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***THE POWER OF SUPPLY CHAIN MANAGEMENT—  
A VITAL WEAPON IN THE WAR AGAINST THE CORONAVIRUS***

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The great French Algerian philosopher Albert Camus observed in his classic novel *The Plague* that “...always plagues and wars take people equally by surprise.” What does *not* take people by surprise is the naming and blaming and politicization (especially in an election year) that immediately come front and center when a national catastrophe takes place. In the “Age of Coronavirus” one side claims that COVID-19 did indeed take us by surprise, while the other counters that as early as November 2019 a report presented to the White House from the military’s National Center for Medical Intelligence made it clear that the contagion was very real and rapidly growing and widening.

Where all parties *should* agree, however, is that whether 9/11, Swine Flu, Ebola and the current Coronavirus, the U.S. was ill-prepared to face the enormous crisis facing the country—due to failures in planning, execution or both. And this leads to a dimension of the crisis that has not been given the attention it fully deserves—namely, *supply chain management*.

Supply chain management is not a terribly sexy topic; moreover, it falls overwhelmingly within the purview of the private sector. In the public sector it is associated more with the armed services, such as the Defense Logistics Agency, and the U.S. General Services Administration that helps manage and support the basic functioning of federal agencies, such as the purchase and distribution of office furniture, computer equipment and other materiel.

However, the greatest failures of preparedness for and confronting COVID-19 are all related to supply chain management: insufficient tests, inadequate testing, scarcity of personal protection equipment and ventilators, and a lack of hospital space and refrigerated trailers to serve as morgues.

A fully functioning, well-managed supply chain system is capable of coordinating three challenging management functions into one: demand management (understanding *what* is going to be needed), procurement management (*where* is it going to be made) and fulfillment management (*how* is it going to be delivered). At the same time, it needs to do all this in a very

responsive manner, which translates into “fast”. Supply Chains, by definition, search for "optimality" which is generally translated into “lean” which results into "cost efficiencies".

This model has been extremely successful and robust in "normal" conditions where the boundaries of operational performance are reasonable. In reality, nobody plans for the landing of the Black Swan, since that would be “inefficient”. Yet without some redundancies in the supply chain and more onshoring and less offshoring of materiel of vital importance to health and national security, our country could be faced with critical shortages of equipment and supplies as we are at present.

According to a recent article in *Harvard Business Review*, the world’s largest 1,000 companies or their suppliers own more than 12,000 facilities in COVID-19 quarantine areas. However, 95 percent of surgical masks and 70 percent of tighter-fitting respirators, such as N95 masks, are made overseas, mainly in China. Is it wise for any nation to allow itself to become so vulnerable should another Black Swan event occur?

Yet, *where* one sources is just part of the problem, the other is *how* one manages the supply chain. Ironically, it is one of the most iconic concepts of supply chain management—JIT (Just-In-Time inventory management)—has negatively and monumentally impacted the response to the Coronavirus. Used most extensively by firms such as Hewlett-Packard, Toyota, General Electric, and Westinghouse, JIT is the antithesis of stockpiling. So, without redundancy in supply chains and the warehousing of components and finished products significantly above levels needed in the near term, severe shortages result.

Black Swan events DO happen; and since they can be regional and national in their impacts, such as earthquakes, hurricanes, floods, and pandemics, it behooves governments to be fully prepared in planning, overseeing, and responding to crises and calamities. Note: even the port city of Dubrovnik, Croatia, at the time of the bubonic plague in 1377, instituted a plan for social distancing and isolated ships from entering their port for 40 days.

Since supply chain management is a vital weapon in the war against the Coronavirus—and future pandemics, as well—it would benefit the nation greatly if the federal government took inventory of critically important inputs and products to ensure resilience in combatting a pandemic. Once shortages are identified and an optimal level of stockpiling is determined, the government should pass a law to provide significant tax incentives for industry to produce that materiel. It’s government’s role to protect the people and private enterprises role to make money—this solution is win-win, if there ever was one.

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