

Technology and Tools for Mitigating Emerging Security Threats

FEATURED EXPERTS:

Chris Hurst, Chief Operating Officer, Stabilitas

MJ Leslie, Chief Growth Officer, LifeRaft

James Barton, Chief Technology Officer, [eTravelSafety](#)

MODERATOR:

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As individuals and enterprises travel more widely and conduct business in far-flung corners of the globe, the necessity of security and safety becomes ever more insistent. Physical security risks are commonly countered by a set of traditional mitigations, such as manpower applications, security design and infrastructure improvements, among others. Increasingly, the application of new or evolving technologies can enhance these efforts for both internal and external threats. New technologies and security related products can sometimes be marked by more hype than reality. Companies need a clear-eyed, informed way to understand how to leverage technology to support their enterprise in securing its facilities, people and operations.

ANTICIPATING TROUBLE

Frustration with a messy situation brought **Chris Hurst** to the bundle of solutions that was to become Stabilitas. In his work as director of enterprise risk management for a large NGO with people and operations in 40 countries, **Hurst** led teams in complex environments in the Middle East, Asia and South America. Three questions framed his work: Was the area safe? When an incident did occur, who and what was affected? How quickly could he communicate with all parties impacted — and moreover, how quickly could we warn potentially at-risk people, *before impact*? Unfortunately, though he had multiple different platforms all trying to solve a particular issue, they were not communicating well and not providing an integrated or common operating picture for the user. Reacting to these challenges in getting real-time, actionable intelligence, **Hurst** and his West Point classmate **Greg Adams** created Stabilitas to make diverse sources of information available to the user in a quick, simple way.

“Stabilitas solves three challenges for our clients,” **Hurst** says. “We first detect incidents globally using a combination of human analysis and machines — artificial intelligence. Second, we then correlate those events with the location

of resources— travelers, business operations, supply chains, facilities — so that the company can quickly see who and what could be impacted. Third, we enable our clients to communicate with people managing these resources and travelers who could be affected.

“The functions of *detection, correlation, alerting and communication* have traditionally been siloed into separate tools that do not always work well together. Stabilitas solves gaps within and across the detection, correlation, alerting and the mass-notification processes so that companies have a single source or single view to rely on. Our platform creates a common operating picture that enables the risk management team, business continuity team, travel, supply chain, and duty-of-care team to all be on the same page.”

QUICKLY CREATING CERTAINTY

One of the good news/bad news aspects of the plethora of information at our fingertips these days from the internet and various media is that, yes, we have access to all the facts we can probably stand, but it can be challenging figuring out what of that information is essential and what is noise. Nova Scotia-based LifeRaft was initially created as a platform for security agencies, **MJ Leslie** says. The company now delivers solutions that allow a variety of organizations to respond appropriately to the challenges they face from the global adoption of open source channels. It helps identify and analyze, then validate and investigate threats online.

“It’s called ‘open-source,’” **Leslie** says, “which is a fancy way of saying ‘anything that’s publicly available on the web.’ We focus on giving teams the tools to help do their jobs a lot faster when it comes to investigating threats — quick, proactive features to help not just gather that information, but once enterprises have that critical alert, help them analyze and validate it to sort out what to do with that information after the fact in an efficient way.” It’s impossible to imagine the time and human capital it would take to do this work in a manual, less technology-driven process.

SPACES DEEP AND DARK

LifeRaft also provides protection when entities need to explore the “dark web” — that part of the internet that’s accessible only with special software that allows user and website operators to remain anonymous. These spaces so deep and dark, **Leslie** says, are not fundamentally safe to be in. If a team wants to explore within that space to research and investigate the growing number of threats that are produced in that part of the internet, it’s a really bad neighborhood to wander into alone. “That’s very difficult to do in a safe manner by going through a Tor browser, for instance,” she says. “We put an interface between the analysts or the user and that part of the web so that there’s no threat to the organization or to the user for being in there and exploring that space.”

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SOLUTIONS TAILORED TO NEEDS

Sometimes attempting to use a technological “solution” is a bit like Goldilocks’ adventure. Though the tech seems nifty, it’s either too hot or too cold, or just doesn’t capture a solution that does what the user most needs and wants it to do. eTravelSafety has worked to create a solution that’s just right for travelers seeking to be safe while on the move. **James Barton** says the company approached its solution with the intention of creating something that was cost-effective, scalable and critically easy to access.

“We’ve ripped up the rule book really,” **Barton** says. “We started from scratch to say what do the travelers want as opposed to what we want. I’m sure we’ve all had the experience where you’ve got a fantastic product, but people simply are not using it because they hate the user experience. We came at it from the user-experience point of view and we developed some solutions which are sweeter solutions that put the traveler right in the middle. Think chat-bot technologies that allow people to move away from a search generation to ‘ask generation.’”

TRAINING TRAVEL SAFETY

Gone are the days when most organizations can get all their people together in one room for several hours or days of training. eTravelSafety has addressed that concern by creating training videos that can be tailored for a specific organization to deliver travel solutions to keep all their people safe and that can train them on the go, on any device. People in an organization need information on its travel policy or expense policy and having a mobile app deliver that data is cost-effective and efficient. “People want short, accessible content in the moment,” **Barton** says, “and that’s where technology really does meet the need, in the moment.”

APPLYING TECH TO WORKPLACE VIOLENCE

Although no one really wants to think about workplace violence, it’s a topic no one can ignore — all over the country, all over the world. While some traditional mitigation techniques cannot be displaced by technology, such as good security policy, safe facilities, security guards where applicable and appropriate, growing tech applications can increase and enhance prevention efforts and responses when the worst happens.

Hurst cites a recent incident: “An active shooting was in process at the school right next to the customer’s location, and the customer didn’t know that this was happening. He had heard the helicopters, but we picked up the incident, correlated it with his location and showed him in real time. *The alert told him what the issue was (the shooting) and communicated, ‘This is happening right next to you, right now.’* He was able to respond quickly and notify the relevant teams.

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“The appropriate action is typically warning, advising and notifying. By having mass-notifications tools, you can send two-way polling, SMS, emails or voice calls to all employees in the affected area. This starts with having the intelligence. ‘Hey, something’s happening. You have people and assets who could be affected.’”

IDENTIFYING TROUBLE BEFORE IT STARTS

Immediate detection of risk situations is one of the most valuable opportunities technology affords. Increasingly, it also is helping detect and deter threats. **Leslie** says that the events leading up to and after an employee’s termination can be a source of really critical information.

“Once a termination has been carried out or if, in the case of some of our global customers, they have some large downsizing initiative taking place, that is really a key time for us to leverage technology and start listening,” **Leslie** says. “Are any of those employees holding malice or making threats about coming back to the employer?”

An anecdote underscores the importance of anticipating and deterring malicious behavior and how technology makes that possible.

“A large energy utilities company had an individual that had indicated online that he had been promoted as manager of the plant where he worked and was really excited about it,” **Leslie** says. “He referenced the company’s name. Then, in very short order, he very publicly shared some sensitive content about his drinking and substance abuse. He made some aggressive posts, one of which had been that he was too drunk to drive but had to work in three hours.

“This is in an industry that involves heavy physical labor and indeed, he showed up to work under the influence and was fired. The next 36 hours following that post, he again got aggressive in the language he was using and posted that he had ordered a shotgun online. It was arriving the next day and he posted that he intended to go back to the employer.”

Leslie says the organization was notified in ample time to identify the employee and to intervene before a threat could materialize. In the process, the individual deleted his entire online social footprint, but the LifeRaft platform had retained much of it for evidentiary purposes and also to be made aware when he eventually came back online.

POLICY PROVIDES PATHWAY TO ACTION

In the above scenario, the company was able to take quick action thanks to policies it had in place to anticipate such circumstances. One of the most useful developments in technology is that it affords up-to-the-minute access to necessary policy documents, so employees have no doubt about what the enterprise expects in the situation.

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“It would be naive of us all to think that we put people through some training, and they remember all of it,” **Barton** says. “Statistically, if you take a course and you do not use that training, within four weeks you’ve lost at least 80 percent of it. Workplace violence is prevalent. But what we need to do is provide that in the moment ‘What do I do right now?’

“We’ve been looking at the use of artificial emotional intelligence in the way that we deliver our content,” he says. “What that does is to identify when somebody is under pressure versus when somebody is relaxed. It can respond in time. If you’re in a risk situation, you don’t want to be saying, ‘Oh can you please give me the information?’ You’re saying, ‘Give me the information right now!’ The technology that we’re using responds back in time to deliver the content and or the policies, in the right context — delivering it in short form by sensing and detecting the emotions of the person involved. It’s about the right content to the right person at the right time.”

HIGH TECH MEETS NATURAL DISASTER

One area where technology can provide a dramatic difference in what was available before compared with what’s possible now is in dealing with natural disasters. According to **Hurst**, over the last 20 years there have been 6,873 natural disasters globally, which breaks down to 344 incidents every year. Over the past 20 years, that is about 218 million people impacted or lives lost or an annual rate of 68,000. A business 20 years ago that had a small footprint in one or two countries had a significant challenge when disaster struck, no doubt. But now, with so much of business being global, the challenge is massive.

Though severe weather events and their aftermath have a dramatic effect on many, many people, few have any notion of a “standard operating procedure” for such events. Even companies that are well prepared for events affecting their employees directly may not know what to do when the event goes beyond those parameters.

Leslie points to an instance when a hotel had policies for what needed to be done in a hurricane. Then when the hotel faced such an event, it found the preparation had not gone far enough. “They had internal procedures for what needed to be done and how to identify their employees in that scenario,” she says. “However, for guests and guest services and incoming individuals they were expecting, there wasn’t a clear procedure or threat intelligence-gathering method to say ‘Okay, this is what we know, and this is what people are saying.’

“A lot of what we try to do is aggregate that content and then validate it to ensure that not only are we producing real live and real-time information, but we’re also giving them the ability to follow some of those pieces of content through to see where they’re happening, what the timestamp on that is, and if there’s any ability for us to say where the hurricane is going, how that will be in their area. Or, once it’s passed through, how do we find out or validate that, for example, ‘This hospital is saying it’s open, but do they actually have real contents from on the ground that can verify that?’”

Last fall, the question of natural disasters became personal for **Hurst**. He lives in Southern California and said trying to figure out what was happening during the fires last fall was “a mess.”

“Do I need to get my two kids who are under 2 out of our house? I wondered. “Eventually we did, but if you think about the information streams during a situation like that. It’s the news, it’s social media, it’s fire departments, police feeds, traffic reports using Google. ‘Where do I go?’ It’s a ton of information coming at me and that’s just on the coverage about the event.”

“In that scenario as a dad I had to just deal with my two kids. But consider the role of our customers. They have *thousands* of people and resources to correlate against those same risks: travelers in the area, assets in the area, suppliers in the area. Not just their own assets but their supply chains were at risk, key vendors. In one case we had a client with a data center at risk.

“Our corporate clients are facing a huge task trying to make sense from all this separate data, and that highlights how AI and technology are valuable when human analysts are not enough,” **Hurst** says. “You have to be able to take all that data, put it in a single stream, make sense of it in a way that shows the updates and then again correlate those with assets. And then open the two-way communications, ‘Hey are you okay? We saw this incident.’”

WHERE SAFETY BUMPS INTO PRIVACY

One thing any enterprise will want to do after a natural disaster or terrorist event is to find out where their people are and what their status is. Finding that out can put the company on a collision course with privacy concerns.

“Over here in Europe, [we’re having] lots of conversations about how traditional travel tracking is not acceptable for people,” **Barton** says. “You ask the individual, ‘Can we track you all the time?’ and they will say no. However, if you say, ‘Can I track you in an emergency with these parameters?’ they will say yes. What we’ve done in our solution is to build in the ability for people to be tracked but only for a specific and certain amount of time as opposed to being tracked continuously.

“We have had quite a few interesting discussions with travelers who say, ‘Oh yeah, I know my phone gets tracked, that’s why I leave it in the hotel room.’ Of course, as soon as you do that, by your very act of trying to make yourself safe, you’re making yourself unsafe. They’re leaving this primary communication device behind in the hotel because they don’t want to be tracked. Being able to customize the tracking and turn it on very quickly when you need it is really important.

Barton cites an example from London’s [Westminster attack](#) in 2016. “It took them nine hours to locate every individual to make sure they were safe,” he said. “In the solution that we provide, we can do that literally in minutes to find out who has responded, who said they’re okay, and who is in that area but

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hasn't responded. In those emergency situations, you triage out the ones you know are safe. It's the people that you know are in the area and not responding, those are the people that you need spend your focus on first."

IT'S NOT JUST ABOUT THE PEOPLE

Concern for the safety and welfare of all their people is the first order of business when disaster strikes. But following immediately on is the question of massive disruptions in operations. Supply chains are interrupted, transportation can be wrecked. The causes and consequences can be staggering and important at all points along the bottom line. Using technology's capacity to gather information so companies can make informed decisions about what they're doing from an operations standpoint is essential as they contemplate how and when they will get that unit or company back online and running.

Leslie notes that there are success stories, too. "An organization in Florida got hit in a hurricane that wiped out all of their facilities. But because of how their systems were integrated and their ability to gather that information and know up-to-date content through a multitude of different tool sets, they were able to get up and running 36 hours after the hurricane hit. Their competitors were still working at it four or five days later. That could be the difference between a few million dollars. When we look at natural disasters, we need to consider them not only as a security issue but as an overall business-continuity issue."

SMART TO THE LAST DROP

Hurst points to the example of Folgers Coffee, which was able to reestablish its plants quickly after [Hurricane Katrina](#).

"Folgers put thousands of people back to work very quickly," he said. "If you think, 'Natural disaster, utter devastation, what do people need?' They need money. They need their jobs. The hurricane took that away. With Folgers being able to respond so quickly, people were able to get back to work right away. President Bush actually [visited the Folgers plant](#), and they were featured in the *New York Times* for the social benefit that Folgers was providing to the area, which I think is super powerful. All of us on this call are always looking for ways to help our customers establish ROI on their event detection and security metrics — and a quick return to business adds to the top line — and to the public benefit."

SERVING PERSONALIZED SECURITY

RANE experts agree that the direction of technology for the future is highly personalized security training, alerts and information. They made the point that an overabundance of alerts means alerts are likely to be ignored. On the other hand, highly specific alerts tailored to that user compel a click. **Barton** has created a chat bot for eTravelSafety, dubbed "Chatbot Charlie," that delivers true on-demand learning for users.

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“When I was developing our chat bot,” he said, “what I found astonishing was that the greatest risk for the majority of countries is natural hazards — highest by a long shot against the other metrics we’ve got. We often think of natural disasters as large-scale events, but sometimes it’s as simple as what happened yesterday in Denver. You’ve got [approximately 850 flights to and from Denver canceled](#) and that is the kind of situation where your people are going to be at the most risk. If they’re at the airport and a flight gets canceled, they need to know what to they do — right at that moment. What is the policy about booking a hotel? How do they know if they’re safe? You need to have the context of the training built in because you’ve got to be able to link it together.

“Let’s say [our team] is traveling to Brazil. The majority of organizations will have a risk rating for Brazil as a country. That doesn’t actually help because what you need is to tailor it to the individual traveler. Their level of training, experience, age, gender — everything has an impact on their travel safety. Through AI and our systems, we get the country data as a baseline and then by asking clever questions about you as an individual, some of which the bot already knows from your profile, some in asking you specifics for that journey, it then creates automatically a personalized travel-risk assessment. It recommends a personal set of videos that you need to watch to make sure that you are trained before you travel. We can then prove that you have watched that video so the whole feedback chain is complete. As soon as travelers recognize that we’re tailoring it to them for that individual trip, the adoption rates go through the roof. Therefore, you can help people stay safer.”

BRINGING NECESSITY INTO FOCUS

Hurst says the November 2015 [Paris attacks](#) became a foundation story of how and why the Stabilitas platform can help companies . A series of coordinated terrorist attacks rocked Paris and a northern suburb, Saint-Denis, and highlighted in a stark way the necessity of a platform that connected all the dots of detection, correlation, alerting and communication.

“I went to a seminar right after the Paris attacks,” he says. “So many security and travel managers were still trying to track down their people in the days after the attacks because they only had partial data. They weren’t able to connect with all their employees, particularly local employees and contracted staff who wouldn’t be in a travel system The travel trackers were showing that people had flown to Paris, but there was no way to know that people actually were working in a different city or that the London team had come to Paris and were at risk.

“We saw that it is essential that you are able to have the data about all resources, all your facilities, all your employees in one place and then be able to correlate with any events around that. That really cemented the idea of an operating view that you have to enable communication with everyone. Otherwise, you’re telling your CEO, ‘The people who booked in certain systems are trackable, we have reached out and we have 80 percent responses.’ The CEO is saying, ‘What about everyone else? What about our local employees? What about the people who didn’t use a certain system?’”

REAL-TIME INTEL IN THE THICK OF IT

Leslie says the situation that underscores the need for smart use of technology is the [Nairobi incident](#) in which armed gunmen attacked a hotel complex. “One of our global customers received the first alert and communicated out,” **Leslie** says. “And then, what happens when the communication you get back is, ‘I’m not safe. I am in proximity of this event and I am in danger’? That was the case for our client.” At that juncture, **Leslie** adds, the client turned to tools that were familiar: “They got into a WhatsApp group. One of the employees was out traveling with their family at the time. The employees began communicating with each other and with the organization, which was able to communicate with some supporting contract organizations locally to help them make decisions. The company used other forms of intel to start validating, investigating and trying to understand the level of threat in that area. They monitored what was going on in proximity to the incident as an emerging, ongoing event to understand what was taking place on a continuous basis so that they could provide intel back and advise collectively what should be done. They [put all that together] to make a smart decision in a real crisis situation where their people and people’s family were affected in a high-stress scenario.”

ABOUT THE EXPERTS

Chris Hurst, Chief Operating Officer, Stabilitas

Stabilitas employs artificial intelligence and cloud-based technology to accelerate an understanding of the world around to make people safer. By providing event intelligence and detection, the company makes international travel and work abroad safer and improves coordination among dispersed teams. Stabilitas's mass notifications deliver situational awareness and risk mitigation via smartphones and web applications with integrated travel risk management. Prior to joining Stabilitas, Chris Hurst led engineering teams to complex environments in the Middle East, Asia and South America and had prior experience as director of Enterprise Risk Management for a large NGO with people and operations in 40 countries.

MJ Leslie, Chief Growth Officer at LifeRaft.

LifeRaft delivers solutions to organizations that allow them to respond appropriately to the challenges they face from the global adoption of open source channels. MJ Leslie specializes in identifying how to leverage open source intelligence for security programs from enterprise clients to investigative firms. Her career has been focused on the education and implementation of products and services targeted to the security industry. From her background in technology and communications, MJ understands the unique needs of clients and how to identify solutions for challenges arising from the global adoption of digital communication.

James Barton, Chief Technology Officer, [eTravelSafety](#)

eTravelSafety delivers a comprehensive, tailor-made suite of travel safety solutions to manage risk globally. With more than 25 years of commercial sales, technology, and learning-development experience, James Barton is focused on developing the next generation of travel safety technology. From artificial intelligence, artificial emotional intelligence, the blockchain, and virtual and augmented reality, James is obsessed with how to take these complex tools and make them simple enough for everyone to use by building learning technologies and digital solutions.

ABOUT RANE

RANE (Risk Assistance Network + Exchange) is an information and advisory services company that connects business leaders to critical risk insights and expertise, enabling risk and security professionals to more efficiently address their most pressing challenges and drive better risk management outcomes. RANE clients receive access to a global network of credentialed risk experts, curated network intelligence, risk news monitoring, in-house analysts and subject matter experts, and collaborative knowledge-sharing events.

