Situational Intelligence: Emergency Response Using Mobile Apps and Social Media

Robert Chandler, Ph.D.
Director of the Nicholson School, University of Central Florida

Claudia Dent
VP Product Management, Everbridge

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blog.everbridge.com
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Agenda

• Challenges of Emergency and Incident Response
• Why is Situational Intelligence Important?
• Smart Delivery and Assured Response
• Q&A

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We’ll send out a recording after the event.
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Challenges of Emergency and Incident Response

The “Fog of War”: Communication During an Event

- Uncertainty of situational awareness
- Information is delayed, fragmentary, changing
- Confusion of user-created information and rumors
- Time is of the essence – and can impact your outcome

Quality of Information \( \times \) Quality of Decision-Making Process = Quality of Decision Making
Situational Intelligence

Typical Situational Awareness

- Traditional sources of information
- Limited view of “on the scene” data

Flexible Sources of Incoming Information

- Groups closest to a situation
- Social Media and public forums
- “Volunteered” insight (responders, employees, general public)
Situational Intelligence:
a dynamic process of gathering information (inputs), interpreting data (insight) and informing others/requesting feedback (interaction).
A variety of sources can provide inputs for Situational Intelligence. Combined and qualified with trusted feeds, they can paint a picture of a developing event.
Social Media as an Input

- Increases the quantity of information – but needs to be filtered for quality
- Evolving sources of information – Twitter, Facebook, Forums, Wikis
- Enables two-way communication
- Allows geolocation of developing incidents and impacted groups
- Opportunity to develop a long-term relationship with the public
Communities as an Input

Who comprises your personal community?

+ Your employees
+ First responders
+ Residents
+ Volunteers

Because you have a relationship with your community members, they are more likely to communicate with you as an event develops.

✔ Trusted, credible source
✔ Motivated communicators
✖ Fewer “feet on the street”
Inputs from other trusted feeds

Other trusted feeds can inform and qualify incoming information:

+ Your IT systems
+ Other internal feeds
+ Weather alerts
+ Traffic alerts
You can be surrounded by great information and still make bad decisions – if you don’t know how to interpret the data you have

+ Build on small amounts of information
+ The channel affects the message
+ Define the boundaries: tools & techniques
+ Two way messages qualify input
Every event has a life cycle: situational intelligence is critical during a crisis, but 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.
**Interaction is a two-way street**

Interactive communication with input sources can help you refine your information, put together an action plan, prioritize resources, etc.

+ 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
Summary

+ Quality of Information x Quality of Decision-Making Process = Quality of Decision Making
+ Situational Intelligence combines traditional situational awareness and social intelligence
+ Public and private sources of information can increase the quantity of incoming information about a situation
+ Intelligent analysis and interaction can increase the quality of incoming information about a situation
+ Interaction is a two way street – receiving and listening can be as important as sending and broadcasting
Situational Intelligence: Emergency Response Using Mobile Apps and Social Media

Claudia Dent
VP Product Management, Everbridge
A Timeline of ENS Innovation

- Church bells and messengers on horseback
- Telegraph
- Radio communications, telephones and sirens
- Mass automated dialing, Reverse 911
- Geo-targeted mass notifications
- Social media notifications
- Mass text messaging, Voice-to-text
- Interactive, multi-device notifications
- Situational Intelligence
Monitor **social media** venues to detect escalating situations
- Identify potential incidents before they reach emergency status
- Watch for new developments as incidents progress

Use **mobile apps** to relay time-sensitive incident information
- Communicate valuable on-the-scene information about an event
- Include media, like photos, to quickly convey situational intel
- Allow more effective prioritization of emergency resources
The Need for Situational Intelligence

Delivery Challenges

- Errors under duress
- Old contact lists
- Too many systems
- Inconsistent processes
- Limited access to front-line intelligence

Responder Challenges

- Have the messages been received?
- Have the right teams been notified?
- Are the messages clear and complete?
- Can we really reach everyone?
- What if we get audited?
- Can we prove it?
Smart Delivery: Combining Speed and Intelligence

Smart Delivery

Delivery Automation
Visual Intelligence
Social Intelligence
Mobile Management
Incident Management
Assured Response: Connecting & Confirming

Smart Delivery
- Delivery Automation
- Visual Intelligence
- **Social Intelligence**
- Mobile Management
- Incident Management

Assured Response
- Target the Individual
- Contact Confirmation
- Two-way Mobile Communications
- Situational Responses
- Live Status Reporting
Smart Delivery: Mass Notifications

+ Single page notification process
+ ‘One-click’ sending speeds launch
+ Pre-determined message templates & contact lists reduce errors
+ Multi-language support with text to speech improves message clarity
+ Call-throttling flexibility paces delivery to infrastructure capacity

Select contacts based on groups, rules & GIS map locations

Only one page notification process & “one-click” sending
Smart Delivery: Social Intelligence

+ Monitor internal data & frontline responses automatically to capture missing information and improve situational intelligence

Only integrated social media monitoring & alerting.

Only mobile recipient app with rich two-way communications.
ANALYZE...

High Volume of tweets

+ Clustered within specific geographic boundaries

**ANALYZE...**

**High Volume of tweets:**
- One or more **keywords**
- One or more **hashtags**

**Higher than normal percentage**
**of tweets for a specific hashtag:**
- Containing specific **keywords**
Smart Delivery: Mobile Manager

+ Manage and monitor communications while ‘on the go’ using notification templates, real-time reporting and map-based targeting

Only mobile management app with integrated GIS-targeting.

Notify & run reports
Build new messages
Select contacts on maps
Assured Response: Targeting the Individual
Assured Response: Two-Way Mobile Communications

Communicate with and geo-locate frontline resources even under adverse network conditions like low bandwidth or connectivity

- Receive push notifications
- Respond using polling
- Share details & photos

Only dedicated mobile recipient application with two-way communication.
Trusted Platform: When Needed Most

- Smart Delivery
- Trusted Platform
- Assured Response

Unified Data Management
100% Redundant Systems
Scalable Elastic Infrastructure
Open Integrations
Trusted Platform: The Everbridge Suite

**Mass Notification**
Send and manage notifications across geographies and enterprises

**Matrix**
Manage incidents with automated rules based communication and tracking

**Interactive Visibility**
Maximize situational intelligence with social media, mobile and weather

**Mobile**
Provide two way communication between Mobile Members & Managers

Everbridge Platform

Global Elastic Infrastructure • Unified Data Management • Open APIs Reporting and Analytics • Compliance and Audit • Everbridge University
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Q&A

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QUESTIONS

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