

WHITE PAPER

Mitigating Risk: Developing a High Consequence Training Strategy

BY MICHELLE EGGLESTON

August 11, 2015

When the stakes are high and failure is not an option, it's imperative that training be done right the first time. Successfully trained employees mitigate risk and can often mean the difference between a minor incident and a full-blown emergency. Developing a high consequence training strategy and program that gives employees the right level of preparedness to excel in challenging situations requires diligent planning and execution.

MANAGING RISK IN HIGH CONSEQUENCE ENVIRONMENTS

Organizations deal with business risks every day. Risks that can lead to adverse effects on their employees, customers and assets. In high consequence industries such as oil and gas, aerospace, health care, automotive and financial services, employees must be able to react and respond appropriately in the face of a crisis or high stakes situation. These high risk environments demand situational awareness, incredible efficiency and excellent decision-making and problem-solving skills.

High consequences are not limited to matters of life and death. Potential risks can also be related to compliance, cybersecurity, the protection of

intellectual property and physical assets, the financial security of an organization or certifications that are required in order to perform job functions.

Organizations that operate in high consequence environments have the following characteristics:

- **Significant business concern** with managing, mitigating or eliminating risk
- **Process or technical complexities** that resist simplification
- **Focus on safety and regulatory/compliance standards** as required by operating environment
- **High value** on industry/domain expertise

Minimizing risk is a primary concern for high consequence organizations due to the high costs associated with a failure to properly perform a particular task or activity. With the need to safeguard against costly mistakes comes the need for high consequence training.

WHY STRATEGY MATTERS

Successful training in high consequence industries and occupations requires a combination of deliberate training design, an appropriate training delivery method and the use of aligned

metrics — all of which depend on a foundation of thoughtful planning and strategy.

An effective training strategy focuses on improving organizational performance as well as ensuring employees have the skills they need to be successful on the job. Developing a training strategy in a highly regulated setting, for example, requires compliance with industry-focused processes and procedures, identification of performance requirements and strategic alignment with business goals.

Ensuring the training strategy is tied to the corporate strategy is a crucial factor in the success of a training program, said Tracy Cox, director of performance consulting for Raytheon Professional Services.

"If the training strategy for a company that operates in a high consequence environment is not tied to key 'care-about,' the chances are very good that neither the curriculum nor the results of that training will meet the important objectives of the business," Cox added.

IDENTIFYING GOALS: WHERE TRAINING MEETS BUSINESS STRATEGY

Effective training can turn risk into a competitive advantage. To garner bottom-line results, learning and development professionals need to understand the desired business outcomes when planning a high consequence training program. Meet with company leaders to discuss the mission, vision and goals of the company, including where learning and development fits into the business model.

Training should be viewed as a business decision that requires input from various positions within the organization. Rolling out a training program is not the sole responsibility of human resources. Rather, it's a by-product of collaboration and involvement from stakeholders, business leaders, instructional designers, training managers and subject matter experts.

The most common root cause of failure in high consequence training stems from the lack of a clear and structured governance system, according to Robert Szostak, transformation manager of Air Traffic Control Optimum Training Solution (ATCOTS) at Raytheon.

Specifically, for air traffic control, major factors that must be addressed include decentralized decision-making and the local operation autonomy of operation facilities, Szostak explained. It's challenging to implement mission-critical training programs when facilities are allowed to make their own

interpretation and follow their own path to certification. While these are necessary operational features, they introduce levels of complexity that require bounding and the application of a systems level plan and strategy to be integrated into a plan for change; that is the role of governance, he added.

Additionally, organizational siloing can hinder the development of a robust training strategy and must be avoided. An effective training program starts from the top down and needs to address the needs of the learners as well as the business.

UNDERSTANDING THE WORK ENVIRONMENT

Identifying areas of risk that could adversely impact the business is a critical part of planning high consequence training. Consider how the business identifies the potential for risk and the process for eliminating it. Learning and development professionals can distinguish existing training gaps and the potential for future training needs based on the identified risks.

Along with developing training related to specific risks to the business, the training strategy must also adhere to all industry-relevant regulatory/compliance requirements. This could include mandatory safety and emergency training, fraud monitoring and detection, or HIPAA patient privacy training.

Understanding the environment in which training is being delivered,

and the risks associated with the environment is necessary to develop training programs that target the right objectives, said Dave Letts, vice president of Raytheon Professional Services.

Potential on-the-job risks in high consequence environments can include security breaches, exposure to carcinogens, explosions, massive power outages and managing automotive recalls. High consequence training can help employees confidently face and navigate through potential challenges.

CONSIDERING COST, RESOURCES AND TRAINING MODALITY

Training should be efficient and effective without sacrificing quality. While training in high consequence industries is usually a non-discretionary spend due to compliance requirements, budget and cost concerns are top of mind for learning professionals. Designing customized simulations and large-scale, instructor-led programs in a classroom comes with a hefty price tag.

Delivery methods need to be matched with training objectives without compromising the integrity of the learning objective. Unrealistic scenarios and a lack of credible content and instructors can result in negative training experiences that lead to poor outcomes. By using knowledgeable subject matter experts and real-world experiences, learners can trust they are receiving reliable information.

MEASURING TRAINING OUTCOMES

The true measure of a successful training program is tied to business outcomes. Are employees applying the training to their work environment? Has organizational performance increased as a result of the training? These are a few questions learning professionals should be asking to gauge training effectiveness.

Designing a training solution that solves your business problem requires a clear understanding of what's important to the business. Key performance indicators need to be identified during planning in order to accurately measure training impact. Once the training program is over, it's difficult to work backward to implement measurement criteria.

Analyzing the effectiveness and impact of training involves looking at a variety of factors, including how the learners responded to the training, assessing whether the learning objectives were met, the rate of application of new skills to the job, and calculating a return on investment.

MOVING FORWARD

An organization that views training as extremely strategic, as opposed to a discretionary spend, understands the impact of training on the company's top and bottom lines. Planning an effective training strategy has the potential to mitigate risk and generate a true return on training dollars. In high consequence environments where operations must be zero fail, successful training is the only option.

Michelle Eggleston is the editorial director at Training Industry, Inc.

About Raytheon Professional Services

Raytheon Professional Services is a global leader in learning solutions and services. RPS helps businesses meet their critical objectives by designing, implementing and managing efficient and effective training solutions that improve the performance of their global workforce.

Raytheon Company, with 2014 sales of \$23 billion and 61,000 employees worldwide, is a technology and innovation leader specializing in defense, security and civil markets throughout the world. With a history of innovation spanning 93 years, Raytheon provides state-of-the-art electronics, mission systems integration and other capabilities in the areas of sensing; effects; and command, control, communications and intelligence systems, as well as cybersecurity and a broad range of mission support services. Raytheon is headquartered in Waltham, Mass. For more about Raytheon, visit us at www.raytheon.com and follow us on Twitter @raytheon.

Cleared for public release. Copyright © 2015 Raytheon Company. All rights reserved. Printed in the USA. The word Raytheon and the Raytheon logo mark are trademarks of Raytheon Company and the subject of U.S. and foreign trademark registrations.