Foreword

Irrational Exuberance

In May 2003, Harvard Business Review Editor-at-Large Nicholas G. Carr published an article titled “IT Doesn’t Matter.” Carr’s article ignited a debate about the role, value, impact, and potential of information technology (IT). This debate continues with vigor fully two years later. Carr’s article touched the nerves of chief executive officers who had been called into question by shareholders and industry analysts about the impact of IT investments on company performance. To many, “IT Doesn’t Matter” looked like the exclamation point on the proclamation that the “New Economy” was dead.

Information technology has had a checkered career in the service of firms and organizations. Until recently, economists, investment bankers, and policy makers debated the so-called IT paradox. Nobel Prize–winning economist Robert Solow (1987) said that we see computers everywhere except in the productivity statistics. Indeed, productivity growth in the United States slowed in every decade since the 1960s, while investments in IT grew dramatically. Some took this paradox as proof that IT doesn’t affect productivity. In the 1990s, a period of unprecedented creativity in computing was launched by the emergence of 1) the Internet as a widespread mass communication medium; 2) the World Wide Web as a means of linking textual “pages”; 3) the search engine; 4) the rapid reduction in prices of computer workstations; and 5) the adoption of a wide variety of technical standards. We witnessed the insertion of an “e” in front of nearly every area of human activity: learning, business, banking, and commerce. A New Economy was declared, an economy fueled by real productivity gains that were ascribed to computing and communications technologies. The future included exciting visions of convergence; plentiful (and cheap) broadband; 3-D Webs; and next-generation search engines that could link data, images, and other media.

Bursting Bubbles

By 2000, the party was over. The era of so-called irrational exuberance was followed by choppy and near-recession levels of economic performance, and the major productivity gains of the 1990s diminished. For some, the New Economy was indeed dead! In corporate IT environments, the challenge shifted from a preoccupation with placing an “e” in front of every firm activity to a focus on how to take the most money out of IT spending. Practices such as onshore, offshore, and near-shore outsourcing were widely adopted.

Along with the demise of the dot-com darlings of Wall Street came skepticism about the need for massive Y2K investments and the pain and expense of acquiring and installing new enterprise resource planning (ERP) systems. Chief information officers (CIOs) everywhere were under pressure (if not under siege) to demonstrate their value to the
“enterprise.” Added to this were revelations of corporate excess and criminal conduct that led to the passage of new laws (Sarbanes-Oxley) that prescribed transparency in financial transactions, institutional accounting, and reporting. In this environment of increased scrutiny and accountability, many CIOs faced a tougher time selling institutional investments in new technologies such as portals, customer relationship management (CRM), and content management systems. Finally, Carr asked the question everyone dreaded: does IT matter? Was there, Carr implied, an elephant in the executive suite? In another sign of the times, in the October 15, 2003, issue of CIO Magazine, Stephanie Overby decried lower CIO salaries, slashed IT budgets, and the removal of CIOs from corporate boards and executive teams as the phenomenon of “the incredible shrinking CIO.”

What About Higher Education?

Higher education was not immune from the early euphoria about IT, the creeping skepticism, or the subsequent disappointments. Indeed, the educational sector itself and the opportunities presented to it hovered near the center of the New Economy hype, as investment bankers at Merrill Lynch and the Bank of America produced tomes proclaiming the emergence of an exciting new for-profit educational market—with institutions including Temple University, New York University, Cornell University, and Columbia University making forays into these waters—and as Cisco CEO John Chambers proclaimed that e-learning’s impact on network consumption would make e-mail look in comparison like a “rounding error.” I described (1999) the herky-jerky tango of IT in higher education as a dance with the devil, and higher education’s path from irrational exuberance over the new economics of e-learning to its subsequent disappointments over for-profit e-learning was described in compelling and controversial terms by Robert Zemsky (2004) as “thwarted innovation.”

Against this backdrop of exuberance and disappointment, ECAR studies have shown repeatedly that belief in the value of IT in higher education is widely shared among top leaders of colleges and universities.

Enter ECAR

The fellows of ECAR, especially the authors of this study, have long felt that the truth in the story of IT’s contribution to the “business” of higher education likely falls somewhere between the New Economy promises of the mid-1990s and the thwarted innovation described by Zemsky. First, information technologies—particularly networking—clearly have transformed scholarly communications and research (National Science Foundation, 2003). For example, computational simulation and modeling have taken their place alongside theory and experimentation as methodological pillars of science. Second, ECAR fellows felt that IT and the organizations that support it had borne too large a share of higher education’s hopes, dreams, and expectations. We suspected that disappointments over our institutions’ seeming inability to “run like businesses” might be misplaced at the feet of IT leaders. Perhaps, we speculated, higher education does in fact run like a business; that is, the business of experimentation, discovery, learning, and community engagement. The fundamental questions that framed ECAR’s curiosity in this domain were:

- Are higher education business processes performing well?
- Does investment in IT enhance the performance of these processes?
- What roles do culture, leadership, and other factors play in process performance?
- In sum, in their business aspects, do colleges and universities behave like businesses?
A Tough Nut

As ECAR fellows discussed this potential research topic, we were at once excited and horrified. From a business perspective, the framing questions as posed collectively represented the proverbial $64,000 question: does IT matter? In fact, this research begged even more vexing questions. Does culture matter? Does leadership matter? On the frightening side, we were mindful that it would be nearly impossible to devise a research strategy that would satisfy possible critics and that the political nature of the inquiry virtually assured the emergence of critics. Therefore, in solid research fashion, we declare the results of the study that follows to be preliminary. And in fact they are. Robert Kvavik, Philip Goldstein, and I are mindful of the inherent limitations of survey research generally and particularly of research that depends primarily on the analysis of the subjective impressions of one campus subculture (IT leadership). Having rejected any claim to Nobel Prizes, let me add my confidence in this research and most enthusiastically in our researchers. No data set has ever been so tortuous, or so tortured. As Kvavik commented to me, “every drop of nectar has been squeezed from these data.” ECAR fellows are at once analytical wonks and, at the same time, profoundly skeptical of their own findings. Judith Pirani and Julie Ouska spent hours with dozens of our colleagues in conversations designed to amplify, verify, refute, or otherwise clarify our findings. They are careful listeners and bring texture and nuance to our work.

Herbert Simon, Take a Bow

The results of this study were simultaneously murky and obvious. What the data reveal at first is survey respondents’ disturbing acceptance of “acceptability” in the performance of many of higher education’s business processes. How could that be, we wondered. Weren’t those of us who drank Michael Hammer’s process reengineering Kool-Aid committed to excellence? The ECAR study Good Enough! reveals what Nobel Prize winner Herbert Simon taught us. Simon reshaped our understanding of decision making. Classical theory held that most behavior could be explained in terms of matching the utility of a decision against its costs. In this way, rational decision makers made optimal decisions. Simon argued (1965) that bounded rationality led decision makers instead not to look for optimal solutions, but rather to “satisfice”—that is, to settle for solutions that are “good enough,” in the belief that better solutions would have to justify the extra costs carried in finding them. Satisficing, if you will, is the decision maker’s conscious relaxation of rationality. Good Enough! revealed that higher education decision makers and process owners are in many cases satisfying themselves with business processes that perform only adequately. Importantly, the data show that student-related processes outperform others. Tomorrow’s headline: higher education decision makers behave rationally!

As uneventful as this finding may appear, it is subtle and important. Within this finding is the kernel of an answer to that persistent question: “Why doesn’t higher education act like a business?” In fact, in most ways it appears that higher education does act like a business, investing heavily in infrastructure and programs that produce scholarship and educated students, but cutting corners in areas deemed to be on the periphery. Indeed for many business processes, “good enough” can be translated as “in compliance”—nothing to brag about, but nothing that would tarnish the institution’s reputation or embarrass its leaders. A long way from world class, but world class supply-chain management never vaulted an institution into the top echelon of higher education either!
IT Does Matter

The data in the study also reveal a complex set of decisions, behaviors, and patterns that underlie IT investment decisions and the relationship of these decisions to institutional processes. This is not a surprise and in fact is at the heart, I believe, of why an understanding of IT’s value is problematic. Information technology, it must be known, is an enabler of change. IT is a necessary—if insufficient—variable in the construction of overall process or institutional performance. IT leaders can build a robust infrastructure, enforce rigorous project management, install contemporary applications, and deliver services pursuant to negotiated service level agreements (SLAs). Despite all of this, enterprise process performance can be merely adequate. The performance of processes, in the end, depends on the creativity of those who “own the business” and on a partnership between creative business owners and creative IT suppliers. Anyone can implement an enterprise course management system. Despite this, what is the state of higher education’s processes to intervene with students to improve persistence, retention, and academic performance? Few deans, provosts, registrars, or vice chancellors for student affairs have worked with IT leaders to mine the data from these systems or from student information systems to build and test models of retention, performance, and persistence. Nor have they built a network of alerts for academic advisors who can intervene with students whose indicators suggest that they are in some way at risk. The point is that the performance of complex processes depends on an equally complex interaction of policy, process design, leadership, culture, and technology. The ECAR data suggest that while these factors do indeed matter greatly, efforts in higher education are directed primarily to processes that serve the institution’s core purposes. Further, in environments characterized by shared governance between administrators and faculty, processes that directly impact research and students typically prevail. Satisficing.

Good Work Depends on Many Hands

As always, our ability to gain insight into the complex interactions of IT practitioners within higher education environments depends on the generosity and commitment of the EDUCAUSE community. Senior practitioners take time from busy schedules to take ECAR surveys and to answer our calls. We have never been turned down for a site visit, and in all cases, our colleagues share their time and that of their colleagues without hesitation. Robert B. Kvavik and Philip Goldstein are the principal investigators for this study and did the heavy lifting with their characteristic thoughtfulness and depth. John Voloudakis, now with BearingPoint, crafted Chapter 8 on the future of business process performance and was instrumental in the development of the survey instrument. He is frequently the ECAR voice of industry who forces us to understand how corporations behave in areas of ECAR inquiry, lest we get too comfortable with our understanding of the current state of higher education practice. Julie Ouska, late of Mercy College and now with SunGard Collegis, and Judith Pirani made significant contributions to the study through qualitative interviews and a review of the literature. Our colleague Mark Nelson, now with the National Association of College Stores, contributed in important ways to the literature review and to our understanding of the literature.

There are too many campus colleagues to thank, and our acknowledgement of individual contributions of these friends in the appendices is not adequate. We will make it up to you. Last we thank our colleagues at The City University of New York and Iowa
State University for hosting ECAR researchers and for offering their experiences as case studies for the benefit of the community. And of course, the creation of a highly readable study depends on Toby Sitko’s choreography of a great production team. She and Barbara Hey work with our colleagues within EDUCAUSE and with a first-rate team of external layout artists and printers to make this final product what it is. It is a privilege and a ball to work with great people.

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