Q&A

OPPORTUNITIES AND RISKS:

Adapting to a Changing Environment

Part One

I really enjoy working with WIT. They always come prepared and are enthusiastic, knowledgeable, and friendly. They make me feel a part of the team."

Robert Handfield, Ph.D.

An interview with...

Robert Handfield, Ph.D.

WIT Supply Chain Management Expert

Bank of America University Distinguished Prof. of Supply Chain Mgmt.
Executive Director, Supply Chain Resource Cooperative
Poole College of Management
North Carolina State University

COVID-19 has proven that our environment can change rapidly and in detrimental ways. At WIT, we stay at the forefront of real-time crises and affiliate with experts who have extensively studied pandemics or have first-hand experience dealing in industries devastated by downturns and disasters. We sat down with supply chain expert, Robert Handfield, Ph.D. to discuss the supply chain fallout that has resulted from the COVID pandemic.

Robert is considered a world's leading expert in supply chain management, with particular experience in procurement, supplier relationship issues, contractual disputes, supply chain disruption, supply chain risk, and intellectual property disputes. He has worked extensively as a consultant in the pharmaceutical sector, electronics, oil and gas, and industrial manufacturing. He has authored more than 120 peer-reviewed articles in top management journals and has written several books about supply chain management and redesign.

Robert has consulted with over 25 Fortune 500 companies. He is a frequent speaker at corporate supply chain events and is often quoted by the media. He also has served as an expert witness in numerous cases.

wit
EXPERT WITNESS AGENCY

1. As a result of what is happening in the world, what are the industries that are hardest hit by supply chain disruption?

Interestingly, all industries have been hit by supply chain disruption. In March, a group of us in academia and government began working with the various national supply chain task forces responding to COVID-19. We were quickly met with the overwhelming realization that our country was not prepared to respond to needs being imposed on our healthcare supply chains. Not only were we unprepared, but our previous strategies had left us crippled by overseas supply chain dependencies, often accrued through the pursuit of low-cost procurement. Furthermore, perceived scarcities in critical supplies, medical and otherwise, have resulted in a new tragedy of the commons. One in which the pasture being grazed is covered in human lives.

The initial set of issues involved the food, paper products, and protein supply chains, but this quickly escalated into healthcare shortages, especially in PPE, ventilators, and other products. I have been involved in white papers documenting our Strategic National Stockpile failure and how we need to rethink our country's pandemic response. Ironically, I wrote a report on the need for a federal pandemic response in 2011 during the SARS crisis, but this was evidently not well adhered to. We see massive shortages of healthcare and medical products, despite what the news is telling us, and this will likely escalate with the second wave.

Every industry is facing shortages due to the pandemic closures and stay-at-home regulations, but this has also been a demand shortage as well.

Every industry is facing shortages due to the pandemic closures and stay-at-home regulations, but this has also been a demand shortage as well.

2. Have there been any other periods in history when the world experienced supply chain disruption similar to what we see today?

One question repeatedly asked about the COVID crisis is, "Why is the healthcare system so unprepared?" Also, "why was industry impacted so badly?" During the last pandemic in 2010 (SARS), executives swore that they wouldn't let this happen in the future. And government bureaucrats also assured everyone that a strategic stockpile would be maintained. Nine years went by, and people somehow lost track of the impact of a major health epidemic sweeping the world. The problem today is that organizations forgot to replenish and prepare stockpiles for one of the world's worst epidemics - one that is for the history books. This is a function of a couple of different factors.

Stockpiling supplies and creating redundant sources of supply is one of the most often cited strategies associated with pre-emergency planning. The cost of stockpiling is not insignificant and requires an investment in products that go into inventory and which may or may not be utilized in the short term. Typical inventory holding costs are 18 to 25 percent of the value of a good on an annual basis and include opportunity costs, storage, interest, insurance, shrinkage, and obsolescence. But executives aren't rewarded for holding inventory. In fact, it shows up as a penalty in the form of lower working capital. So, guess what? Nobody stockpiled.

This situation reveals a singular lack of capability to respond to a national pandemic situation. I believe this is due to several inherent problems that exist not just with the national pandemic response function, but also the entire national healthcare system in general. What I observed is a lack of effective interface between those in healthcare who manage the supply chain, and those who manage the clinical issues, and a singular lack of governance structure to manage that. This disconnect has evolved to some extent. Hospitals have outsourced their procurement of materials to the lowest cost provider, often relying on third-party distributors and

group purchasing organizations to take over these functions.

Stockpiling also requires some serious business continuity planning. Healthcare is one of those areas where supply chain stockpiling of goods is absolutely essential before the first wave of patients swarming emergency rooms. The press has devoted significant attention to the lack of stockpiles, yet many questions remain.

In the crisis that erupted in 2020, there was no centralized task force planning and creating insights into how to deploy assets. Worse yet, there were few sources of supply market intelligence to identify where the production of these goods is going to come from. Demand models are a good start, but without supply, such models will only predict a lot of shortages, but not offer any solutions.

3. What can supply chain executives learn from that experience?

There is one important point lost on many executives since the pandemic began: how organizations value inventory, and where that inventory is located. Because so many healthcare products moved to China, which began hoarding products for their own purposes to support their possible second wave of coronavirus victims, hospitals were short of these products. It's one thing to produce masks, but you still need raw materials. Ventilators are another issue. It will take at least a month. This occurred because everyone wanted the "cheapest" product possible. The future (post-COVID) national healthcare policy is likely to change forever after the dust has settled. Thousands of people will have died, and even for those who make it through, scarring of lung tissue can hamper their lives. And to make things worse, another coronavirus is possible. A recent study found that "...pandemic risk may be seasonal and predictable, with the accuracy of pre-pandemic and real-time risk assessments hinging on reliable seasonal influenza surveillance and precise estimates of the breadth and duration of heterosubtypic immunity." What that means is that the virus could indeed come back in a different form – but this time, hopefully, we will be on the lookout for the early signs and start to create strategic stockpiles to support hospitals and healthcare workers putting their lives on the line. The lack of healthcare products produced locally may also result in increased levels of domestic production, and a move to a more local supply base of critical products like ventilators, masks, and PPE. ■

Stay tuned for Part Two of our conversation with supply chain expert, Robert Handfield, Ph.D.

WIT is an expert witness agency representing the world's leading consulting and testifying experts.

For more information about working with Robert Handfield, Ph.D., contact a client manager at WIT.