



# High-Reliability HR: Preparing the Enterprise for Catastrophes

By Benjamin E. Baran

In a turbulent, unpredictable world, organizations face many threats. Left unchecked, those threats can morph into catastrophes. The principles of high reliability, previously unapplied directly to the HR function, provide key insights into how organizations today can better ensure their preparedness. While exploring this framework, we will examine the findings of a study conducted by a major university in a large-scale exercise to prepare itself for the possibility of an active shooter on campus. High-reliability HR and its proposed practices are important for HR leaders and executives of all types seeking to better prepare their organizations for calamities.

**D**irectly or indirectly, catastrophes occur within an organizational context—involving people who work within or under the authority of an organization. Executives in all sectors and industries, therefore, must acknowledge that their organizations face security threats that can arise suddenly with far-reaching negative consequences.

Facing these threats requires leaders to expect, support, and reward specific types of behavior and a mindset of vigilance. The human resources (HR) function is well-poised to champion such an approach, but HR leaders will need to adopt new frameworks themselves to be effective.

One particularly helpful framework for executives who wish to mitigate emerging risk is that of high-reliability organizing. Scholars within this field have identified five specific characteristics that allow organizations in industries with high-risk



## When Catastrophes Strike

Catastrophes happen. And when they do, they often strike with disorienting speed and unpredictability.

For example:

- April 16, 2007. A student at Virginia Polytechnic Institute and State University (Virginia Tech) shot and killed 32 people on campus in one of the most deadly massacres by a single gunman worldwide.
- April 20, 2010. An explosion on the Deepwater Horizon oilrig in the Gulf of Mexico killed 11 people and caused the largest oil spill in U.S. waters to date.
- Feb. 25, 2012. U.S. Air Force Lt. Col. John D. Loftis was working at his desk at the Afghan Ministry of Interior in Kabul when one of the Afghan police officers he was there to help shot and killed him without warning. By the end of 2012, similar “insider” or “green-on-blue” attacks killed a total of 61 people and wounded another 81.

technologies. But many other organizations—and their leaders and HR departments—do not deal with such technologies. Instead, many organizations are “reliability seeking” in that their vulnerability to catastrophes stems from their close connections with their environments and their complex operations (Vogus & Welbourne, 2003).

Reliability-seeking organizations must mitigate the risks that come from the possibilities of small errors in one part of the organization or its environment—for example, an issue of supplier quality—spinning into major disasters. They also must deal with the numerous unintended consequences that inherently arise in large, complicated organizations. Indeed, the world itself is becoming increasingly interconnected and complex, leading to a commensurate increase in the possibility of catastrophic failures.

We can apply the principles of high-reliability to a wide range of organizations across sectors and industries, and these have distinct implications for the HR function, which, as the custodian of policies and practices related to the organization’s people, may be well-positioned to act proactively across the strategic, operational, and tactical levels of the organization. The accompanying table defines the five characteristics of high reliability and provides examples of potential HR practices that align with each. Realistically, these potential HR practices may or may not actually be driven by the HR function, but HR leaders may have the capacity to provide internal consulting or coordination of these and other related activities.

To illustrate these principles and potential HR practices, we can look at the lessons learned during a specific instance in which an organization trained for a specific type of disaster.

## The Active Shooter on a University Campus

Most college and university campuses are like small towns with a few thousand to tens of thousands of diverse residents working across a scattered collection of administrative, class-

technologies (e.g., the military, nuclear power, etc.) to operate with surprisingly rare large-scale failures. These factors are: (1) preoccupation with failure, (2) reluctance to simplify interpretations, (3) sensitivity to operations, (4) commitment to resilience, and (5) deference to expertise (Weick & Sutcliffe, 2011).

Five characteristics of high-reliability may apply to HR and help leaders at all levels prepare for catastrophes. To illustrate these principles, I then present evidence from a study I led in which we collected observational, survey, and interview data from top leaders and key players who participated in a large-scale “active shooter” training scenario conducted at a major university. Clearly, most large organizations have entire departments devoted to security, safety, and business continuity. The perspective provided here is meant to provoke a constructive evaluation and discussion of the role of HR in these processes and how HR could potentially be a proactive partner in pursuit of organizational reliability.

## High-Reliability Organizing and High-Reliability HR

High-reliability organizations such as nuclear power plants and naval aircraft carriers provide many lessons because they operate with relative safety despite frequent use of high-risk

## High-Reliability Organizing Characteristics Applied to HR

High-Reliability Organizing Characteristics	Examples of Potential HR Practices
1. Preoccupation with failure: Having a healthy sense of exactly what types of hazards, threats, and internal vulnerabilities the organization faces and being continually mindful of them.	<ul style="list-style-type: none"> <li>▪ Systematic review of internal vulnerabilities and external risks, from the front lines to top management</li> <li>▪ Scenario planning based upon identified risks</li> <li>▪ Communication of scenario plans throughout the organization</li> </ul>
2. Reluctance to simplify interpretations: Resisting pressure to attribute causes and effects too quickly, seeking holistic perspectives on new situations to promote understanding and learning.	<ul style="list-style-type: none"> <li>▪ Training on root-cause analysis, after-action reviews, and critical thinking</li> <li>▪ Developing leaders who support, expect, and reward a climate of healthy questioning</li> <li>▪ Promoting multifaceted approaches to problem-solving, avoiding the allure of “silver bullets”</li> </ul>
3. Sensitivity to operations: Maintaining close connections between leaders and those who are most likely to first notice the subtle signs of emerging threats and promoting a culture of continual feedback and communication.	<ul style="list-style-type: none"> <li>▪ Developing managerial skills that promote positive employee relations across levels</li> <li>▪ Rewarding and recognizing rapidly reporting errors, risks, and potential hazards</li> <li>▪ Frequent, two-way feedback conversations between supervisors and employees</li> </ul>
4. Commitment to resilience: Cultivating knowledge and skill throughout the organization regarding first responses and subsequent actions to perform when threats emerge.	<ul style="list-style-type: none"> <li>▪ Training employees on actions to take in worst-case scenarios</li> <li>▪ Systematically delivering follow-up training to ensure skills remain current</li> <li>▪ Running periodic simulations to test proficiency and promote learning</li> </ul>
5. Deference to expertise: Pushing decision-making authority to subject-matter experts instead of relying solely on hierarchy or rank.	<ul style="list-style-type: none"> <li>▪ Hiring practices that select for carefully identified areas of expertise</li> <li>▪ Developing skill and knowledge of key employees</li> <li>▪ Establishing decision-making principles that value expertise over rank</li> </ul>

room, and maintenance buildings. These structures and the people who work within them are typically situated within larger communities, but the campus itself often has a highly porous boundary, making it easy for people to come and go. A person can enter such an area unnoticed, and while there,

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he or she can move with relative freedom. The presence of a stranger in such an environment is common.

But these serene venues are not immune to violence. According to statistics compiled by the U.S. Department of Education, 24 murders or incidents of non-negligent manslaughter occurred on campuses during 2013 (the most recent data available). Only two of these involved the worst-case scenario of an active shooter (Kingkade, 2014), but given the potential loss of life at stake in such an incident, university communities

must prepare themselves for the possibility of unanticipated armed conflict. Study of such events involving schools and university campuses during recent years have provided some basic considerations for leaders, but consistent planning and training remain of paramount importance (Buerger & Buerger, 2010). Although I use this specific example from higher education, the principles and lessons presented here likely extend to a wide variety of organizations across sectors and industries.

The principles of high reliability and the associated HR practices that I propose here are evident in the lessons learned from a large-scale exercise and simulation that I had the opportunity to study. This event focused on preparing approximately 50 key leaders (e.g., the president, president’s cabinet, risk management and business continuity departments, etc.) within a major university—as well as first responders and leaders from nearby hospitals—for the possibility of an active shooter on campus. The event involved both a “table-top” exercise, in which leaders worked through a scenario together in a large room, and a full-scale simulation, in which actors played victims and the perpetrator while the many different parties involved responded accordingly. I led a research team that observed both parts of the event, administered two surveys to the participants, and conducted interviews of 17 participants afterward.

Analyzing these data revealed a number of important themes. Given the training and communication-related implications of these lessons learned, they clearly intersect with the responsibilities of HR. Based upon their prevalence in the data, some of these lessons are primary, while the others can be considered as supplementary (yet still important).

It is important to note that this particular university had a comprehensive notification system that allowed threats and amplifying instructions to be communicated immediately to faculty, staff, and students via email and text messages. Such a notification system is indeed a foundational aspect of emergency preparedness.

### Primary Lessons

- **Publicize basic procedures.** HR leaders, in coordination with other key leaders of staff and faculty, should ensure that everyone knows the basic procedures. This communication campaign should include faculty members because they are often in close proximity to students but are typically far removed from considerations of security and emergency management. Students should all know the basic first responses to take upon being alerted of a possible threat.
- **Train people on typical roles and responsibilities.** Faculty members, for example, could take five minutes each semester at the beginning of class to discuss security protocols. Key leaders should go through refresher courses on incident command systems and how to coordinate both internal and external communication. Key leaders should also practice their own communication

and teamwork as part of an emergency operating center or crisis action team, focusing on (1) what do we know, (2) who needs to know it, (3) have we told them, and (4) what do we need to know. The team must learn to anticipate what could happen in the next few hours or days while staying informed about ground-level events.

- **Share and build upon existing knowledge.** Training efforts should incorporate lessons learned from incidents at other similar organizations. HR could also help coordinate a diverse, representative working group from across campus with the ongoing mission of identifying potential threats and potential responses.

### Supplementary Lessons

- **Anticipate change.** A mindset of vigilance is critical to ensure quick responses to rapidly changing situations. Leaders should embrace the concept of agility, for example, to reinforce the expectation that real-life situations rarely go exactly as planned. Key roles should have backup personnel in place, and people should be cross-training to fill in as needed.
- **Systematically update training plans; budget for periodic training simulations.** As the organization becomes more competent in these training scenarios, increase the level of ambiguity present to ensure continually enhanced realism and learning.
- **Understand your structure.** Our survey data showed that people who anticipated working together again were more optimistic about their group's abilities, highlighting the value in repeated interaction across departmental lines. We also found that ad-hoc internal groups



were significantly lower on key indicators of teamwork than other groups such as law enforcement and the crisis action team. This suggests a need for additional training targeted at more typical leaders across campus such as those in facilities management, counseling, student affairs, information technology, and others.

- **Facilitate collaboration with partner organizations.** At the very least, campus officials should meet with local law enforcement to discuss contingency plans and provide information (e.g., campus maps and aerial photography, contact lists, etc.). Ensure accurate, updated crisis plans are created and provided in concert with these partner organizations.

## High-Reliability HR on Campus

The lessons presented above illustrate the usefulness of applying the principles of high reliability to prepare the organization for catastrophes. HR leaders could use the practices and lessons presented here as a starting point for discussion with other senior leaders to generate specific action items. To begin, having a healthy preoccupation with failure should motivate leaders to conduct necessary preparations. HR directors on a campus could provide key management of such measures, including structuring relationships among leaders within student and faculty affairs divisions. Such cross-organizational collaboration is critical because answering the questions of “What could go wrong?” and “How should we respond?” is best done in a way that harnesses diverse perspectives.

Regarding reluctance to simplify interpretations, we learned through our study that campus leaders are generally unaccustomed to the level of high-stakes ambiguity that catastrophes embody. Systematic training that becomes increasingly more realistic, therefore, is a key component to building leaders’ capacity for nuanced analysis.

Communication and building shared understanding is an ongoing process, but campus leaders can be more sensitive to operations by streamlining basic procedures. For example, leaders who interact the most with students—faculty members and student affairs staff—should be trained on the subtle signs of mental instability and the threats of violence. Accompanying such training should be easy-to-follow instructions on who should be contacted and how.

Pertaining to the principle of commitment to resilience, our study revealed that outside of law enforcement and the administration’s crisis action team, few people were prepared with knowledge of first responses and subsequent actions in the face of an emerging threat. Campus leaders should ensure that all training reaches those people who are most likely to be caught in the situation prior to the arrival of law enforcement.

Finally, universities focus first on the production and sharing of knowledge—not necessarily on responding to crises. In the spirit of deference to expertise, therefore, university officials should ensure that they have competent staff members who can be relied upon as subject-matter experts in the face of an emerging disaster. These people include security and law enforcement personnel, but they

also include people with deep knowledge of the buildings and layout of the campus. It is just as important for administrators to know who these people are—simply having them is not enough if they are never called upon.

It is important to note that the organization studied here was large. Smaller institutions likely require even closer coordination with outside agencies than large institutions, and rural campuses likely have different considerations than urban ones.

## Conclusion: High-Reliability HR Beyond the Campus?

University campuses are not the only type of organization that can benefit from the concept of high-reliability HR. Most—if not all—organizations seek reliability, safety, and resilience. Furthermore, many organizations such as Google and Apple have grown in ways that distinctly resemble college campuses in terms of the physical environment, suggesting potential direct applications of these lessons to enhance security.

It is critical to note the importance of organizational culture in imbuing norms that promote the rapid identification of and response to threats. HR leaders can have a direct influence on such cultural norms through practices within hiring, onboarding, promotion, and much more. HR leaders can also directly influence many of the training and communication aspects of such preparation.

It is without question that organizations today face many complicated, unpredictable threats. But regardless of what form those threats may take, high-reliability HR practices are a key part of ensuring the organization’s security and preparation in the face of potential catastrophes. ■■

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