



MASS NOTIFICATION

THE LAYERED APPROACH

Mass notification is not a brand-new concept in safety and security circles

By Michael Zuidema



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WITH ONE RECENT STUDY PROJECTING THE MASS NOTIFICATION MARKET TO BE WORTH MORE THAN \$6.4 BILLION BY 2018, IT IS OBVIOUS THAT MORE AND MORE INSTITUTIONS ARE TURNING TOWARD A LAYERED APPROACH TO DELIVER EMERGENCY ALERTS. IT'S A PRUDENT CHOICE, SINCE THE ODDS OF REACHING THEIR INTENDED AUDIENCES ONLY INCREASE WITH MULTIPLE MEANS OF COMMUNICATION, AND IT'S AN APPROACH THAT IS ESPECIALLY CRUCIAL WHEN IT INVOLVES A POTENTIALLY DANGEROUS SITUATION.

Purchasing a security system with mass notification capabilities might seem like an easy fix. One issue: now that you possess the ability

to quickly communicate with a large group of people, what can you do to ensure that these notifications are being delivered in an effective manner? Just because you have the power to reach large groups, doesn't mean you're providing a quality message that's useful or even practical. It's extremely important to understand all of the factors that go into mass notification communication, such as the differences between audio and visual messages and why that discrepancy matters, and what all of that means in an emergency.

ACCORDING TO A REPORT

A report published in March by the Fire Protection Research Foundation titled "Emergency Communication Strategies for Buildings"



provided some guidelines on how to effectively broadcast messages given the technological advances made in recent years and the demands “to meet needs for emergency events other than fire, such as security or natural catastrophe.”

As the report outlines, there are a variety of factors that can both augment and hinder visual and audible warnings. Visual warnings, for example, can be limited by location, visibility and message length. Audible warnings, meanwhile, run the risk of being ignored or misunderstood by the audience. That’s just one reason why the ability to communicate via multiple means is the best way to reach as many people as possible when time and safety are the two most important factors, whether it’s an active shooter on a campus or a tornado bearing down on a town.

Fortunately, a sophisticated mass notification system can cast a wide net, both visually and audibly, via a wide array of sophisticated products, including public address, blue light phones, fire panels, email, text messaging, social media, digital signs and more. The next step is learning how to effectively deploy those security tools to maximize your reach and impact.

Here are seven key factors to consider with emergency communication:

Message/Alert. The Fire Protection Research Foundation report makes a point to distinguish the purposes of an alert versus a warning message. While an alert is meant to grab your initial attention during an emergency, a warning message is intended to provide important information for an appropriate response. Therefore, an alert has the ability to disrupt the often mundane nature of everyday life and grab people’s attention, whether it’s audible or visual, while the follow-up warning message provides guidance. There are devices that only supply alerts or messages, and others where an alert is part of the message. Understanding these differences and how to respond accordingly should be an essential part of an emergency operation plan, regardless of the delivery method. The key is to provide alerts and messages that both raise an appropriate level of urgency and that provide accurate information about what to do and what is wrong.

Intelligibility. It’s easy to be loud, but it’s more important to be understood. The ability to comprehend an emergency alert when it is delivered is a key component of NFPA 72 Chapter 24 standards, which reads, in part, “It is important to provide a distributed sound level with minimal sound intensity variations to achieve an intelligible voice message.” That means in addition to providing pertinent information, organizations using public address speakers (both indoors and outdoors), tone alerts and other audible broadcasts must pay careful attention to speak in a voice and magnitude that can be easily understood. Using a live voice can be particularly effective since messages can be updated as needed and have the versatility to convey varying levels of urgency.

Operational planning. Because emergencies rarely come with any type of advance notice, it’s crucial to create base message templates ahead of time for a variety of events—active shooters, severe weather or chemical spills—with announcements tailored to the audience, scenario and technology. This kind of forward thinking offers a number of tangible benefits, including providing knowledge and instructions at a much faster clip and reducing the institutional steps required for emergency managers or supervisors during a crisis. Horrific incidents in the past have proven how dangerous it can be when an emergency plan isn’t in place. While you may always hope for the best, the reality is you have to plan for the worst.

Human behavior. Organizations are forced to contend with the fick-


le nature of human nature, which itself is being studied to determine how to provide effective communication that will compel people to not only pay attention, but respond appropriately during different stages of an emergency. As the Fire Protection Research Foundation report states, “... recent studies of human behavior in a variety of emergency situations have increased awareness regarding the need for effective communications before and during different stages of an emergency.” Unfortunately, it’s become far too easy—and common—to ignore emails and texts or think an alarm is simply a test or malfunction; employing multiple channels is more likely to entice people to act swiftly. Repeating those messages is useful to maintain a suitable level of urgency and attention.

Redundancy. It’s imperative to push out multiple messages, not only to increase the odds of reaching the largest possible audience, but to provide updates and feedback as the situation changes. This can be achieved through the use of multiple layers simultaneously, emphasizing the seriousness of the situation amongst people and prompting the appropriate reaction. For example, a 2013 study conducted by the University of Texas at Austin titled “Using Multiple Channels and Sources to Combat Noise and Escalate a Sense of Urgency” found that the most effective way to increase awareness is to send multiple messages through multiple channels.

“The reason why I think it has to be redundant today is that increasingly we’re being hit with so many different messages through mobile devices, through desktop computers, we have lots of different communication channels,” Dr. Keri K. Stephens says in a YouTube video supporting the study. “The challenge for organizations is when they have a real emergency, something really important to communicate to people; they need to be able to reach us.”

Unified systems. As software and technology continues to expand and advance, it has become easier and easier for different products to work together, which can be an indispensable asset when you are trying to communicate during an emergency. Many locations already have a disparate set of security devices, but those layers are significantly strengthened when they work together, essentially creating a single station that can be properly organized and prepared to respond. Examples of integration include public address speakers with blue light phones, incorporating video feeds into an emergency operation plan and increasing fire panel functionality. This can offer organizations additional cost savings and benefits through flexibility and the ability to retrofit existing infrastructure.

Accountability. This may be one of the most overlooked, but vital, pieces to the puzzle. When an emergency occurs, precious time cannot be wasted determining who should send the message, what it should say, where it should be delivered, etc. Time is far too critical to be figuring out those roles on the fly. Instead, it’s imperative to have a plan in place, then test it, obtain feedback, and consciously strive to make periodic updates and improvements to provide the safest possible environment. That way, when an emergency occurs, you are ready every time.

Mass notification can be an extremely useful emergency communication solution for organizations looking to promote an atmosphere of safety and security. But in order to realize all of the potential benefits that exist, you need to be proactive in determining the best way to use this burgeoning technology. 

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