A&M INSIGHTS

THE IMPORTANCE OF END-TO-END SUPPLY CHAIN DECISION MAKING IN SOURCING

Global economics, politics and legislative influences are pushing businesses into re-thinking their sourcing policies.This has been very evident recently, with the effect of price increases in China and Eastern Europe, tariff plays by the U.S. and China, and political sanctions as well as other factors such as Brexit.

Businesses are wrestling with these issues and are constantly striving to optimise cost, service and lead time into chosen markets. Different sectors have been hit in different ways, and some examples that Alvarez & Marsal has seen are:

- **Western Retailers hit by rising labour costs in China and Asia.**
- **U.S. industrials and construction impacted by steel import tariffs.**
- **Car industry under threat from Brexit (no-deal) export and import tariffs.**
- **Defence industry hit by military action in Crimea.**
- **Increases in fuel costs and driver shortages reversing manufacturing centralisation decisions in Europe.**
- **Market economics, South East Asian prices and speed to market impacting apparel businesses globally.**

These examples demonstrate how both gradual and sudden changes in business context can result in profit decline or business loss. Often the profit/loss problem is gradual, with businesses identifying changes in profits but optimistically seeing it as a blip in performance. This typically results in 'death by a thousand cuts', where executives and managers are tasked with incremental cost savings outside of the supply chain, usually by reductions in overhead headcount.

Interestingly this approach has the effect of reducing the ability of a business to respond to a business problem and monitor changes in costs over time. This is especially evident where long serving experienced (and expensive) staff are often in the first round of cutbacks.

In A&M's experience, continuous monitoring of a business' supply chain operations is an essential activity for businesses today and one that needs to be in place end-to-end.

How can a business spot that a problem is a supply chain issue?

The tendency to focus on cutting overhead, usually through reducing headcount invariably fails to address the root cause of the problem and which is very often found somewhere within the supply chain.

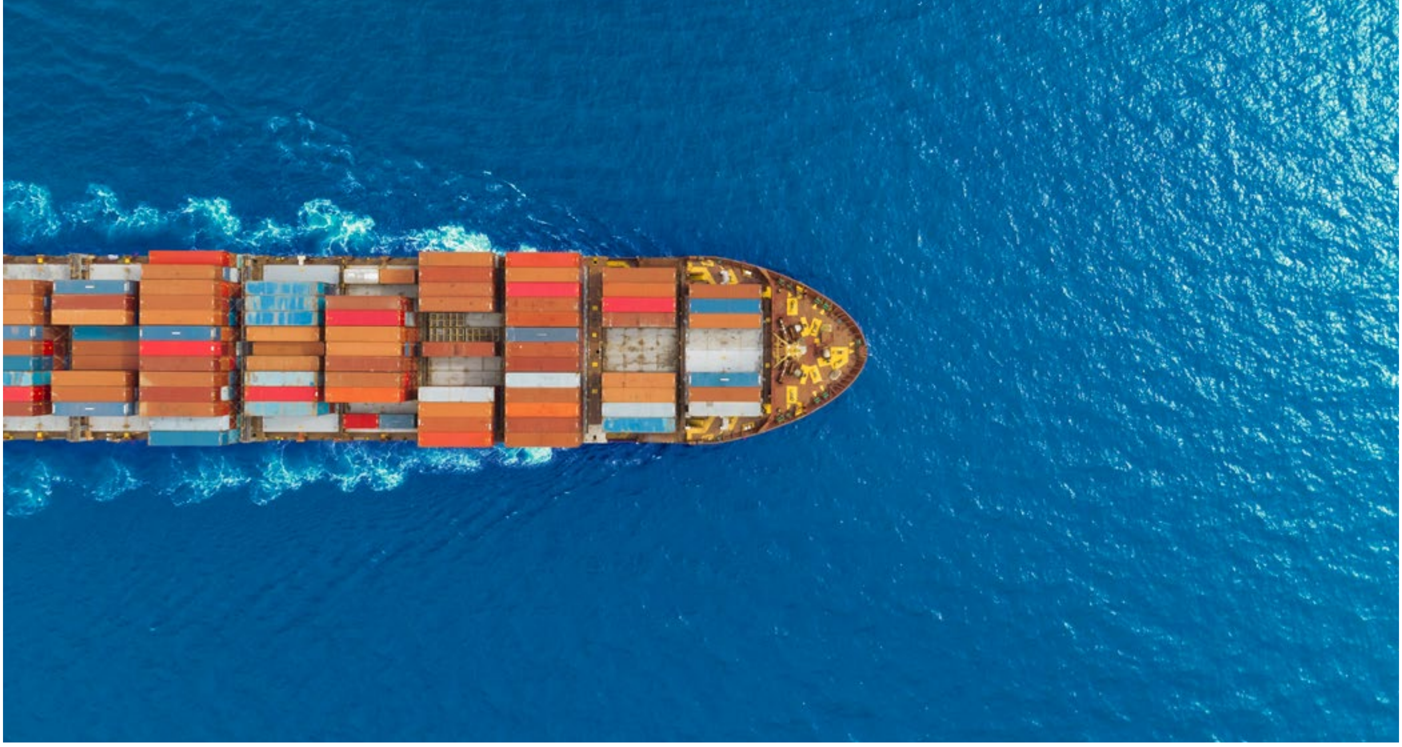
Further, because of inaccurate diagnoses, a downward spiral on profitability may follow together with shareholder or activist intervention to demand urgent remedial measures such as transformation or restructuring and / or CEO and Board member changes. Without the right advice and knowledge this can be, and often proves, fatal for the business.

In A&M's experience, continuous monitoring of a business' supply chain operations is an essential activity for businesses today and one that needs to be in place end-to-end: explicitly from the procurement of raw materials right through to the customer receiving the goods. Additionally, with the exponential growth of online, looking end-to-end must also embrace customer home order fulfilment and product returns to the warehouse. The inexorable growth of customer expectations places huge demands on supply chain teams to operate on tighter schedules, across more global locations and with an increasing number of suppliers.

A seemingly sensible decision taken in response to a market change can have a major impact on the supply chain downstream.

By contrast where regular network and sourcing reviews are undertaken across the supply chain, these provide the necessary data and insight to help businesses understand where their cost drivers are and identify different options that can be actioned to remedy gradual or sudden changes.

The Best-in-Class supply chain organisations are doing this today. They will have firstly, thought about the problem and secondly have plans in place to mitigate several scenarios on cost increases. Finally, there will be an end-to-end supply chain finance model in place. This model will include factors such as cost of goods sold (CoGS), primary and secondary distribution, manufacturing bases, import / export duty tariffs, fuel pricing, labour rates and overhead which together result in a total cost-to-serve view. These scenario models often take the form of a spreadsheet-based model, including fixed and variable cost elements, often connected to a way of visualising the changes.



What actions can a business take to mitigate risks?

In our supply chain work at A&M, we see many variations in actions across many different sectors and too few examples of best practices. One of the major issues when facing problems within supply chains is the time it takes to change a business footprint – by the time changes are implemented it is often time to start again. This is where constant end-to-end monitoring is vital to maintain healthy margins.

Table 1: Types of risk that need to be managed across a company's supply chain

Geopolitical
Pandemic, regional economics & political stability, intellectual capital protection, natural disasters.

Industry
Capacity expansion or reduction, labour force turnover, supply base sophistication and density.

Macro/micro economic
Economic issues with host economy, tariffs, regulations, foreign exchange.

Operational risk
Lead time, inventory, quality control, language barriers, supplier sustainability, information security.

Some supply chain problems are created by natural disaster and yet others are policy driven. See Table 1. The former group of forces tend to be transient and cause disruption by cutting lines of supply. Examples include hurricanes, wild fires, earthquakes, military actions and nuclear melt-downs. Natural forces are sudden, unpredictable and therefore risk management relies on dual or multi-sourcing strategies and larger inventory positions.

It is the policy driven events that require careful risk mitigation and planning. For example, to solve a political issue or tariff with one country, the decision could be to move to another nearby country, but this can sometimes be followed by a similar action within the newly selected production location with the result that the purchasing team must repeat the exercise to yet another country. This example demonstrates well the complexity and why risks must be carefully managed.

Rapid assessment of the impact through regular monitoring helps prepare the business to be agile in thinking, with multiple 'what if' scenarios alive at any one time. Being agile in execution is often more difficult in large organisations as they are more complex. Options to move production will already have been investigated, alternative suppliers will have already been identified, alternate routes into the markets will have been negotiated. The effect of a range of tariffs will have been modelled, the effect of a total loss of product availability will have been studied. In Table 2 some recent examples of strategies that A&M has seen employed to counteract the effects of market changes are shown.

Table 2: Examples of strategies to counter the effect of market changes

Market situation	Effect on business	Countermeasure implemented
Unique raw material sourced from Crimea. Russian invasion stopped trade overnight.	Launch of new product stopped, customer affected. No mitigation plan in place.	Redesign of product to different specification. Risk assessment introduced to avoid similar events.
Increases in fuel price and shortages of driver changes business profitability.	Business gone into red significantly – no plans in place to mitigate. Business rushed into making sub-optimal choices.	Open new sites across geographical market to lower impact of long-distance and number of deliveries.
Food business suffering change in private label / branded mix.	Network of manufacturing sites over-rationalised to previous margin levels, could no longer afford centralised model.	Counter previous strategy with more, smaller sites increasing service and reducing end-to-end cost to serve.
Apparel retailer with source too far away from market at wrong price point.	Discounting 50% of volume, per season across range. Source too slow to react to market trend and effect of weather on sales.	Move a blend of merchandise to more localised sources, increase the speed of design to shelf through rapid prototyping and approvals.
U.S. based automotive distributor heavily sourced in China for its metal components affected by tariffs.	Pricing increased by up to 25% on products sourced in China to the U.S. due to the tariffs which shrinks margins to unacceptable levels.	Negotiated with supplier which had similar production sites also in Taiwan whereby the U.S. directed production was swapped with the Chinese site.

What are the typical sourcing decision trade-offs?

One of the most important and challenging aspects of supply chain decision-making relates to sourcing.

In the 1990s and early 2000s there was a rush of offshore production to Asia, particularly to China and Eastern Europe for the European and U.S. markets. Since then, wage inflation (in China especially) has forced sourcing teams around the world to seek out cheaper lower-cost locations. Depending on the product, popular alternate choices now include countries such as Myanmar, Mexico, Indonesia, Romania and Africa. These more recent lower-cost sources come with their own set of risks which require different trade-off decisions. Examples of the trade-offs to be made include political instability, lack of an educated workforce, poor infrastructure as well as the threat of bribery and corruption.

Additional problems in these centres typically include having to purchase a full or half container load of a product to benefit from economies of scale during shipping. This is an issue for Western retailers, as often their buyers are incentivised to purchase lowest piece cost products. Though at first sight this appears a sensible approach, it can result in high inventory levels and product write-offs due to obsolescence and an inability to forecast weather sensitive products.

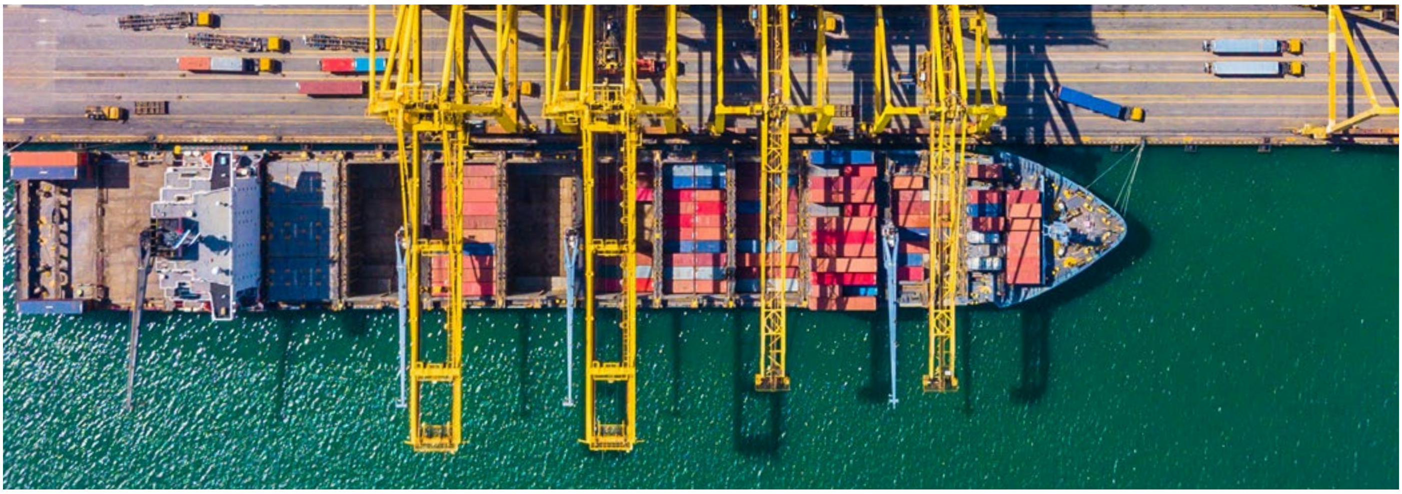
As with most supply chain related decisions, there are trade-offs to be made which involve balancing cost, quality, service and lead time to-market to optimise sourcing decisions. This is a crucial step though and one that is made easier where there is also a willingness to take an end-to-end perspective across a company's supply chain.

Table 3: Sourcing decision trade-off considerations based on different factors – identifying the best sourcing strategy for Product "A" in various global markets

	Factors **Products source**	**Cost / piece**	**Shipping / piece**	**Import duty**	**Total cost / piece**	**Lead time**
Product A	China	8c	3c	**1c**	12c	24 weeks
	Myanmar	**6c**	5c	2c	13c	24 weeks
	Romania	12c	3c	–	15c	12 weeks
	Germany	20c	–	–	20c	6 weeks
	U.S.	20c	–	–	20c	**5 weeks**

(Assumes an equivalent quality product)

Depending on different factors, markets vary in their attractiveness. If the decision is price then Myanmar is preferred; if total landed cost is important then China is best and if a short lead time is needed, then the U.S. is the winner.



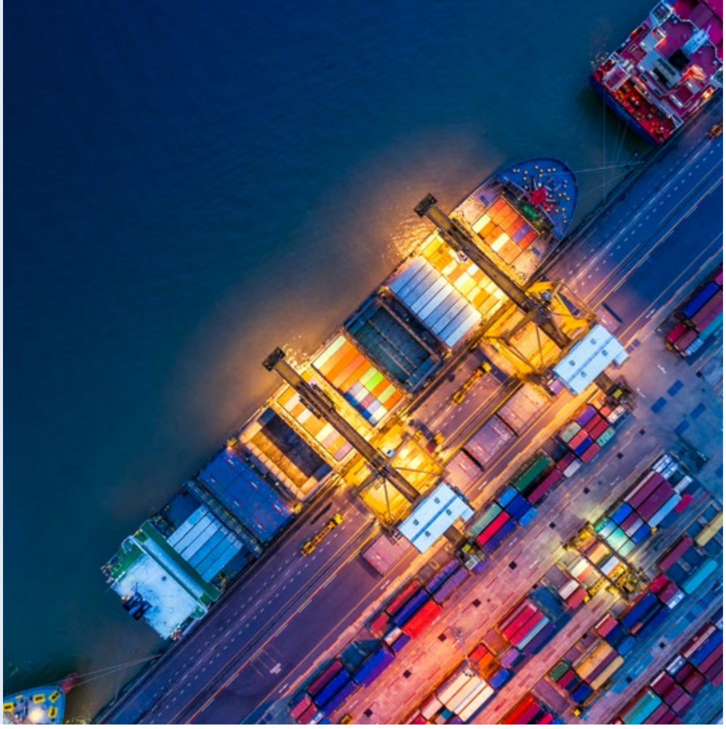
The lessons to be drawn from the case study in Table 3 are that it is never easy to make a sourcing choice when the buyer is incentivised on best gross margin coupled with little visibility of other supply chain considerations. Data on storage, handling and duty for example could change the decision as could external considerations such as political instability or in the extreme, the threat of invasion by another country. Each trade-off would lead a business to a different decision, which is why it is important to look beyond initial cost as cheapest is not always best. Furthermore, by looking end-to-end across the supply chain and exploring which sourcing decisions are most appropriate for your business, this will help clarify the most appropriate trade-offs, and help be more confident in the outcomes of any major decision around new sourcing locations.

It is important to look beyond initial cost as cheapest is not always best.

Conclusions

Global geo-political issues are driving greater complexity in supply chain decision making. Businesses need to mitigate risk by putting into place constant monitoring in order to find the problem areas quickly to stem any profitability underperformance.

Decisions on sourcing are particularly key as a wrong decision can have significant knock-on effects. However, armed with data that addresses the end-to-end inter-relationships and dependencies, businesses will be better equipped and more confident of making the right choices.



How can A&M help?

Quite often businesses are aware of a problem within their supply chain but don't have the resources to fully diagnose the scale and impact and then construct a business case for change. Additionally, they have difficulty in diverting teams away from day-to-day firefighting to deliver the change through to a successful outcome.

This is where Alvarez & Marsal can help. We have a global team of industry experts with practical experience of moving factories, warehouses and supply points and of doing this at pace and to tight deadlines. We don't just diagnose issues but work with your leadership to implement and fix problems. We have worked with many large organisations around the world on complex cross-border supply chain initiatives, so are confident in providing leadership and expertise in dealing with the most difficult challenges.

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Companies, investors and government entities around the world turn to Alvarez & Marsal (A&M) when conventional approaches are not enough to drive change and achieve results. Privately held since its founding in 1983, A&M is a leading global professional services firm that provides advisory, business performance improvement and turnaround management services.

With over 4,000 people across four continents, we deliver tangible results for corporates, boards, private equity firms, law firms and government agencies facing complex challenges. Our senior leaders, and their teams, help organizations transform operations, catapult growth and accelerate results through decisive action. Comprised of experienced operators, world-class consultants, former regulators and industry authorities, A&M leverages its restructuring heritage to turn change into a strategic business asset, manage risk and unlock value at every stage of growth.

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