Entrepreneur & Innovation Exchange
Published online at EIX.org on November 16 2021
DOI: 10.32617/715-6193bdb64b7ed

Get Ready for the Next Supply Chain Disruption

David Johnston (Schulich School of Business, York University)

KEYWORDS: Management, crisis management, Supply chain.

Second in a two-part series. Read Part 1 here (https://eiexchange.com/content/building-a-stronger-supply-chain-lessons-from-the-crisis) .

To understand why building a robust supply chain management capability is important, small and medium-sized enterprise (SME) owners need to to understand the risk that disruption brings to equity and earnings. Large publicly traded firms have been found to average approximately a 10% decrease in their net worth, as measured by stock price, when experiencing a supply disruption[1]. This can reflect the market's judgment on the persistent earning impact, averaging approximately 7% lower sales growth, 11 % higher growth in cost, and 14 % higher growth in inventories[2].

This public humiliation and resulting financial haircut can motivate the big firms to invest in making their supply chains more resilient – by improving inventory and operating capacity and developing alternative supply sources. But this comes with a cost: more "safety" inventory and capacity increases current assets on the balance sheet, reduces return on assets (ROA) and depresses financial indicators such as inventory turnover.

Smaller Firms Can Have an Advantage

The good news is that most SMEs don't face the same pressure from stock market analysts and activist shareholders continuousing questioning these measures. Smaller family-owned and private firms may have more time and latitude to do what is needed to diversify risk and invest strategically in the critical relationships that support customer retention. However, someone in the organization must know how to make these investments.

SMEs scramble to maintain and grow their customer base and at the same time are constrained in investing in the order fulfilment and service delivery side of the business. Just like they do with their customers, SMEs need to hustle and target key relationships with their suppliers upstream. Two things can help:

1. Hire supply chain professionals

These people have the industry certifications and university and college degrees that help them know which questions to ask about the supply chain's vulnerabilities and where to look for solutions. If supply chain management is treated as a mere clerical function to buy and make only what is needed at the lowest cost, then ownership will not get the "heads up" proactive thinking about emerging threats and how to minimize risks of disruption. By reducing these risks, these professionals give the firm a competitive advantage: delivering superior customer service in good times as well as bad. As a minimum, anyone who purchases goods and services for SMEs should learn to ask suppliers early in the game, during the Request for Interest (RFI) or Request For Proposal (RFP) stage, about how they manage their own suppliers and where they see risks. These risks could include having their flow of product disrupted by their distributors, wholesalers and manufacturers. And before entering into a partnership, purchasers should also review that supplier's financial stability and appetite for risk.

Where do SMEs find these people? As with all supply chain decisions, a "make or buy" decision must be made about talent. The company should help new hires or existing employees educate themselves in the basics of forecasting, inventory control, scheduling and process improvement. With the rising popularity of supply chain management, local colleges are offering courses in these topics. Furthtermore, industry associations offer professional designations in supply chain management, such as the Assoication of Supply Chain Management (ASCM) across North America or national organizations such as Supply Chain Canada (SCC) or the Canadian Institute of Traffic and Transporation (CITT). The second option is to hire a seasoned supply chain professional who's working with a large company and may want the benefits of a smaller firm: more responsibility, opportunity for rapid advancement, and better work/life balance.

2. Collaborate with Important Stakeholders

Who is always the first to know when crisis threatens or a link in the supply chain looks vulnerable? Does your organization talk to these people? Who in your organization has these conversations and then focuses attention on mitigation or prevention actions? SMEs may not be able to afford building a business intelligence or risk management function into their organization. But they can collaborate with suppliers and customers, be active in supply chain management industrial associations, and reach out to government agencies and educational institutions to stay informed. The caveat here is that talk takes time and money; therefore the first step is to identify critical suppliers and customers. The 80/20 rule applies. For example, of all that is bought, which items and their sources have the biggest impact on the income statement if their pipelines were disrupted? Or on the positive side: Where would being more certain of a steady supply of items or services enable the company to sell more products, maintain margins and keep promises to customers?

Where Future Disruptions Lurk

Crystal ball-gazing can be foolhardy, and so is predicting the next supply disruption without considering the triggers of disruption that can spread across economic sectors. The Covid-19 pandemic was unprecedented in its global scope and severity, and we're still feeling its impact in November 2021. That being said, supply chains have always faced localized disruptions, and the nagging problems of variable performance from suppliers, employees and customers. Before Covid-19 businesses that wanted to protect their ability to service customers needed a supply chain capability that was data-driven, process-focused and proactive. Post Covid-19, we now know that systemic supply chain failure can happen and it's costly if we do nothing about prevention. The starting point is a frank assessment of a business's vulnerability to various sources of disruption.

Here are risks that will persist once the pandemic eases, and that could trigger future supply disruptions. Supply chain professionals must monitor these risks and begin talking with their supplier partners now:

1) Political Risk. We have witnessed economic nationalism impacting trade by imperiling the flow of product, whether between China to North America and Europe or between countries within a region, such as Britain and mainland Europe. It is currently fashionable to question the wisdom of buying from only one region or country. This does not mean a massive re-shoring of production and supply within individual countries or regions, but rather re-weighting supplier selection criteria to make the merits of some local sourcing more attractive. In addition, the balance of supply and demand can be impacted if governments act to change competitive policies to encourage greater SME participation in the economy and/or increase the diversity of supply in critical sectors such as food production.

2) Technology Risk. Advanced economies are undergoing a digital transformation. That has put a strain on the supply of components such as microprocessors, as demand exceeds production capacity. It also means it's harder to find people who can harness the analytical capabilities that digital innovations make possible. To be agile in the face of supply disruption, companies should be able to automate blue and white collar functions when they can't find people, and analyze demand-planning data in real time from sources inside and outside the organization. Given the risk of talent shortages such as truck drivers, companies are risking a lot if they don't implement labor-saving technology such as warehouse automation and self-driving trucks. In the meantime, businesses along with their suppliers and logistics provders will be recruiting critical skills continually.

Digital transformation has a potential upside for SMEs to mitigate the stressors of an ever-present search for talent and capital. Increasingly, rapidly-growing service providers like Shopify are offering platforms for SMEs to scale up operations quickly, especially those using e-commerce as a channel for doing business. This allows supply chain capabilites to be expensed to an online service provider instead of investing rare capital and rarer people and infrastructure.

3) Climate Risks. This risk has elements of both political and technology risk. Nearly everybody agrees that climate change is an existential threat to the human race, and that extreme weather events will make supply chains less reliable. The proposed remedies also have the potential to disrupt some supply chains. At some

EIX.org (2021)
DOI:
10.32617/715-6193bdb64b7ed

point we will see carbon taxes, price increases for fossil fuels, and the regulation of emissions – either by government mandate or voluntarily by businesses and organizations. These taxes and price increases will need to recognized as a cost of doing business and be part of the pricing of goods and services. SMEs who are unprepared to assume these costs may lose their climate-sensitive customers, including government and larger firms who are increasingly pushing sustainable procurement practices based on standards such as Science Based Targets (SBT)[3]. Most of these requirements will require SMEs to know something about their suppliers' carbon footprint as well as their own.

4) Social Risks. Nobody is sure if the pandemic has permanently changed consumer spending patterns or has only shifted spending in reaction to the much-reported current supply shortages and delays. But independent of the pandemic's impact, we're also seeing a growing clamor for ethical sourcing of suppies. This may be possibly amplified by the growing concern about environmental degradation, minorities denied economic opportunities or workers denied the basic right to a healthy and safe work environment. As food for thought, recent studies show that packaged goods products clearly marketed as sustainable grew 7x faster with a 40% price premium then those that were not.[4] Factoring social sensitivities into demand forecasting will change who a firm buys from, the mix of products sourced and possibly the logistics of its handling.

For SMEs suffering from the current supply shortages and disruptions, it is important to stay focused on the long-term goal: to secure the reliable supply of product and supporting logistical services. Many of the congestion problems will dissipate as supply and demand finds its balance post Covid-19. Some commodities will take longer to clear, such as the semi-conductor shortages which requires more manufacturing capacity that is expense to build and requires a longer lead time. The capability within the reach of SMEs who are often short of people and money is to "own" the local. That is: Be laser focused on the opportunities to offer superior delivery and service to local customers and have closer relations with local suppliers.

Read More

The New Normal: Overcoming Post-Pandemic Challenges to Survival and Growth

(https://eiexchange.com/content/the-new-normal-overcoming-post-pandemic-challenges-to-survival)

[1] Hendricks, K.B. and Singhal, V.R., 2003. The effect of supply chain glitches on shareholder wealth. Journal of operations Management, 21(5), pp.501-522.

[2] Hendricks, K.B. and Singhal, V.R., 2005. Association between supply chain glitches and operating performance. Management science, 51(5), pp.695-711.

[3] https://sciencebasedtargets.org/

[4] Sustainable Market Share Index Report 2021 https://www.stern.nyu.edu/experience-stern/about/departments-centers-initiatives/centers-of-research/center-sustainable-business/research/research-initiatives/csb-sustainable-market-share-index

EIX.org (2021)
DOI: 10.32617/715-6193bdb64b7ed