How a Small Nonprofit Made Simple Tech Tweaks and Saved $176,000

By William Grassie

LIKE MANY NONPROFITS struggling in the economic downturn, my organization has tightened its belt. A year ago we reduced our work force from 10 to four staff members and cut our operating budget by almost two-thirds.

The Metanexus Institute works to promote interaction between religion and science through publications and symposia at universities around the world and has always prided itself on using cutting-edge computer technology. (We started in 1997 as a moderated e-mail discussion list.) As we looked to trim costs, we found ourselves taking a particularly hard look at the technology we use to run our organization.

We made a number of big changes and small tweaks, which not only resulted in greater cost savings but also made us more nimble as an organization. When the overhaul was complete, we had cut our information-technology expenses—including phone service—from $5,000 per month to $300 per month. We also no longer needed our own technology staff, which gave us additional savings of nearly $10,000 per month. All told, we're saving about $176,000 a year on an annual budget that now stands at $385,000.

Here are some highlights of our transformation:

A cloud file server. The first order of business was to move our computer file server with some 400 gigabytes of data, consisting of some 150,000 documents collected over 12 years, into the Internet "cloud." What this "cloud" means is that, instead of storing data on hard disks at our physical office, we now gain access to our collective files over the Internet. Many services are available for Internet-based data stor-

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age, but we chose Egnyte. It has a useful Web interface, but you can also install software on your local computer that maps the cloud server as a "local" drive. We pay $50 a month for a terabyte, or enough storage to hold 1,000 copies of the *Encyclopaedia Britannica*. That's a lot of data.

Free help from Google. Before the overhaul, one of our biggest expenses was for an outside technology service that managed Microsoft Exchange Server, desktop IT support, and remote backups for the entire office. We switched to Google Apps, which as a nonprofit we could get free. We now have all of the functionality of Exchange Server and more at no cost. Furthermore, it is fully interoperable with Apple computers, which turned out to be essential for our new office (more on that later).

A new database. Before we could turn off our computer-server closet at the office, which was consuming about $350 in electricity each month, we needed to convert our customer-relations management database—containing 40,000 contacts and related data and built up over 12 years in File-

Maker—to one based on the Internet cloud. Valued at $1,500 per month, the Salesforce Foundation offers qualified nonprofits free use of its Web-based customer-relations management system. We hired an outside company to manage the conversion and customization of our database into Salesforce. By making the change, we could now pull the plug on the server closet.

Phone service. Our monthly bill for our phone system and Internet access was $365. We were anticipating moving to a smaller office or possibly jettisoning the office completely as key staff members live in geographically dispersed areas, but we still needed a phone system.

We opted to go with Toktumi, a virtual system that worked on our laptops. For $45 a month for four lines, we now have unlimited calling in North America. No more telephone handsets on our desks. Instead, Toktumi is a "soft phone" that works through our laptops' built-in speakers and microphones. Personalized voicemail, call transfers, and call forwarding are included. An additional application turns your iPhone or Android into your office line at no extra charge when you are logged into a local wireless network. We can now make or answer our office phones over the Internet from anywhere in the world.

Meeting and working remotely. As we were working more and more from home offices and gathering only once or twice a week to work in our new central office, we needed ways to have video conferences and share our computer screens. Skype, of course, provides these services free. When working on Macs, however, we also had the use of another free service, iChat, which offers the added benefit of videoconferencing. More critically, iChat also allows someone to manage your computer remotely, so tech support can now be provided by a colleague elsewhere in the universe in a Mac-to-Mac-only environment. iChat is also better suited to interactive collaboration on design and editing projects, a few steps beyond what Skype can now

provide. We find ourselves using both services many times each day.

Accounting on the cloud. While our accounting program QuickBooks can be run on a single computer, without the computer server, it was difficult for several people to use the program at the same time. Besides, it seemed unwise to put all of our company's financial data on a single comput-

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er. For $35 a month, however, we now use QuickBooks Online, which allows multiple people to gain access securely to information about the company's finances anywhere and anytime. Again, we don't need to worry anymore about backups.

New laptops for everyone. We had an office of aging desktop computers. In the process of reducing staff members, including our IT support, we decided to convert the remaining employees to MacBook Pro laptops with a three-year Apple Care warranty. When employees are in the office, their laptops are backed up on a two-terabyte Apple Time Capsule. The Time Capsule also serves as our wireless base station. In essence, the little white Time Capsule now replaces our computer server, a jungle of Ethernet cables around the office, and provides backup redundancy with the Internet cloud file server.

Processing donations. We had used a variety of services for processing credit-card transactions over the years but were losing money at every step of the process. We compared multiple options and settled on PayPal, which offers a discounted service for nonprofits. Instead of 6 percent per transaction plus monthly fees, we pay about 2 percent per transaction.

Our office is now completely porta-

ble; we no longer actually need a physical office. All we need is an Internet connection, anywhere, anytime. All of our organization's tech-related services are as secure as our passwords and our employees, which of course was always the case, but the worry of system failures and backups is now gone.

We face one last hurdle in this conversion. In the next year, we need to convert our Web site—which is on a machine of ours that is housed at a data center and which we currently manager, so it requires a level of technical expertise—to an environment where we are no longer responsible for the machine. Additionally, we will change the Web site to use an off-the-shelf content-management system like Drupal, Joomla, or ExpressionEngine.

Once this conversion is completed, we will further reduce the technology costs associated with maintaining the organization's main Web site—down from $1,000 per month to something like $500 per year.

The problem with computer technology is that it is always changing. Early adopters often make expensive mistakes. It's easy to get locked into a system, which makes it more and more difficult to change, but change we must. And in this case, the changes were especially wonderful because the result was so sweet—and so cheap.

William Grassie is the founding executive director of the Metanexus Institute.

A Technology Overhaul: One Group's Savings

Here's how much the Metanexus Institute, a nonprofit in Philadelphia, saved by making changes in its technology operations, which also made it easier for the organization's staff members to work remotely:

Expenses	Before the overhaul	After the overhaul
Personnel	**$10,000** a month (estimated): in-house technology staff	**$0**
File server, backup capability, and tech support	**$3,200** a month (estimated): Microsoft Exchange Server, backup, and support contract	**$0**: Internet cloud file server; **$50** per month: Egnyte for 1 terabyte of storage; **$0**: Google Apps; **$400** per year (estimated): Apple Care Plan and extended warranties for four users
Electricity	**$350** per month (estimated): electricity for in-house computer server	**$100** per month: electricity for the entire office without in-house server
Internet and phone service	**$365** per month: Comcast service for Internet and phone system	**$100** per month: Comcast for Internet access; **$45** per month: Toktumi phone system for four people
Accounting software	**$480** per person: QuickBooks Enterprise (software purchase)	**$35** a month: QuickBooks Online, enabling multiple people to use the system
Web server	**$1,030** a month: dedicated Web server, housed at a data center	**$500** a year (estimated): hosted Web site using new content-management system

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