

# HUMAN CAPITAL: Protecting Critical Manufacturing and the Defense Industrial Base with SRP—Secured, Resilient, Prepared

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## LEARNING OBJECTIVES

- Understand the importance of the Critical Manufacturing Sector Specific Agency and its relation to the Defense Industrial Base
- Identification of stakeholders including shareholders, management, employees, customers and suppliers
- Recognizing the value of Human Capital via education and training to secure Critical Manufacturing
- Understanding Secure, Resilient and Prepared (SRP)

The nation has met the harsh challenges of protecting our national security, weakened by the tragedies of terrorism, natural disasters and low priorities of infrastructure protection by an immense response at all levels of Government and the commercial sector. This response called on its citizens, whether they are the President of the United States, a night watchman at a semi-conductor factory or a university professor of supply chain management to not only exert maximum effort to protect each other but to recognize the value of human capital to detect, plan for, mitigate, respond and recover from disasters. Such action can make the difference in protecting our Defense Industrial Base, the loss of which, or severe weakening, would compound our weakness in maintaining national security.

Educating and training Human Capital will be the responsibility of the enterprises who employ us; of the universities who teach us rational reasoning and acquisition of knowledge; of professional associations such as the National Defense Transportation Association through their educational activities; and most importantly each of us to learn and continuously improve our knowledge in a rapidly changing world.

Among recent developments at the Department of Homeland Security in support of protecting critical infrastructure has been the formation of the Critical

Manufacturing Sector Specific Agency (SSA). This SSA joined sixteen other SSA's including the Defense Industrial Base Critical Sector. The two SSA's are obviously interrelated as the security of the nation depends on our ability to produce the goods to support warfighters, Federal, state and local homeland security, and the commercial sector to sustain itself.

The Critical Manufacturing SSA was formed last year:

“The Critical Manufacturing Sector is crucial to the economic prosperity . . . and the continuity of the US. United States manufacturers design, produce, and distribute products that provide more than one of every eight dollars of the US gross domestic product and priorities . . . and employ more than 10 percent of the Nation's workforce. The (lack of) protection of the sector from a direct attack on or disruption of certain elements of the industry could disrupt essential functions at the national level and across multiple other Critical Infrastructure sectors.” (DHS, 3 March 2008, [http://www.dhs.gov/xlibrary/assets/nipp\\_snapshot\\_criticalmanufacturing.pdf](http://www.dhs.gov/xlibrary/assets/nipp_snapshot_criticalmanufacturing.pdf))

It is undeniable that the loss of key manufacturers in industries such as transportation equipment, automotive, electricals, primary metals and more will severely impact the security of the nation. How well do stakeholders understand these relationships? More important, how do stakeholders learn to collaborate to be Secure, Resilient and Prepared (SRP) The answer lies clearly in the ability to train, educate and motivate human capital.

## WHO ARE THE STAKEHOLDERS?

1. **Shareholders** – Ownership in publicly traded enterprises is the engine of growth for the nation. Disruptions of a minor or major degree will reduce, if not destroy the value of owners' shares. How are shareholders educated to be SRP?
2. **Management** – Management fulfills shareholders responsibilities to produce

a designated return on investment. Implicit in achieving a desired ROI is the preservation of the enterprise's assets both physical and human. How is management educated to be SRP?

3. **Employees** – Employees earn a living at an enterprise to support their families and their communities. In their contract with management, they agree to produce expected results. The failure to produce results due to the loss of production through intentional or unintentional events reduces the value of the enterprise. How are employees educated to be SRP?
4. **Customers** – Customers determine the value of the enterprise by the money they spend to purchase its products or services. Customers value certainty and consistency of such products and services. How are customers educated to value SRP?
5. **Suppliers and infrastructure support** – Firms which supply services to the enterprise as well as those that provide infrastructure support affect the output of the enterprise by the resources they provide or fail to provide. How are suppliers and those who provide infrastructure support (including government) educated to be SRP?

Our space is not sufficient to provide the level of detail needed to respond to these questions. But we can focus in on the value of educating human capital as follows:

1. Risk has multiple components:
  - a. Risk process describes the steps you need to take to identify, monitor and control risk . . . defined as any future event that may prevent you to meet your team goals
  - b. Risk control involves measurement, prevention, contingency planning and mitigation of the impact of disruptive events.
2. Security is a condition that results from the establishment and maintenance of protective measures.
3. Resilience builds on security by developing processes which guarantee the full security of assets.

4. Sustainable operations meet the needs of the present without compromising the ability of the enterprise, and of future generations, to meet their own needs.
5. Global economic risk will impact risk, security, resiliency and sustainable.

Risk Management has been understood in the past to be limited in scope in large part due to the natural protection of borders, lack of information sharing, and low dependence on entities outside of the enterprise. Though tragic in the loss of human life, enterprises were hardly affected if there was a natural disaster halfway around the world if they did not depend on that part of the world. As noted by Tom Friedman in "The World is Flat," we now have greater prosperity based on the ability of information, people and resources to flow effortlessly in a world seemingly without borders or obstacles. This prosperity has also brought great risk for now continuity of operations may depend on importing key components from points halfway around the world. Or consider the risk of a manufacturing process

dependent on 99.9% on time movement through congested sea ports and highways. Without risk, there is no reward but equally important, is that global risk has potential for global failures.

Thus the Critical Manufacturing SSA must balance the prosperity of the nation with securing the nation against failures that may still occur despite our best efforts to prevent them. Do the stakeholders understand this proposition? Do customers value the certainty of receiving their items at the right price, in the right condition, at the right time . . . without disruption?

How do we recognize the value of Human Capital in this process? How do we value the importance of educating and training Human Capital in SRP?

1. Acquire tools through education and training that blend On the Job training with newly acquired knowledge
2. Understand the convergence of Security, Resilience and Sustainability in the global enterprise
3. Understand trade offs that must be made when we optimize the opera-

tional performance while we minimize operational vulnerability

4. Understand the balance among operations and security professionals through education and common foundational knowledge

When it's time to cut budgets, which these days appear to be more popular than Mom's apple pie, consider preservation, even expansion of funds for professional development, the process which educates and trains human capital. Not recognizing the value of human capital will work against SRP. *DTJ*

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*Look for new professional development sessions at upcoming NDTA national and regional forums which focus on efficient and sustainable Joint Deployment and Distribution Enterprise.*

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