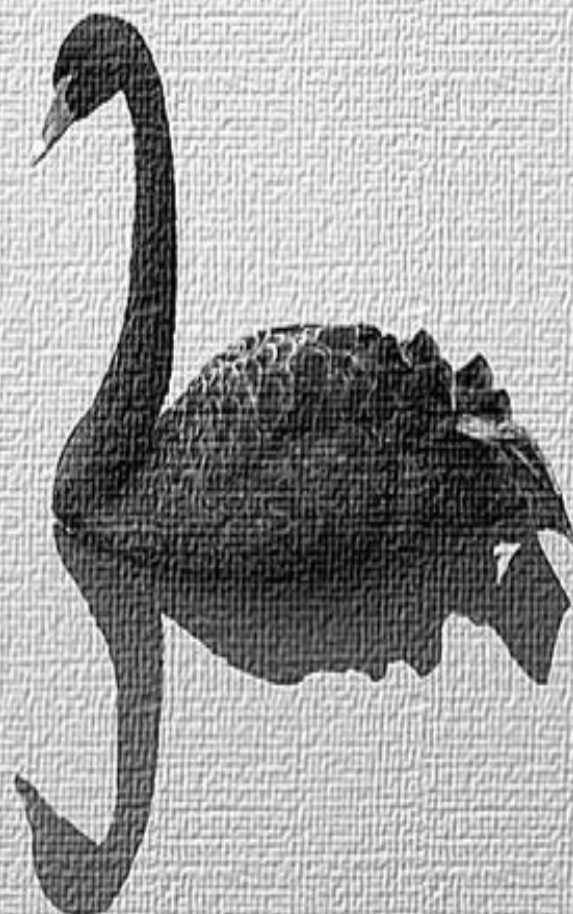


Altum Quarterly

Issue II: Q4 2020



The Permanency and the [NEW] Normality: the **BLACK SWAN** that decided to stay

Economic resilience in the face of black swans requires companies to do things differently.

Our current economic model is based on pursuing efficiency: Find the quickest and cheapest way to do or make something, and you likely have a time or cost advantage. But global supply chains that optimize for centralization and reduced costs have serious potential weaknesses. An analysis of global supply chains done by MIT Sloan calculated that the world's 1,000 largest companies and their suppliers have over 12,000 facilities in quarantined areas of China, Korea, and Italy.

We've seen something like this before. Triggered by the landfall of Tropical Storm Nock-ten, massive floods in Thailand in 2011 shut down factories that made critical parts for the computer hard drive industry and components for major automakers including Toyota Motors. Those were the only places some parts were made....

Nothing can dodge the inevitable reduction in demand imposed by social distancing and severe cutbacks in travel and all services. But more generally, there are some things organizations can do to reduce the risks to operations. They can build into their value chains some duplication and diversity — key principles of resilience in nature (we have two kidneys for a reason) — in production and suppliers. In the short term, multiple supply chain and production pathways may seem less than efficient, but they come in handy in an emergency.

Businesses should value resiliency and risk reduction in their plans and investment calculations, not just whatever gets them the lowest cost today.

REASSESSING SUPPLY CHAIN RISK

What the current situation exposes is that the risks associated with supply chain fragmentation and globalization have been unpriced and largely ignored.

For many companies, the combination of lean production and global multistage supply networks is leading to crises. This should be a **wake-up call** for managers who need to understand their supply chain's strategic vulnerabilities (this is beyond the chokepoints investigations in time of business-as-usual). A number of potential actions include:

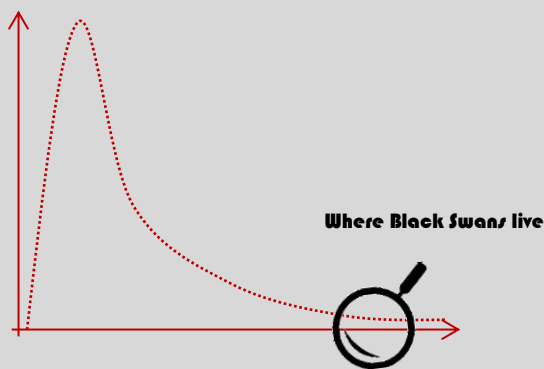
[re]Consider regionalization. The U.S.-China trade war has already put regionalization of manufacturing back on the table. While production moves have begun in many cases, localizing the supplier base is also worth considering. When Toyota pioneered lean production in Japan back in the 1970s, its suppliers facilitated this by being collocated nearby. Chinese manufacturers did the same as they evolved their operations during the 1990s and early 2000s!

Go for multi-sourcing, raise your safety stocks. Although there are costs to adding alternative supply sources and increasing safety stocks, the long-term benefit is greater supply chain resilience. The difficulty, however, is that supply concentration is often driven by scale economies in manufacturing, the unique capabilities of a supplier, or the location of specific resources. Depending on the circumstances, it's important to reassess how much safety stock is needed!

Rethink scale and product mix. Some production processes, such as automobile assembly, benefit from minimum efficient scale, ideally producing a quarter of a million units of the same basic vehicle per year. This is why many companies have relied on focused factories that manufacture model variants on a single platform and then ship the finished products between countries.

A good example is the BMW's X Series models which are built in Spartanburg, South Carolina, though distributed to and being sold on over 80 countries!

REVISITING THE THEORY OF BLACK SWAN



Developed by Nassim Taleb, the theory of black swan events is a metaphor that describes an event that comes as a surprise, has a major effect, and is often inappropriately rationalized after the fact with the benefit of hindsight.

There are some properties featuring Black Swans:

- The disproportionate role of high-profile, hard-to-predict, and rare events that are beyond the realm of normal expectations in history, science, finance, and technology.
- The non-computability of the probability of the consequential rare events using scientific methods (owing to the very nature of small probabilities).
- The psychological biases that blind people, both individually and collectively, to uncertainty and to a rare event's massive role in historical affairs.

WHY EXISTING OPERATING MODELS FAIL

Extreme uncertainty on a global scale is rare; however, existential crises at the organizational or community level are more frequent and thus provide lessons concerning which operating models succeed and fail during periods of uncertainty. Many organizations, including publicly traded companies, operate on an annual-planning cycle.

Managers collectively decide on strategies, budgets, and operating plans once a year and then manage operations in accordance with those goals and cost limits. Between annual-planning cycles, amendments are few and usually minor.

The assumptions shape how managers engage with each other: from the content of status reports to interdepartmental information sharing to the timing and structure of management meetings.

Recently, some organizations have adopted more agile techniques to make planning more flexible and responsive to outcomes from pilots or trials. However, the approach is rarely deployed in the C-suite to manage the whole organization.

The COVID-19 crisis has undermined most of the assumptions of the traditional planning cycle. Existing management operating models are no longer supporting managers effectively in addressing the challenges this crisis presents.

The revenue assumptions managers relied on for 2020, often worked out to two decimal points, are not relevant in an economy suddenly expected to suffer a historic contraction. Meticulously prepared status reports are now outdated before they reach senior managers.

Managers seeking more up-to-date information discover that existing processes are too rigid for a timely response.

FIVE ACTIONS FOR DYNAMIC RISK MANAGEMENT

Today, many firms see enterprise risk management as a dreary necessity but hardly a source of dynamism or competitive advantage. It can suffer from being static, siloed, and separate from the business. But dynamic and integrated risk management, which includes the ability to detect risks, determine appetite, and decide on action in real time, is growing ever more critical. Leaders can take the following actions to establish the necessary capabilities

- 1. Reset the aspiration for risk management**
- 2. Establish agile risk-management practices**
- 3. Harness the power of data and analytics**
- 4. Develop risk talent for the future**
- 5. Fortify risk culture**



FURTHER GLOBALIZATION OF SUPPLY CHAINS

Over the past three decades, supply chains have become increasingly global. This change has been driven by the dramatic increase in the number of goods and services that are tradable. Tradability is determined by the extent to which items can be produced remotely from the market where they are intended to be consumed. The main factors in tradability are transportation costs and product perishability. Thus, for goods with high value relative to their size and shipping cost, it often makes sense to manufacture them in a low-cost region and ship them. A steady decline in those costs has encouraged many companies to shift to a global sourcing model, allowing them to take advantage of lower costs for labor and materials, land, and other factors.

The COVID-19 contagion has had a major impact on Chinese manufacturers, and because of the central role many Chinese companies play in the supply chains of other companies, the impact is being felt around the world. The disruption is particularly acute in the electronics and auto industries, but it is also affecting pharmaceuticals, metals, and a wide range of consumer and industrial products, including surgical gowns and masks.

Another factor in the growth of global supply chains has been the increased use of subcontracting. Subcontracting has become more prevalent for a number of reasons, including the increased sophistication of components, manufacturing processes that require specialists, and the desire on the part of producers to have more flexible capacity that can be turned on and off depending on demand. The result is deeper tiering of supply chains whereby suppliers draw upon their suppliers who in turn draw on their own networks of suppliers in multistage production networks.

