

Vive la Différence?

Colleges and universities think different is good. Sometimes this thinking is right, but not always. Consider the following two cases.

Case 1: Computer Procurement

I'm writing most of this on a relatively new Dell GX400 computer. The University of Chicago buys lots of Dells—about 3,000 systems in the 2001–2 academic year, or almost \$6 million worth. Given the university's local-market economic tradition, we in campus administration don't tell anyone, especially faculty or students, what type of computer to buy. Like the administrators at many other higher education institutions, however, we make standard-platform recommendations to simplify choices for individuals or departments who don't want to waste time choosing desktop computers. Unlike many others, we promote our recommendations by discounting them somewhat relative to custom configurations.

As a result, although we've neither prescribed nor constrained choices, most of the new Dells at the university, well over half, are just like mine. We can thus predict quite safely that we will buy, say, 1,500 essentially identical machines each year in the Windows arena alone. (The University of Chicago is about one-fourth Mac, three-fourths Windows.) Were we to guarantee Dell this many orders, it's quite likely we could negotiate a better price. Yet we don't. Why not? Because we would have to eat the consequences if we're wrong. We are unwilling to hedge, and we pay the price. In microeconomic terms, we believe that the expected cost of the risk inherent in a guarantee ex-

ceeds the expected savings from the resulting discount.

For the University of Chicago's purchases alone, this belief might be correct. But the University of Chicago is not the only campus that celebrates free choice and distinctiveness while buying numerous identical machines. Indeed, the dozen "Ivy+" institutions (in information technology, "Ivy+" refers to the eight Ivies plus Stanford, MIT, Duke, and Chicago) will probably buy \$40 million worth of Dell GX400s this academic year. The members of the Association of American Universities (AAU), a group of sixty-one research institutions, will buy approximately one-quarter billion dollars' worth. And again, for the most part, these identical GX400s will be bought one by one, following hundreds of thousands of individual decisions by students, faculty, and staff in different institutions. Thus Dell does not see one group—AAU institutions, for example—buying one-quarter billion dollars' worth of a standard platform. Rather, it sees hundreds of thousands of separate transactions.

Not being stupid, Dell behaves accordingly. Beyond awarding educational discounts to colleges and universities for their public service, it does not treat higher education as a major customer. Higher education institutions thus pay Dell more than they should. (There are parallel circumstances, I'm sure, for other hardware vendors such as Apple, Sun,

Higher education celebrates diversity. Yet sometimes colleges and universities don't manage the consequences very well.

Cisco, or Gateway, and for service providers.) However, if several institutions that buy from Dell were to band together, agree on a recommended standard for Windows users (say, the GX400), estimate its popularity, and make a collective guarantee, two things would change. First, the risk of falling short would go down, mostly because predictions across a larger base would be more accurate. (With a larger base, it would also be possible to negotiate a lower, safer guarantee.) Second, the likely discount would go up because of the larger aggregate volume. Indeed, the discount might

become deep enough that the institutions could afford to buy insurance against mistaken guarantees and still come out ahead.

Case 2: Instructional Management Systems

An Instructional Management System (IMS) makes it simple for a faculty member to offer class materials online, usually over the Web. It gives students a flexible, consistent gateway into those online instructional materials.

Some years ago, several universities began work on IMS projects. Several of these projects proved quite successful, and their sponsors made them available to other institutions—sometimes offering them for free, sometimes attempting to recover costs or even make a little money. An effort to write standards ensued, with

widespread participation from many institutions. In due course, a couple of the IMS efforts evolved into commercial ventures that marketed attractive systems and support to colleges and universities. Two of these, WebCT and Blackboard, have spread with lightning speed across higher education, enabling institutions to simplify online access to course materials for very modest investments in hardware, software, and support.

This seems like a good story: diverse efforts standardizing into a few products that get widely adopted, driving costs down across higher education and facilitating cross-institutional collaboration. The next step, one might hope, would be a concerted effort by IMS customers to agree on necessary improvements to the dominant systems and then to advocate those improvements coherently to ven-

dors. Money would talk. Vendors would compete to satisfy the collectively (and financially) expressed needs.

Instead, precisely those institutions that are best able to provide national leadership have struck out on their own, developing “reference implementations” that look very much like competing products. These institutions are putting energy not into moving forward from the status quo but rather into starting over. They are redefining and redeveloping new IMS projects of their own—“doing it better than Blackboard.”

If these redevelopment projects come to fruition, I am quite sure that what they produce will be better than what is now available. But will the improvement be worth the cost? I doubt it. Too much will have been spent replicating Blackboard’s and WebCT’s achievements before moving beyond them. More important, I doubt the splinter efforts will benefit those institutions that prefer, for cost or capability reasons, to stick with commercial offerings. Nor are vendors likely to see the splinter efforts as anything other than competition. Competition tends to discourage openness and collaboration. Still worse, if standard-setting efforts get confounded with “reference implementations,” the result could be a schism between institutional needs and commercial offerings. What seemed like a good story could easily have a bad ending.

The Good, the Bad, and the Ugly

Higher education celebrates diversity. Yet as I think these two cases illustrate, sometimes colleges and universities don’t manage the consequences very well.

In the computer-procurement case, institutions make thousands of individual purchases, paying more than they have to as a result. It still might make sense for colleges and universities to divide and be conquered in this way if doing so somehow contributed to individual excellence and distinctiveness. But how does spending more than is necessary for precisely the same desktop computers achieve that goal? If colleges and universities would join together and make a collective guarantee for a number of computers to be purchased, they could do much better with vendors—still without having to tell their faculty and staff what to do.

Other situations do not admit such benign progress. For the IMS case to have a better outcome, institutions with the ideas and resources for redevelopment would need to forgo their independent, reputation-building initiatives in favor of collaboration with a much wider array of institutions. Unlike desktop computers, a distinctive IMS might plausibly enhance an institution’s market position. To the extent this is true, moving from a competitive to a collaborative approach is very difficult. There is no incentive for the leaders to help the others.

And some situations are hard to classify. If MIT’s Project Athena taught anything, it is that machines managed tightly, automatically, and authoritatively to a central model are far less expensive to operate than individually tailored ones: free choice is antithetical to efficient support. The implications for reducing the cost of desktop support in higher education are clear. But telling faculty members, in particular, that they may not control their “personal” computers has high costs for those doing the telling. We can’t always afford efficiency.

The answer to the implicit question in my column title is twofold. Sometimes *la différence* yields a net cost because we’re unwilling to believe in stochastic processes or to collaborate in ways that might maximize savings and minimize risk. This serves no one but the vendors. We should find ways to do better, as we have in cases such as MICTA and Internet2. Yet sometimes *la différence* is precisely what we want, so if it costs more, this is money well spent, not wasted. Although spending this extra money may not serve higher education generally, it certainly serves particular institutions, and we would be naïve to expect uncompensated altruism.

The challenge, of course, is how we can know when being different yields a benefit that exceeds the cost. Simply asking the question is a good start.

Gregory A. Jackson is Vice President and Chief Information Officer at the University of Chicago. With this issue of *EDUCAUSE Review*, he begins a two-year term as Editor of the Viewpoints department.

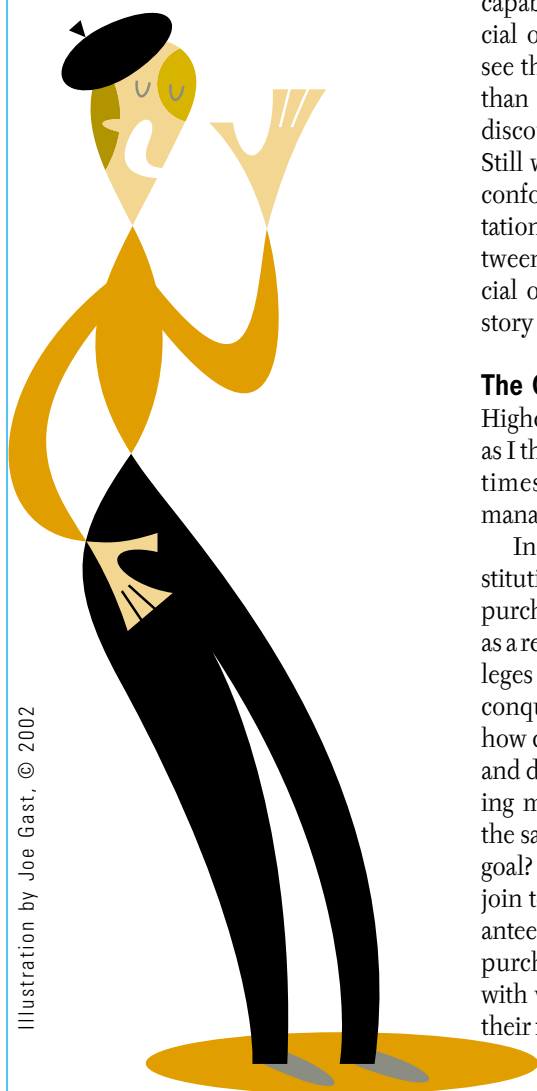


Illustration by Joe Gast, © 2002