

Leveraging Technology and Human Systems in an Emergency

Saint Peter's College responded to a bomb threat and evacuated the campus safely and efficiently thanks to close integration of human systems with IT

By **Stan Molinski**

Last year's shootings on the Virginia Tech campus prompted a great deal of discussion about the role technology plays in campus safety. This year, Saint Peter's College in Jersey City, New Jersey, saw firsthand how important *human* systems are in keeping campuses safe. Combining technology with human systems enables the most effective response in a crisis situation.

On February 20, a note threatening violence and referencing the Virginia Tech shootings was found taped to a hallway wall on the campus of Saint Peter's College. The note spurred a five-hour campus lockdown. Emergency communication plans were activated to provide warning to our 3,000-plus students, faculty, and staff through text, e-mail, and website alerts. A newly installed wireless network kept students with their laptops informed. Commuter students who arrived on campus were turned away by campus security and Jersey City police. The campus community was then evacuated as the Jersey City Police Department conducted a room-by-room search of the campus. No bomb

was found, and no violence occurred.

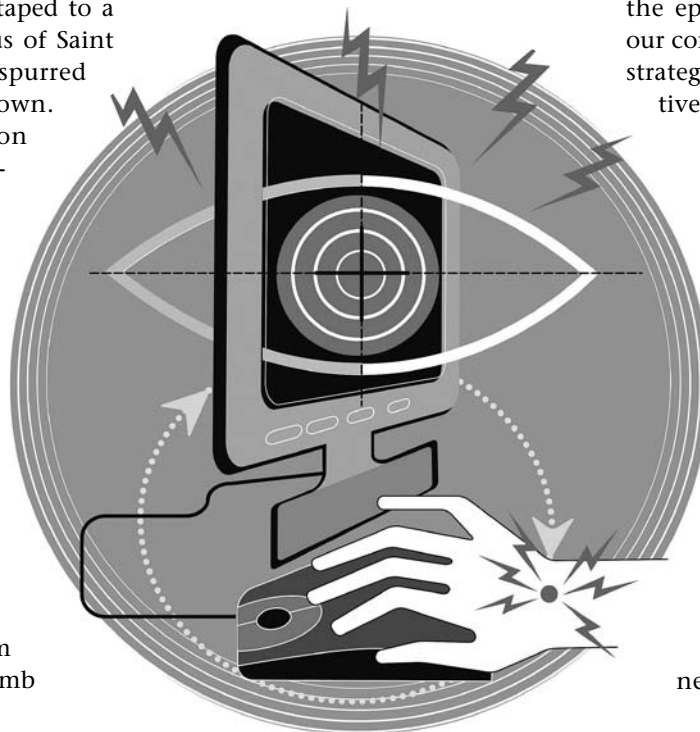
Although—to our great relief—the situation was resolved peacefully, we could not risk the campus community's safety by minimizing the threat's potential credibility. We responded immediately to secure the campus. Now, having been through that crisis experience, Saint Peter's College has a better understanding of the important relationship between robust technical and human systems when faced with

an emergency.

My experience as a volunteer emergency responder in my home county of Westchester, New York, has taught me to first consider the available human resources in an emergency situation. And my experience as CIO and in other positions in IT has taught me that both technology and human systems need to work well together. Otherwise, it's like running with your shoes tied. One system can't get too far ahead of the other without causing a fall. Based on the episode at Saint Peter's College, our core team identified the following strategies as essential to reacting effectively to a crisis.

Have a Plan

The events at Virginia Tech prompted the Saint Peter's College Campus Safety Committee to revisit the overall campus safety plan and to implement some new systems. The Campus Safety Committee includes representatives from across the campus who are responsible not only for developing strategies but also for carrying information back to their areas, informing their peers, and initiating training efforts as needed.



Early on, we established that we must all work together to define everyone's roles and responsibilities. Saint Peter's Office of Campus Safety is the unit having lead responsibility for managing an emergency situation on campus. IT staff had worked with the Campus Safety office's staff to configure the college's emergency communication systems to be under its control at the time we installed our new emergency systems. Campus Safety staff are in the best position to obtain accurate information, and it's their responsibility to trigger the emergency response process. Once that happens, IT's role is to monitor the communication infrastructure and prevent any disruptions in the telephone, wireless, and campus network systems.

Our emergency plan is a detailed 80-page document covering everything from crime prevention and man-made events to natural disasters. But having an 80-page—or an 800-page—document isn't sufficient if campus leaders are not informed and able to accomplish their parts of the plan. February's lockdown event was the biggest test of the Campus Safety Committee's efforts, and it proved that our planning paid off. For example, even though our director of public relations, Lorraine McConnell, had joined the campus just a week before the event occurred, she was able to execute her part of the plan flawlessly.

Build Relationships

Art Youmans, director of campus security, is a 28-year veteran of the Jersey City police force. Two key members of his team, Joe Coyle and Ed Hanley, were recruited from the city's police department. Their firsthand knowledge of the local and state police systems allows the Office of Campus Safety to react quickly and coordinate its efforts with local law enforcement.

Good relationships with law enforcement are critical, and they take time to develop. Our core team built their relationships through the time they spent on the force; however, there are other ways to cultivate good relations. You can invite local police to your campus for an overview of your security system, for

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example, and schedule regular meetings to update each other and discuss ways to work together in a crisis situation.

Train the Community

Campus administrators and safety staff need to achieve a delicate balance between encouraging people to plan for an emergency and scaring them with too much information. It's important for everyone to stay calm in a crisis. Our safety training thus focuses on three basic tenets according to each person's role:

- Have a plan for emergencies appropriate for the individual and the location. Faculty, staff, and students might have different responsibilities, for example, and different responses are appropriate according to the emergency and its location, from a fire in a dorm room to dangerous-weather alerts for the region to campus crimes such as theft or assault.
- Arrange for easy access to the resources needed, whether first-aid supplies, fire extinguishers, or emergency response communication systems.
- Ensure that everyone involved can implement the plan at their level of responsibility. A campus police officer, for example, might need to respond to the reported location of an emergency, while students would be encouraged to stay in their dorm rooms or classrooms (depending on the nature of the threat).

People apply similar concepts at home when they decide what to do in an emergency. They would buy a

first-aid kit and post emergency contact numbers on the refrigerator. Children might be taught how to evacuate from bedrooms on a second floor in case of fire, and the entire family would know to gather in a particular spot to verify everyone's safety. It's not much different for a campus, but of course the scale is bigger. If people know the plan, know how to implement it, and have the resources they need, they are less likely to panic and can better deal with a crisis situation.

Use Targeted Communications

When a crisis occurs, it is critical that the administration provide the appropriate information as fast as possible to the people who need to know what is happening and what they should do. That includes using various communication methods to reach as many people as possible with a message targeted to their concerns and safety needs.

To prepare for communications during an emergency, in fall 2007 we activated an emergency communication system using cell phone text-messaging services from Privatel. By the beginning of the spring 2008 semester, about 1,000 of 3,500 students on campus had signed up for the service. An additional 450 non-students, including faculty and staff, also registered for the service.

Within minutes after the threatening note was found, security sent e-mails to all users with e-mail addresses via our Microsoft Exchange server and text messages via our Privatel system. Throughout the incident, we sent several communications to keep everyone updated, and then a final broadcast when the lockdown was ended. We crafted the text of these messages carefully to strike a balance between informing people of the serious nature of the threat while reassuring them that the campus was taking measures to ensure their safety.

The messages spread quickly as users who had registered for the text messaging service shared information with their friends and family through calls or text-message forwarding. Others forwarded the e-mail communication.

Following the threat, Saint Peter's College President Eugene Cornacchia expressed his satisfaction that the first mass e-mail and cell phone text alerts went out within minutes after the note was found. And, as a result of the February incident, several hundred more students have registered for the cell phone text alerts service through our website.

Now we are exploring leveraging the existing digital signage on campus to display emergency messages. These digital signs are currently in the student center, the dorms, and the cafeteria and are frequently used for student communications. We are also considering pushing alerts through the college website. Ideally, we would like to have emergency messages posted simultaneously to all venues: the website, digital signs, e-mail addresses, and cell phones.

Eliminate Your Weaknesses

While over 1,400 text messages were sent during each individual broadcast message, we later discovered that some messages were not delivered until three hours later. Students using major carriers like Verizon, Sprint, or AT&T received their messages almost immediately, but students using other carriers didn't.

IT has begun investigating the cause for the delay. We can't just say, "It's not our fault your carrier didn't deliver the message." The bottom line is, some students did not receive text alerts for several hours even though they had signed up for the service. This is a problem we need to address, yet one over which we have little influence because it stretches well beyond the campus. For cell phones to reliably deliver emergency messages, on campus or off, cell phone service must be immediate and reliable. Saint Peter's College is looking at ways to work with our Board of Trustees and alumni base to reach out to the telecom industry and local government to address this concern, while acknowledging our limitations in obtaining the necessary changes.

Saint Peter's also is expanding its ability to feed live video from cameras around the campus to the office of Campus Safety. Following the incident

at Virginia Tech, we installed about 90 video cameras on campus, along with card readers at every street-access door. Campus Safety monitors the videos. But the hallway where the note was discovered that triggered our lockdown event wasn't part of the coverage.

Expanding the video coverage means expanding our network capability and making choices to balance competing priorities. We don't have the resources to blanket the entire campus, although we are pursuing outside funding to install more video cameras and expand our network capabilities. We are also making changes to the card access system to more closely monitor and, in some cases, restrict access to parts of the campus.

Stay Focused

As CIO, your first priority during a crisis is to ensure that your staff are safe and accounted for. Then turn your attention to the technology and make sure the campus systems are not under threat. Are the IT systems operating smoothly and delivering the connectivity and infrastructure the campus needs in the face of the emergency demands on communication in particular?

Campus leaders must also guide others through a crisis, with everyone focusing on their assigned roles. Soon after the initial alerts at Saint Peter's College, for example, people were swarming the halls and looking out the windows. (When helicopters are flying overhead and K-9 units are arriving, it's easy to get caught up in the drama.) IT's operational readiness in an emergency affects the entire campus community, however, and IT staff must ignore the excitement and focus on their jobs.

Think on Your Feet

Because we received a threat that was not directed at a single target, we limited movement on campus while areas were searched and secured. First, police searched the Recreation Center. Then they moved people from other campus buildings into the secure Recreation Center while individual buildings were searched. Once a building was declared safe, people were allowed to return to

it from the Recreation Center. (People had to remain inside buildings because it was not safe to walk on campus.) This process was repeated until all buildings were searched.

Unfortunately, the Recreation Center had limited connectivity, and when it came time to evacuate the IT offices, we either had to move staff to a place where they wouldn't be able to do their jobs or send them home, where they had better access. I sent people home so that we could recreate our operations remotely.

Following this event, IT has been looking for places where we can set up remote operations. We can't afford to have office space sitting empty until an emergency, but we do need a remote operations center. We are considering several options on campus and in the immediate area, and also will evaluate whether sending staff members home is the best plan. One of our concerns, though, is travel time. In a busy metropolitan area like Jersey City, drive times can vary significantly depending on the time of day, so we need to keep our options open.

Help People

Helping people in crisis moments is highly rewarding. Listening to the radio coverage on my way home, I heard several interviews with different people about the event. One Saint Peter's student said he felt safe because of the quick alerts and that his parents were happy with the way the campus had communicated with him. It was the best thanks we could get. All the long hours, painstaking planning, and endless detail of our work fell into perspective. During the crisis, our advance planning had proven effective in responding to a threat of violence. *E*

Stan Molinski (sfmolinski@yahoo.com) was an employee of SunGard Higher Education and the CIO at Saint Peter's College at the time of the incident. He is now the Director of Information Technology for the State of New York's Battery Park City Authority and is a member of the Westchester Emergency Volunteer Reserves.