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Digital Business | IT in action

## Cascade that can help avert disaster

## **SECURITY MATTERS**

The recent fires on the US west coast were a testbed for emergency alert systems, writes Ross Tieman,

ast October, as wildfires raged across southern California, emergency services found they had a new and remarkably effective communication tool with which to reach those in danger.

Emergency alert systems bought by Californian schools, colleges and universities were used to deliver warnings and instructions to students, staff and parents across threatened areas.

NTI Group, a leading vendor of alert systems to educational institutions, says its Connect system delivered more than 6m messages during the crisis, including 2.7m voice messages and 1.15m e-mail and text messages that reached 393,000 people. All but 4 per cent of the messages reached their targets.

The performance of these systems, and how to make them still more effective during a regional disaster, was being picked over at public hearings in California this month.

But apart from this, there is already a clear business winner. On January 14, NTI agreed to be taken over by New York-quoted education software and services supplier Blackboard for a hefty \$182m. The price, for a business expected to have achieved 2007 sales of only \$30m, reflects Blackboard's expectations - widely shared in the industry - that sales of alert technology will continue

To reassure investors about its acquisition, Blackboard cited a study by Yankee Group, an IT market researcher, which forecast the US market for alert



and notification systems will be \$1.2bn by 2011 and is growing at 30 per cent a year.

Mitchell Orlowsky, executive vice-president of unified communications at an NTI rival, Send Word Now, says the trigger for software experts to begin creating tailored emergency alert systems was the terrorist attack on the World Trade Center in New York in 2001.

But uptake in the US was hugely accelerated, he says, after a gunman shot 32 people dead on the Blacksburg campus of Virginia Tech university in April 2007. University authorities were alerted, but failed to warn students adequately, even though many of them were carrying mobile phones.

The systems sold by NTI, Send Word Now, and rivals including 3n, MIR3 and AlertNow, are designed to enable educational institutions, companies and public authorities to inform all the members of a chosen community within seconds when

The best of them use bespoke software to deliver an identical message instantly to a pre-compiled database of users via a combination of electronic technologies, including fax, fixed and mobile phones, e-mail and text messages.

To meet best-practice, says Mr Orlowsky, they must log delivery, allow the recipient to respond ("Yes, and I need help") and ensure the sender knows who did not receive the

message, so that emergency controllers can try to reach them by other means.

Besides the unified communications technology, says Mr Orlowsky, the key to success is the ability to create and maintain a database of contact numbers and e-mail addresses for the community of users. Otherwise, the system quickly becomes unreliable as people change phone numbers and e-mail addresses.

To help avoid this, SWN has developed a software tool that periodically reminds alert "targets" to update contact details and automatically checks for discernible human errors, such as invalid phone numbers.

NTI, too, identified the importance of testing the system regularly to reduce bad numbers in a review conducted after the Californian fires.

Mr Orlowsky says many US companies and organisations are pressed to put emergency alert systems into operation by insurers, or the risk of litigation should something go wrong. But many executives also see it as a moral duty to staff, he says.

Companies offering comparable alert services have sprung up in Europe, including Criticall in the UK and Enera, a software house from Gothenburg in Sweden, which offers the Rapid-Reach service.

Criticall boasts a blue chip client list of banks and energy groups, while RapidReach has been adopted by leading companies and local authorities, such as Plymouth city council in its emergency planning.

But as Floris van den Dool, an information security expert at consultant Accenture, points out, there are key differences that encourage the take-up of such systems in the US.

One is that guns are less freely available in Europe, and college killings less frequent. But details of corporate culture also have a bearing: in the US, staff buy their own phones and text messaging is less popular.

In Europe, where texting is common, phones are often supplied by employers, who therefore have an up-to-date database of users based on billing information. Companies are therefore used to sending texts to all staff - reminding Mr van den Dool to fill in his time sheets, for example, but also available for emergency use.

Ian Hammond, chief executive of Criticall, says adoption of alert technology by European companies has two drivers: business continuity planning, and the need to ensure business-critical IT systems are fixed fast if they break down.

Yet his company's experience is that clients who buy an alert service soon find themselves using it for other communications. A bank that replaced a pager service delivering 10,000 messages a month is now sending 200,000 a month via Criticall.

That confirms analysis by IT industry researchers Gartner and Forrester that unified communications, which show presence and enable instant connection, are set for rapid take-off as their business benefits are recognised.

In a showcase project, Microsoft and partner Post CTI set up an alert system using instant messaging and smartphones for Tayside Fire and Rescue to call out its volunteer firemen. Unified Communications manager Mark Deakin says you can use standard tools to build an emergency alert system, though he recommends seeking advice on risks and system design.

Via pioneering alert technology, unified communications are beginning to deliver life-saving benefits. As usage spreads, it will save time and money, too.