# Is It Déjà Vu All Over Again?

I n 2002, the EDUCAUSE Center for Applied Research (ECAR) published "The Promise and Performance of Enterprise Systems for Higher Education," by Robert Kvavik, Richard Katz, and others. In it the authors estimated that more than $5 billion had been spent on administrative and ERP (enterprise resource planning) systems.[1] One can only imagine what has been spent since then—and what is being spent this year and what will be spent in the coming years. Whatever the amount, it is likely to be very substantial.

When the Kvavik and Katz data gets resurrected at a discussion around the water cooler or at conferences these days, the reactions range from "so what, that's the cost of doing business" to "hmmm, I didn't know that, I wonder what we spent" to "you have got to be kidding me, that can't be right." What seems the most striking is that we don't know if the money spent was too much, too little, or just right. We have a hard time showing, in a verifiable way, that the benefits exceeded the cost of implementing the new systems. Regardless of the reaction, we seem poised to do it all over again.

Even more troubling than the amount spent, Kvavik and Katz reported that many of the projects that contributed to the $5 billion price tag failed in that they came in over budget, took longer than planned, or did not deliver the expected value. Why? Kvavik and Katz explain:

> External forces such as quality of software or consulting were found to be less influential than internal forces. When asked, these institutions revealed that the major obstacles to completion were mostly internal to the institution. They include data issues, cultural resistance to change, and lack of understanding of software capabilities. The realization that the greatest implementation challenges are the result of internal institutional issues—not external forces—contradicts a popular message prevalent in the industry for the past few years. It's interesting to discover that the institutions themselves—their cultures, their people, and their historical decisions—are the primary hurdle to clear for a successful implementation, not the technology, the consultants, or the vendors.[2]

In other words, the project aspects over which we had absolute control were the most frequent causes of failure. No wonder, then, that in a recent discussion Vicki Tambellini, a widely regarded expert in the higher education software market, noted that a number of institutions seem to be deliberately waiting to replace or upgrade these systems. As she has tried to understand why, she has learned that most of them anticipate making significant investments in administrative systems in the coming three to five years and are waiting to see what shakes out in the software (tool) marketplace. Specifically, many are watching the emergence of cloud-based software vendors, otherwise known as Software as a Service (SaaS).[3] What is troubling, however, is that most appear to be preparing to make another "silver bullet" bet, thinking all they need to worry about is picking the right software tool to be successful. In other words, they are concerned with external forces, which Kvavik and Katz found to be "less influential." There appears to be little happening in terms of dealing with internal forces—the "major obstacles" to which Kvavik and Katz refer.

Given that many of us had the "good fortune" of being involved in the first round of investing in large enterprise systems, it seems wise to reflect on what we learned (or should have learned) and what we plan to do differently going forward as a result of our reflecting on past system implementations. My reflections have resulted in reminding myself of the following well-tested rules for successful system implementations:

> **Higher education must avoid the déjà vu of repeating the system implementation mistakes from years past.**

- *System = well-aligned process, data, people, and tools.* Too often when we see the word *system,* our partners think *software tool* and we as CIOs seem to just shrug our shoulders and go along, not wanting to rock the boat. Remember what Kvavik and Katz noted: that the major obstacles to the successful completion of implementing an enterprise system were mostly internal to the institution. In other words, the obstacles are *process, data,* and *people.* Resetting the definition of *system* in higher education has become a bit of a mission for me. As I have tried to make my point to my colleagues, I have printed (on a 3D printer) tetrahedrons with *process* printed on one side, *data* on another side, *people* on another, and *tool* on the fourth side.[4] Handing these out allows me to talk about the need to align these four components of a system. It seems to help people get the message, and it creates the opportunity for me to make the next point.

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to data and tools. Why, you may ask? Processes span organizational boundaries. For example, think of all the different organizations that play a part in admitting a student. Certainly the admissions department has a major role. However, many other organizations are often involved as well: financial aid, international studies, the bursar/controller function, housing, food services, parking, legal, and don't forget athletics if the prospective student is an athlete. Whether procure-to-pay, hiring, planning, or virtually any other process, the challenge is integrating all the design requirements across organizational boundaries.

If someone does not help integrate the process requirements across all the various organizations and functions, the institution will face significant challenges (e.g., cost overruns, time overruns, or undelivered functionality) when implementing a new tool as part of implementing a new system. Few organizations have the breadth and depth of exposure to the entire institution as does the IT organization. This is a tremendous opportunity that should be seized.

I fear that if CIOs do not step up and lead in the design of enterprise processes, we will be one step closer to the CIO becoming more a director of infrastructure than a critical partner in the president's cabinet. This is the primary reason that a growing number of CIOs are sponsoring a process innovation team that helps the college or university rethink the nature of its processes. Doing so will keep the CIO in the middle of any transformation effort rather than being relegated to the "tech person." And doing so will help higher education avoid the déjà vu of repeating the mistakes from years past. ∎

- *Process and data first, then people, then tools.* Industry has learned that we focus first on process and data, then we clarify people's roles in the new process, and then we design/configure the tool for people to use in implementing the process and data. Too often organizations think that they can simply install a new tool and then the process, data, and people issues will resolve themselves. For decades we have known that process and data need to come first, yet we keep breaking picks on this principle etched in stone.

- *Automate, don't just augment.* If there is one thing I have seen too often in higher education it is that we use technology to simply augment people's administrative work instead of rethinking the process, data, and people's roles and striving to automate work whenever possible. When we augment instead of automate, we often add cost to the current process and actually make the process harder to change. We should be ambitious partners with administrative leadership to bend the cost curve of administration and not just apply technology for technology's sake.

Some may wonder whether it is the domain of the CIO to be fiddling with process and people issues in system design and implementation. Aren't we technologists? Let me conclude with a thought about this issue.

For me, the title Chief Information Officer is a misnomer. I would argue that our title should be Chief *Integration* Officer. We have a fundamental responsibility to see that an institution pays careful attention to the processes and people roles, not just

**Notes**

1. Robert B. Kvavik, Richard N. Katz, et al., "The Promise and Performance of Enterprise Systems for Higher Education," *ECAR Research Study*, vol. 4, 2002, 17.
2. Ibid., 16.
3. Vicki Tambellini, conversation with the author, November 8, 2016.
4. If you want the file for printing these on your own, email me and I will send you a copy.

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