PRECISE MANUFACTURING

Risk Mitigation in the Supply Base

Contents

Introduction:
Risk Mitigation in the Supply Base

The manufacturing supply base has become much more complex in today's marketplace. A wide range of uncertainties have the potential to cripple work flow and in turn, a business's' reputation and profitability. If businesses are to remain productive, profitable, and competitive, they must look for ways to manage and reduce supply chain risks.

According to the 2017 BDO Manufacturing Risk Factor Report, "Supplier, vendor or distributor disruption" is the number one risk faced by the 100 largest publicly traded U.S. manufacturers in the fabricated metal, food processing, machinery, plastic and rubber, and transportation equipment sectors.

The goal of this eBook is to inspire manufacturers to consider ways to mitigate supply chain risks before they become problems. Considering supply base risks individually can be complicated as many of these risks are highly interrelated. For the purposes of this discussion, we have categorized supply base risks into these six general categories:

1. Geopolitical Risks
2. Economic/Financial Risks
3. Strategic Risks
4. Market Risks
5. Compliance Risks
6. Contractual Risks

"'Supplier, vendor or distributor disruption' is the number one risk faced by the 100 largest publicly traded U.S. manufacturers..."

As we examine each of these areas, it is important to keep in mind that supply base risk mitigation will look different for each business based on factors such as business size, manufacturing volume, industry, markets served, and other unique considerations.

Geopolitical Risks

When your supply chain involves global suppliers you have to be mindful of geopolitical risks. Even if you think you know your direct suppliers, they might have their own international suppliers, who could in turn put your company at risk. A volatile political climate, weak economies, and evolving trade policies all have the power to present a wide range of unforeseen geopolitical risks.

Other examples of geopolitical risks include:

- Government instability
- Global protectionism
- Trade restrictions
- Terrorism
- Theft and illicit trade
- Cyber Threats

Geopolitical risks can impact your business in a complex myriad of ways. In a recent article, David Anderson, Executive Vice President and Managing Director, Credit & Political Risk, Zurich Insurance Group explains,

> *"Geopolitical risks are complicated to evaluate. They are interconnected and often highly volatile, prompting shifts between global power centers and impacting businesses. This is why businesses and governments need to understand the deep connections between risks and find innovative ways to mitigate them."*

In most cases, geopolitical risks do not exist in isolation. By identifying and analyzing interrelationships and potential triggering events or conditions, a company can begin to develop strategies to deal with threats before they occur. Some possible ways of dealing with geopolitical risks might include trade credit or supply chain insurance. The use of scenario planning tools may be helpful in the development of early warning systems and contingency plans. Any business that relies on a global supply chain, whether directly or indirectly, must to be prepared for managing all geo political threats with strategies that are aligned with their business goals and needs.

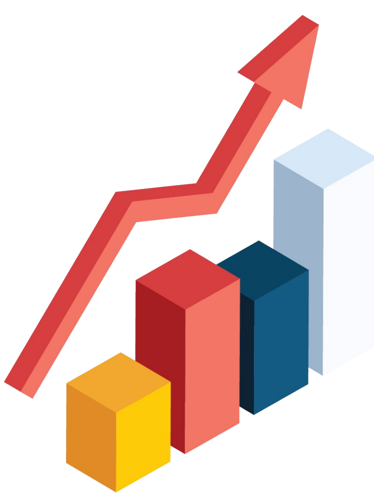
Economic & Financial Risks

No matter what the size or scope of your supplier's business, they should be willing and able to provide you with a strategic plan for dealing with whatever economic risks and uncertainties may impact their business and their ability to meet your needs. A strategically focused supplier will not only be able to meet the needs that you planned for, they will also have the flexibility to meet needs that may arise from unanticipated circumstances or market changes you did not expect.

Economic risks might include:

- Sudden demand changes
- Price volatility
- Currency fluctuations
- Energy shortages
- Natural disasters

An evaluation of economic risks must include consideration of the financial stability any company you rely on in your supply chain. Is the new supplier company that is being considered stable enough to meet all of their obligations? Do they have the financial stability to make strategic adjustments for their customers, such as longer production runs to reduce set up costs? It is important to work with a supplier partner that has a demonstrated history of financial stability.



Strategic Risks

There are many reasons why a particular supplier might not be a good strategic partner for your business in the long run. Perhaps the supplier has plans to move toward expand their capabilities in a new area, and in so doing will be shifting focus from the area that serves your needs.

When evaluating a potential supplier, ask them to share with you the long term plan of the business. Do they have a stable senior level management team? Has that team designed developed and implemented a well planned growth strategy? A high rate of change in top-level management or continual changes in strategic direction can signal imminent trouble with the supplier. Conversely, a stagnant management strategy can also indicate potential problems. When choosing business partners, look for companies that are developing effective growth plans and show signs of success and profitability. Make sure they are investing in new technologies and that they have plans for navigating the skills gap and growing their future labor force.

Other strategic risks involve potential operational problems. Issues may arise due to a lack of clear understanding and communication. Requesting information about the internal processes of a prospective supplier provides insight into their reliability and security, and also puts controls in place during the manufacturing process. Suppliers should be ready and will explain processes for dealing with any conceivable issues. See the Contract Risk section of this eBook for more on this.

Market Risks

Consider what markets the supplier serves. Do their customers represent a diverse range of markets or are they a niche supplier that may be dependent on the success of a particular company or industry? If a potential supplier is exceedingly dependent on a particular set of clients or has a narrowly-focused business segment for its revenue and profitability, it is likely that a loss or slowdown, could have a material impact on the supplier's ability to sustain operations. Diverse suppliers offer the advantages of:

- Increased flexibility
- Higher degree of experience
- Greater financial stability
- More extensive capabilities
- Broader range of experience

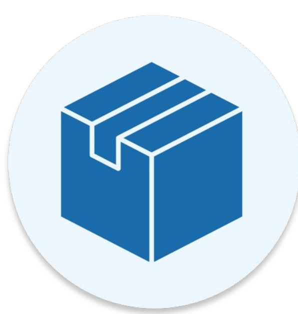
As a manufacturer depending on a particular supplier base, it is easy to engage in similar market risks. When outsourcing part production or even entire product lines, the likelihood of your success in their hands. Keep in mind, if the supplier delivers a poor quality product, or fails to deliver completely, your customer will be asking you for an explanation, not your suppliers.

Compliance Risks

In addition to making sure that your business is in compliance with governmental regulations, you must be sure that the companies in your supply chain are also in compliance. Your suppliers must review and evaluate quality and compliance throughout all phases of their workflow in order to provide a workable, acceptable design. Guidelines and requirements can be in the form of:

- Federal, state, and local regulatory requirements
- Industry standards - such as AS9100
- Bilateral and multilateral trade agreements
- Internal corporate policy
- Contractual obligations
- Customer and non-governmental organization

Effectively managing supply chain compliance risks involves unique challenges. Close collaboration is required within a company and third-parties, including suppliers, distributors, brokers, and other related parties. A myriad of requirements must be tracked and adhered to in order to avoid problems in the supply chain, such as regulatory investigations that could cause work flow halts. Assured supply chain compliance is essential to a company's bottom line and reputation. An effective supply chain compliance strategy provides control and accountability in the supply chain for efficient operations.


Contractual Risks

Contract review is essential in the supply chain to protect your business in the event of a wide range of unforeseen issues. Complications that affect your workflow may include:

- Reduction in capacity caused by plant closures or layoffs
- Design alterations that impact your ability to use the product
- Problems at manufacturing locations, subcontractor or material supplier points
- Strikes, lockouts, and other types of labor disputes
- Damaged or lost transit
- Legal problems with parts or materials
- Compliance or safety issues halt supplier workflow

Effective risk management begins in the quoting and contract phase. In the aviation, space, and defense industry, AS9100:2009 certification requirements include focus on up-front planning and establishing adequate controls throughout the entire process to stay on schedule, within budget, and in compliance. This management process includes accepting responsibility, meeting criteria, planning for mitigation, as well as adoption of acceptance procedures that apply to both the processes and products.

Develop Your Bench with a Dependable Plan & Reliable Suppliers

Understanding these supply chain risks and developing your company's strategy for dealing with them is essential for business success. Developing strategic partnerships with dependable suppliers is the best way to avoid these and other supply chain risks and uncertainties. An economically stable supplier with a broad range of experience will work with you to establish an effective, efficient, and profitable supply chain.

Things to look for in a potential supplier include:

- Industry experience
- Level of technical expertise
- Manufacturing capabilities
- Company's financial stability
- Investment in workforce development
- Investment in new technology

A stable supplier will be forward thinking, on the leading edge of industry technology, and actively engaged in averting supply problems that are possible for all manufacturers.