Situational Intelligence:
The Missing Link in Emergency Notification

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# Situational Intelligence: *The Missing Link in Emergency Notification*

Crises happen. No matter how much an agency or organization prepares in advance, the occurrence of disruptive events is a simple non-negotiable fact. What is negotiable is the amount of physical, financial or reputational damage that can result.

When faced with a crisis, you need a complete set of credible information in order to conduct a proper risk assessment, make critical decisions, inform stakeholders, and direct impacted parties. However, both receiving and relaying time-sensitive, operative communication in the midst of a crisis can quickly become a challenge. Access to and availability of credible information may change, becoming limited or even delayed. Fragments of information might become available from various sources, but the reliability of those sources may be questionable.

Without a clear picture of an event, misinformation and misunderstanding are likely to arise, creating a gap in understanding of the true magnitude of a situation and resulting in confusion. This confusion can substantially hinder swift and effective decision-making and incident response. While many organizations create a communication plan in preparation for potential crises, a one-directional communication plan alone is not enough. In order to effectively manage crisis communication, you also need a method of gathering ongoing, accurate and reliable information.

The ability to make quality decisions efficiently is dependent upon effective information gathering and communication. Decision quality is significantly impacted by the value of information being communicated and the facilitation of the decision-making process. If you don't have timely, accurate, dependable and complete information, the likelihood of a positive decision outcome is greatly reduced. Thus, adequate crisis mitigation and effective incident response is (in part) contingent upon the quality of information processing, the timeliness of the information availability and then subsequently the quality of decision-making.

One key aspect of information processing related to a crisis can best be understood as the process of "situational intelligence." Situational intelligence is an extension of the more general notion of situational awareness that calls our attention to the dynamic process of gathering information (inputs), interpreting data (insight), and informing others/requesting feedback (interaction).
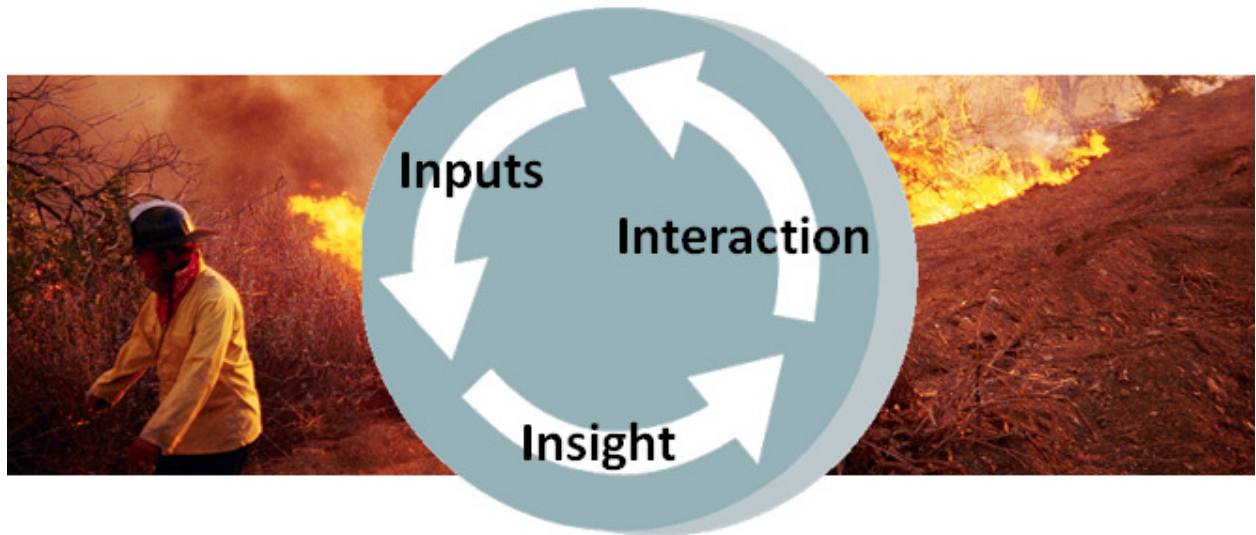
Our increased ability to capture and share information means that overall, the quantity and quality of information available during an event continues to grow exponentially. However, our approach to how we collect, analyze (or discard), process, and retain information typically lags behind the curve of best practices. Far too often, decision-makers fail to access and utilize new sources of information, new tools, and new opportunities. Technology, including mobile devices and social media outlets, has created a new, speedy avenue for communication, potentially leading to more effective crisis communication before, during, and after the incident and supporting better decision-making.

Information gathered from widely-available social media content sources can provide rich and deep insight previously unavailable to the decision-maker and communicator. Consider, for example, how information from various public social media outlets - "posts," "tweets," and "I-reports" from on-the-scene users - could provide access to real-time information, from multiple sources, about an incident or event. Think of the value of this information for verification, cross referencing, and data mining purposes. This is the new frontier for situational intelligence.

Situational intelligence, which combines traditional situational awareness with collective intelligence, results in a dynamic process in which information is gathered, data is interpreted and the information is shared. Specifically in this context, situational intelligence describes mining the fast and large database of public communication (e.g. social media) and combining this information with the traditional sources of information to enhance decision-making and communication processes. In simple terms, adding the collective insights of the general public, communities, employees, etc., who happen to be involved and much closer to the situation themselves, to the usual mix of traditional, trusted feeds of information, can provide a clear-cut advantage for the decision-maker and communicator. The larger the scale of an incident, the wider the availability of data should be from all of these "new media" sources. Assuming you're able to find it, harness it and use it correctly—combining it with traditional sources of information – this larger pool of information can give you superior surveillance and intelligence sooner. This new situational intelligence enhances the quality and quantity of information before, during, and after an incident.

Social media, communities and trusted feeds (e.g. weather) all provide inputs for situational intelligence. Prior to today's swift, interactive technology, crisis was communicated via traditional outlets that shared a very limited view of "on the scene" data. Situational intelligence cuts out the subjective gatekeepers and replaces them with real-time, on-location sources. Social media is an evolving source of information for crisis communication. It enables two-way communication, allows geo-location of developing incidents and impacted groups, and offers opportunities to develop long-term relationships with the public. Social media outlets like Twitter, Facebook, forums, and wikis also help to increase the quantity of information throughout the lifecycle of a crisis, though filtering is essential in securing quality information.

On a smaller scale, employees, first responders, residents, and volunteers compose personal communities that also act as an input to situational intelligence. Because of already established personal relationships, fluid crisis communication between trusted, credible members of a community is likely. Technological advances in mobile communication have also made interaction among members of a community more efficient. Short message service (SMS) allows members to quickly send essential information to one another. Members can embed photos, videos, and audio into their SMS messages to further illustrate the current state of the crisis. Other trusted feeds, including IT systems, weather alerts, traffic alerts, and other internal feeds, also act as inputs to situational awareness; access to these feeds is also available via mobile technology like smartphones and tablets.

Every event has a life cycle: situational intelligence is critical during a crisis, but it can also be critical in preventing a crisis. Being aware of what is happening around you and understanding how information, various events, and personal or public actions can affect you, your organization, and others, gives you indispensable insight that could prevent a crisis or help in ameliorating a crisis.

Finally, insight obtained via social media, community members, and other trusted feeds helps foster better decision-making; however, it is possible to be surrounded by great information and still make bad decisions. This is why it is crucial to be able to interpret present data – either by building context or by adding content. While in a crisis, it is important to build on small amounts of information, to understand the channel of the message, to define boundaries for both tools and techniques and to participate in two-way communication.

Interactive communication with multiple input sources can help you refine your information, put together an action plan, prioritize resources, etc. Consider the possibilities now available given the ubiquitous nature of high-mobility social media and mobile applications:

- Confirm status of employees in the field.
- Ask follow-up questions of users submitting information.
- Verify information received from the general public.
- Manage reputational maintenance and repair (response).
- Control situations by communicating official information first.
- Update first responders as a situation develops.
- Prioritize aid resources based on severity of impact.
- Plan messages in advance for diverse crises.
- Use visual data to assess the severity of a situation.

The quality of information combined with the quality of decision-making processes determines the overall quality of decisions made and outbound communication. Integrating traditional and new media sources of information can increase the quantity of incoming information about a situation. Intelligent analysis and interaction can improve the quality of incoming information about a situation.

When building situational intelligence, two-way communication interactions are advantageous, versus one-way communication interactions. Receiving and listening can be as important as sending and broadcasting. In the new world of social media and public connectivity, it is easier than ever to join the conversation—especially during critical incidents—and to listen, learn, and be better informed. This is the new opportunity afforded by the new vision for situational intelligence.

Key Recommendations

1. **Establish flexible sources of incoming information**: Social media, personal communities, and other trusted feeds like IT systems and alert systems act as inputs for situational intelligence. Establishing relationships with inputs prior to an event can facilitate information messaging and decision-making during a crisis.

2. **Filter social media**: Social media can act as an indispensable platform for communicating a quantity of information before, during, and after a crisis. But it's important to filter social media so that quality information is recognized quickly.

3. **Learn to interpret the data you have**: Even with a quantity of quality information, bad decision-making is still possible. Build on small amounts of information, understand the channel being used, define boundaries, and participate in two-way messaging.

4. **Get smart early**: Situation intelligence is critical during a crisis, but it can also be critical in preventing a crisis. If you know what play the other team is running, you have the opportunity to run the right counter play.

5. **Don't forget to listen**: Interaction is a two-way street—receiving and listening can be as important as sending and broadcasting.

About Robert C. Chandler, Ph.D.

Dr. Robert Chandler is a recognized expert on organizational behavior and communication with research expertise focusing on issues such as pandemic communications, crisis leadership, crisis teams, crisis decision-making and behavior, human factors during organizational crises, and organizational communication assessment in a wide variety of business and corporate contexts.

He has written more than 75 papers and articles and has authored six books, including "Disaster Recovery in the News Media" and his most recent work, "Media Relations – Concepts and Principles for Effective Public Relations Practice".

Dr. Chandler is the Director of the Nicholson School of Communication at the University of Central Florida. He is also a member of the American Academy of Experts in Traumatic Stress, the International Communication Association, the American Forensic Association, and the National Communication Association.

About Everbridge

Everbridge provides industry-leading interactive communication and mass notification solutions to organizations in all major industries and government sectors.

Communication failures have historically plagued organizations in their ability to respond to and minimize the human, operational, and financial impact of critical events and emergency incidents. Everbridge began with a shared vision: empowering a single person to communicate with any number of people as easily as communicating with one person to save lives, protect assets, minimize loss, and ensure continuity of operations. Everbridge brings technology and expertise together at every level for a complete solution. Everbridge solutions match your unique needs, from safety and survival during a crisis to cutting costs and achieving efficiencies in your everyday operations. Our understanding of mass notification and interactive communication challenges is leveraged in everything we do, from how we build our technology from the ground up to the expertise of the people we hire and best practices we share with the community.

We design the Everbridge system according to several key tenets:

- **Target the individual** – not the device. Everbridge has the most comprehensive notification system available, offering more than 30 contact paths that can be designated by incident type or by escalation steps.

- **Ease-of-use during any situation** – emergency or daily use – so even a non-technical person can communicate effortlessly and without anxiety.

- **Speed and reliability of communications.** Every second counts in an emergency. With global datacenters and an infrastructure unparalleled in security and reliability, the Everbridge mass notification system is designed for rapid and efficient communications worldwide so your message will always go through.

- **Universal accessibility** – with a fully managed system requiring no hardware, no software, no maintenance, and a flexible pay-as-you-grow model, organizations large and small have access to the same powerful communication capabilities.

- **Scalability** – the Everbridge mass notification system provides the ultimate flexibility in communication capabilities to meet changing needs in today's dynamic environment. The Everbridge system is inherently scalable to grow with and adjust to the requirements of any organization quickly and without disruption to internal processes, infrastructure, or resources.

Visit www.everbridge.com to learn more.