

## WHITE PAPER

# Key Elements for Designing a Training Curriculum to Minimize Organizational Risk

BY SHINA NEO

August 11, 2015

For organizations that operate in high consequence environments, one mistake can be one mistake too many. Whether it is potential risks related to compliance and cybersecurity, or matters of life and death, high consequence training matters.

Organizational risk can apply to any type of job field where the result of the task at hand has a measurable effect, direct or indirect, on an organization's continued ability to survive and prosper in their market. Employees who are appropriately trained to manage and mitigate potential risks and succeed in overcoming the challenges that arise in a high-stakes environment set the baseline for organizational success. That being said, developing a high consequence training strategy tied to specific business objectives is the key to designing and executing a program that is not only efficient, but also effective.

## WHY TRAINING PROGRAMS MATTER

In a work environment where risk is ever-present and failure has detrimental consequences, an effective training program ensures employees are well equipped to handle the challenges specific to performing their job. The inability to execute a job-related task or activity in a high consequence organization can lead to costly mistakes and the overall misalignment to the

business goals. These risks can include a breach in security, lack of compliance, loss of physical assets and in particular circumstances, death. Accordingly, training to counteract such risks must be designed proactively to address the spectrum of potential consequences.

High consequence training programs make a difference with individual performance, said Russell O'Brien, executive director at Raytheon Professional Services. High consequence training is not limited to responding solely to personal safety concerns, but also the ability to act as the first line of defense in business with problem-solving skills related to diagnostic, interpersonal and customer relations.

To design an effective high consequence training program, organizations need to:

- **Ensure content** is accurate and relevant.
- **Find a balance** between effective and efficient training.
- **Consider a design** that's transferable and applicable.
- **Understand** the multigenerational workforce.

## ENSURING ACCURACY, CREDIBILITY AND RELIABILITY

In any high consequence environment, a successful training program requires competent subject matter experts and instructors, and credible materials.

Constant technological advancements require up-to-date content for training to be effective. All training functions should be updated as needed to ensure strategic programs are informing employees of the latest compliance standards and regulations, cybersecurity updates and threats. Since information and products change so often, the need to design a program that maintains control and consistently provides the most updated material is the fundamental requirement for an effective training program.

"Credibility is critical to a high consequence environment," said Robert Szostak, transformation manager of Air Traffic Control Optimum Training Solution (ATCOTS) at Raytheon. It's pointless to design a training program if there isn't an ongoing conversation confirming accuracy and credibility. "If instructional designers are creating a training program that conveys a specific concept while, for example, the images are factually inaccurate, the learners and instructors can throw out the training completely."

## **MEETING IN THE MIDDLE: EFFECTIVE AND EFFICIENT TRAINING**

In essence, a truly successful high consequence training program cannot skip steps in a rush to completion.

Similar to developing a high consequence strategy where alignment among subject matter experts and training leaders is a major challenge, designing a training program requires an agreed upon balance between efficiency and effectiveness.

"When constrained by formal rules to make sure things are done as efficiently as possible, oftentimes it's not the best job," said Gary Hedlund, senior program manager at Raytheon Professional Services. On the other hand, if learning and design professionals only focus on what's effective, the end result could be costly. "It's all about making effective use of training technology in efficient ways," he added.

Striking a balance between effectiveness and efficiency, takes collaboration from company leaders, stakeholders, instructional designers and subject matter experts. Along with designing a training program aligned with corporate strategy and organizational objectives, learning and development professionals need to understand not only the business model and what's important to the company, but also the work environment, according to Dave Letts, vice president of Raytheon Professional Services.

The goal is to design a training program that allows employees to see the value associated with what they are doing and how it will make a difference. Adapting to a more convenient learning style can motivate employees

to participate, but many also want to see a return on their time investment, whether it's from a safety or monetary perspective, or advancement within the organization.

## **TRANSFERRING KNOWLEDGE FROM THE CLASSROOM TO JOB-RELATED TASKS**

Successful training programs in high consequence industries and occupations enable employees to take what they've learned and apply it on the job. This transfer of knowledge to real-world scenarios through various delivery modalities, such as simulation, gamification and labs, is known as experiential learning and is essential when designing a training program that can meet organizational end goals.

In a more technical environment, web-based learning is beneficial for knowledge-based applications, whereas live instructor-led training can be used prior to the application of knowledge skills through diagnostic scenarios, according to O'Brien. The transfer of knowledge from a simulated classroom setting to a practical application is a crucial factor in the design process of a high consequence training program. Another important element in making sure training is successful is validation through certification, as well as proctored exercises where employees are graded in a real-world setting on a task they might have seen in the training itself, O'Brien explained. Ensuring an effective training program means touching on a variety of blended learning options.

Since training often requires employees to be taken off the job and out of the revenue stream for a period of time,

it can be beneficial to design a program that integrates training activities into the workflow. This enables employees to directly take what they've learned through simulation or hands-on exercises and apply it to their daily tasks.

## **TRAINING DEMANDS FOR A MULTIGENERATIONAL WORKFORCE**

The principal concern for organizations that operate in high consequence environments is managing, mitigating and eliminating risk. In addition to considering the business strategy when designing a high consequence training program, it is critical to identify generational differences within the workforce to figure out what type of learning modalities to utilize in order to effectively help employees overcome potential on-the-job risks.

One of the most common challenges when designing a training program for a high consequence industry is user acceptance. Many long-term employees may be reluctant to make the necessary changes to perform specific tasks under new or different constraints. As a result, they fail to see the value in training and lack the openness to learn and retain vital information. Other employees may not be comfortable or familiar with a blended learning environment. Bridging the training needs of employee groups in today's multigenerational workforce can make designing a training program difficult.

## TAKING THE NEXT STEPS

An organization operating in a high consequence environment knows the importance of designing a training program that safeguards its employees and benefits the company's return on investment. Successful training requires accuracy, reliability and credibility of both content and instructors, focus on the impact and transferability of learned knowledge, and keen mindfulness of cost. That said, awareness of a multigenerational workforce allows organizations to take the next step and decide how best to deliver and measure its training outcomes. In an environment that places a high value on industry expertise and mitigating risk, an effective training program is basic to success.

Shina Neo is an editor 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](http://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.