models.

- Colleges and universities generally lack good cost models for administration (and administrative IT). Panelists indicated that this may inhibit BPR and related cost-saving strategies (e.g., cloud services, shared services) in terms of identifying opportunities and building stakeholder support to pursue them.
- Understanding and reducing administrative/IT costs is difficult to accomplish without appropriate cost data on which to base good working metrics; such “rule of thumb” measures would help institutions draw effective internal and peer comparisons, and would thus serve as important starting points for BPR and cost-saving strategies.
- Significant savings from BPR are possible. A panelist discussed his direct experience with a university system that standardized student services processes as part of implementing a shared student information system; as a result, the cost of implementation dropped by over 60%.
- BPR might be essential to tapping administrative IT’s strategic value through analytics: “How do we maximize value? We have to move from a focus on transactional processing efficiency to [a focus] on the strategic value that the data systems generate and how to get it. Services reengineering is the key to doing that....”

2. Minimize Customization

The panel agreed that the pending renewal of administrative systems creates a unique opportunity for the CIO to engage other senior leaders in assessing what the institution can achieve through BPR to reduce or eliminate unnecessary customization. Panelists concluded that:

- Institutions should explore the potential of BPR to enable greater efficiency and effectiveness in services and systems, even as they work to build effective working models of administrative (and related IT) costs.
- Colleges and universities often face cultural and leadership challenges to pursuing BPR, and an understanding of how to successfully tackle those challenges is not widespread across the IT and higher education communities.
 - » For example, the viability of shared-services initiatives often depends on whether administrative services leaders at partner or system institutions will agree to realign business processes with industry standards.
 - » Helping administrative services leaders to “get to yes” on standards-based process realignment remains a puzzle that the higher education community must work together to solve.
- Institutions must explore incentive models that have demonstrated success in driving BPR within units and institutions, such as approaches that allow units to recapture some of the associated savings.
- Pursuing BPR (as well as shared services), both within and between institutions, requires sustained commitment and active involvement by the full senior leadership team. The CIO alone cannot drive such efforts.
- A key consideration is what steps the institution will take to ensure that it captures any savings resulting from BPR to support strategic objectives, as opposed to letting those resources disappear within functional areas.
- Institutions should also consider whether their strategic interests might be better served by directing savings from BPR to establishing or enhancing their analytics capabilities.

3. Get Analytic

The panel recognized that higher education has thus far invested heavily in administrative systems to support operations as opposed to decision making: “Ninety percent of our money is spent on transactions, and ninety percent of the strategic value of the systems is in the data that we can’t effectively analyze....” With this in mind, panelists expressed the following views on analytics:

- The potential of analytics to advance strategic leadership and mission performance makes pursuing an analytics strategy essential: “What institutions should do to maximize value is to move to data-driven decision making.”
- Emerging cases illustrate the strategic potential of analytics. For example, a participant discussed his institution’s application of analytics to its administrative

data, which uncovered factors allowing it to significantly improve student retention.

- » He noted that this has real-world implications since the institution determined that every 1% increase in freshman retention equals \$1 million in additional tuition revenue.
- » By establishing clear ties between analytics, student retention, and financial returns, the panelist indicated that he has secured the leadership commitment and resources to continue bolstering the institution's analytics capability.
- Supporting analytics at scale will probably entail working to maximize the efficiency of spending on the operational aspects of administrative systems to allow for reinvestment in analytics.
- IT units should consider applying analytics and BPR internally first to generate proof-of-concept before engaging other stakeholders in such efforts. Panelists stressed the importance of establishing credibility on these issues in order to achieve success.
- The EDUCAUSE community must engage with system providers on the analytics capabilities institutions most need: "In order to achieve true progress, we will need true collaboration between the IT and institutional communities and the vendor communities."
 - » The panel indicated that providers are moving to integrate analytics capabilities into their offerings, but it is not clear that they have effectively accounted for what institutions actually need.
 - » In particular, panelists expressed concern that providers may not offer institutions the ability to develop institution-specific analytic metrics and reports within future systems, limiting their usefulness and requiring use of "bolt-on" applications with their added complexity and expense.

4. Share Knowledge

Panelists stressed the importance of collaboration between administrative and IT units—both within and across institutions—to building the knowledge base on how to continuously improve efficiency and cost-effectiveness in administration and related IT.

They recommended that:

- Administrative units should work with the IT organization to establish a process for ongoing evaluation of administrative systems capabilities. This should include assigning functional-area leads to regularly conduct such assessments.
 - » Panelists noted that administrative units often do not fully understand the system capabilities already available. This leads to requests for procuring new applications to address needs that existing systems might meet, which adds further complexity and cost to the administrative IT environment.
 - » By making regular evaluation and knowledge dissemination of systems' functional capabilities part of their ongoing operations, administrative units can partner with IT to maximize the value of the institution's existing systems.
- Institutions and stakeholder communities, both individually and throughout higher education, need to develop models and processes for consistently capturing and disseminating relevant best practices and opportunities for shared services.
 - » Colleges and universities often produce significant improvements and innovations in administrative processes and systems that may go undiscovered outside the originating institution.
 - » If institutions implement ways to regularly capture and share such progress, both internally and with peers, that dynamic could significantly impact service/process efficiency and effectiveness in general. It may also expand the potential for shared services, leading to even greater efficiency and effectiveness.

The IT Community's Message

Panelists raised a number of ideas about what IT's message should be to higher education about the future of administrative IT, but the core elements were:

- The current trend in higher education costs, including the cost of administration and related IT, is not sustainable.

- “[A]chieving sustainability will require radically revisiting how we approach running the university and implementing the technology to support that.”

“[T]he status quo is no longer enough; we either define our future or someone’s going to define it for us.”

- “Institutions are caught between the spending necessary to sustain transactional systems and trying to find the investment capital to drive strategic analytics efforts.”
- “We have to look at new operating and sourcing models to generate savings from transactional operations to generate investment capital.”

Moving Forward

As the EDUCAUSE community considers its next steps on administrative IT, the expert panel advocated for raising awareness across higher education about the value of administrative systems and how best to maximize it. Panelists discussed the need for resources like case studies and cost models to support such efforts. The panel also highlighted the potential of collective engagement to address shared concerns, such as sustained outreach to providers and other higher education stakeholders on essential requirements for new systems.

EDUCAUSE will draw on the panel’s thinking in working with members to advance the future of administrative IT in the best interests of higher education. The association remains committed to engaging other stakeholder communities in understanding the challenges colleges and universities must meet during the pending transition, as well as the opportunities it offers for improving efficiency, effectiveness, and institutional success. As the panel concluded, all of higher education must get involved in changing how colleges and universities address the cost of administration and related IT, and EDUCAUSE stands ready to serve as a leader and an active partner in that effort.

A Thank You to Our Panelists

EDUCAUSE would like to express its appreciation to the member representatives who volunteered their time, knowledge, and experience in serving on our future of administrative IT expert panel:

- **Debra Hust Allison**, Vice President for Information Technology and Chief Information Officer Emerita, Miami University (Ohio)
- **Mark Askren**, Chief Information Officer, University of Nebraska–Lincoln
- **Larry Conrad**, Associate Vice Chancellor for Information Services and Technology and Chief Information Officer, University of California, Berkeley
- **Henry DeVries**, Management Consultant and Principal, Ellucian (former Vice President for Administration, Finance, and Information Services, Calvin College)
- **Bill Dillon**, Executive Vice President, National Association of College and University Business Officers (NACUBO)
- **Tracy Futhey**, Vice President for Information Technology and Chief Information Officer, Duke University
- **Joy Hatch**, Vice Chancellor for Information Technology Services, Virginia Community College System
- **Charlie Moran**, Senior Partner and CEO, Moran Technology Consulting
- **Brian Voss**, Vice President for Information Technology and Chief Information Officer, University of Maryland
- **Gordon Wishon**, Chief Information Officer, Arizona State University