Strategic Partnering and New Technology

By partnering with the right companies, a university can influence product development and implement technology for less than full price

By **Ross McKenzie**

Over the past seven years, my small IS group has been involved in some very cutting-edge technology through strategic partnering. In general we've partnered with companies that produce a technology we have found will fill a hole in our application portfolio or provide some new type of service to our users.

Our experiences have led us to develop an internal model that I'd like to share, one for partnering with companies. Admittedly, not all of the partnerships have been smooth. When the cultures of private industry and higher education meet, there are bound to be differences, but we feel that we have been able to leverage the benefits of doing business with higher education to select companies so that both groups benefit. Let me cite some examples.

Jumping into Wireless

In 1996, while visiting a laptop manufacturer we were considering for a school-wide laptop program, I viewed a demonstration of wireless networking. As luck would have it, the manufacturer was attempting to break into higher education and was looking for a reference account. Within a month we had equipment in our hands for piloting.

The students who participated in the pilot loved the technology, and dean Alfred Sommer immediately saw the potential. At his request, what was to have been a gradual, two-year rollout to classrooms, student lounges, and libraries became a full-speed, six-month rollout to every classroom and large stu-

dent area in our school. That quick rollout put us in the interesting position of having one of the largest production wireless networks in the country for higher education at that time.

We were testing equipment not in a lab or with a limited pilot, but with students who were depending on the connection to stay out of the always crowded computer labs and complete their coursework. On our side, we were learning how to support wireless connectivity in real time with clients who put pressure on us to solve problems immediately.

In 1996 wireless technology was just beginning to be popular, and very few companies actually produced the equipment. (The cards were so expensive that the school purchased them and loaned them to the students — a practice we still employ even though prices have dropped to a quarter of the old cost.) The benefit of partnering with a small company was that we had direct access to their engineering and development process. They were eager to learn more about how their technology worked in the field, and we were eager to have a product that was easy to install and maintain.

One incident illustrates the relationship nicely: We once asked during a conference call if the access points met a particular fire rating for use above suspended ceilings. The engineers hadn't thought about it, but they called back later that afternoon and told us they had put a blow torch to an access point and were confident that it would meet the local fire code. (To the engineers' credit, they provided more conventional proof later that week.)

On our side, we were dealing with marketing material, computer industry periodicals calling with questions, and venture capitalists asking for references concerning our partner as they struggled to stay afloat in a rapidly changing industry. In return for our feedback, advice, and references, our school got a technology that people clamored for as soon as they saw it demonstrated, at a minimal cost. We were poster children for wireless networking.

New technology has its price, however. As wireless networking became more popular, larger companies became interested and eventually swallowed up our wireless partner. We had less input with the new owner, but we really didn't need the intimate communications with the engineering department that we had had previously because the technology was maturing and because we were more concerned about expanding the network. Things changed when company number 2 was in turn swallowed by a large telecommunications manufacturer. We were still a reference account, but now just one of many. Unfortunately, our pricing strength eroded also.

Wireless networking equipment was fast becoming a commodity, and we realized that our school account and name were worth more than the discount we received on the current equipment. Coincidentally, this was at the same time that the 802.11b networking standard was ratified, which meant that more powerful and higher bandwidth equipment was becoming available. So, we shopped around and found a new manufacturer with better pricing. That manufacturer got an established wireless network to showcase its equipment, and we got a network five times faster than the one we had in place, with all new equipment, at a fraction of the cost. In the end everyone won.

Benefits and Lessons Learned

Our experiences building our wireless network helped us in a number of ways:

- We now had experience in working as a technology partner rather than as a customer. We knew what would be expected of us and that we could deliver.
- We knew the value of serving as a reference account and could demonstrate our value with copies of articles we had authored, presentations we had given, and examples of how we had evangelized to the public about the technology.
- We knew that partnering with smaller companies was risky and that we needed to make that clear to our users up front.

And as we looked back at our partnership with the wireless company over the previous two years, a checklist became clear for us for future partnerships:

- Do a thorough needs assessment of any new technology being brought into the enterprise. Although we would do this normally, it's essential to have a clear idea how the new technology will fit into the current portfolio of supported hardware and software. Partnering should fill a real technological need you have. Developing a strategic partnership just to say you did shortchanges the users and the partner.
- Articulate the value you bring to the partnership. As partnerships increase, you should have a nice portfolio to show what's been done before. In most cases it's easier to put a proven technology or product in place. Realize that there is work involved on both ends to make it happen successfully.
- Clearly state the risk to all the shareholders. The partner needs to know how much may be on the line for the school or department in the partnership. School administration needs to know the value of the discount they are receiving to form the partnership. It's very important that everyone agree on the value of the partnership from the start.
- Don't be afraid to walk away from partners who don't appear to understand your needs. There is sometimes a thin line between a vendor and a partner. Make sure you know what you're getting.

A New Model for Projects

At this point, we now had a rough model for other technology projects we wanted to implement: pick the technology, find a small- to medium-sized company in that field, and form a mutually beneficial partnership.

This model worked again when we implemented a school-wide document management system. Having done our needs assessment for such a system, we found a small company eager to break into the market, liked their technology, and formed a partnership. We sold the company on our ability to showcase their product in a diverse setting within

higher education, and we all came to a clear understanding of what would be expected on both sides as the partnership grew. We negotiated with the company to get the server and client software at no cost. We paid only for maintenance and implementation costs.

We launched the project in the information systems office, using it to replace three large filing cabinets full of purchase orders and invoices. When other departments heard of the space savings, saw the system, and, most importantly, learned the cost, they were sold.

As before, the original manufacturer has been absorbed into other companies a number of times. However, unlike our experience with wireless networking, we were able to maintain our input into new features and helped shape the product to our benefit. We mitigated our risks by doing our homework — we knew the file format for storing the documents electronically was transportable to other software. This factor also caused our administration to see the effort as having little risk.

The bottom line is, even though we now pay for licensing, we have a working document management system that again cost us pennies on the dollar to implement. The alternative was going with a large, established company where we might have been one of a 100 customers paying a premium price from the beginning.

Next Up: Portals

The last example is a work very much in progress whose future is by no means certain: our intranet/portal. The portal project began two years ago when the school decided to split the Web presence into external and internal elements. The external presence fell to our marketing department, while the internal fell to the IS group. Again, this was a time when "portal" was the buzzword of the dotcoms. In 1999, I remember attending a portal conference with roughly 30 portal vendors; maybe 4 of them are still in business today.

After we completed our needs analysis for portal framework software, we were down to just two companies. We presented our history of partnering and what we felt we had to offer both companies. One was a local company who understood the value of our name; the other company appeared less than interested in having a higher education partner.

Despite the huge difference in their attitudes, the choice was difficult because pricing was very competitive. In the end we chose to partner with the local company because we felt they understood us better and would work harder for us. Also, since they were closer, we felt we would have more input into the process as their software matured. We laid out our choices and reasons for them to the administration. (Remember — let all the stakeholders know the risk!)

As Yogi Berra would have said, it was "Déjà vu all over again." After six months of work to get the portal ready, our partner was swallowed up by a larger company with the intent of rolling their technology into a new product! Initially, we were assured that everything would remain the same. Even though good intentions abounded, however, business was business — we now had a product that was effectively at the end of its lifecycle before we released it.

We put the best face on it we could and proceeded to release our intranet/portal. We were more concerned with the content of the portal, which our programming staff produced in house, than with the framework software. After all, we purchased framework software in the first place so that we could concentrate on content.

Unfortunately, the framework software needed work. We realized that portal framework software by its nature is highly customized to the environment in which it's operating, so it needed constant care and feeding on the back end. Although our users rarely saw any downtime, our programming staff and the manufacturer worked constantly to keep the portal running, diagnose transient problems, and make minor improvements. At points it became so bad that we had programmers logging into the portal every 2 hours, from 6:00 a.m. until midnight 7 days a week, just to make sure everything was working.

Needless to say, this effort left little time to concentrate on content. In other respects it made it very difficult for us fulfill our end of the partnership. We were still getting calls from magazines, investors, and other higher ed institutions asking us how our portal was going. We were honest in our assessment of the product and told everyone we had hope, but we needed to see the new version.

As the year passed, we saw some light at the end of the portal tunnel. The new company was preparing to release its new product, and it matched in many areas what we had originally wanted. As of this writing we are just weeks away from releasing version 2.0 of our portal. We are looking forward (again!) to a year focused on developing content rather than worrying about the framework. As with the wireless network and the document management system, our users have been vocal, telling us what they like and especially what they feel is lacking in version 1.0. And again, we are beginning to feel that the portal is becoming less an IS project and more a school application.

Even though we had a mixed experience with our portal implementation, we haven't slowed down on our partnering. In the past year we formed three strategic and supportive partnerships — for management of our wireless network, clientless instant messaging in our portal, and, most recently, policy management software. The partnership model's many benefits far outweigh the hurdles we've encountered in implementing various IS projects using it. We expect the same benefits in future.

One last note: The genesis of this article was an offhand comment I made during a presentation at CUMREC in 2001. I was presenting our soon-to-be-released portal and stated that I felt it was a perfect complement to our wireless network. When asked if I saw the portal being used over wireless phones, I dismissed the notion that we would be able to present useful information over a 2-by-2-inch screen on a phone. I wondered aloud if anyone needed to be "that connected?" In retrospect, maybe we just haven't found the right partner for that venture. e

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Ross McKenzie (rmckenzi@jhsph.edu) is director of Information Systems at Johns Hopkins Bloomberg School of Public Health in Baltimore.