Volatility: the new reality

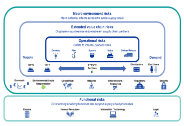
Synchronize your supply chain planning to capture value in a volatile world

Your biggest customer wants an additional feature – so you create it…
Material prices rise unexpectedly – your margins are pressured…
A natural disaster hits your main supplying plant – what do you do …?
The new 'business as usual' – how do you make your company stand out?

The days supply chain planning was about optimizing order and production policies are long gone. The world is changing at a much higher pace than it used to, requiring pro-active management of risks and decision-making to sustain company success. As a result, fewer and fewer companies are able to maintain long-term success and organizations that embrace change are the ones able to retain their competitive edge.

This article presents ideas to capture the value from potential supply chain risks, illustrated by three Deloitte case studies. We present an approach to systematically address supply chain risks, and introduce strategies to manage these risks through improved supply chain planning.

Risks



Approach

Strategies

Case studies

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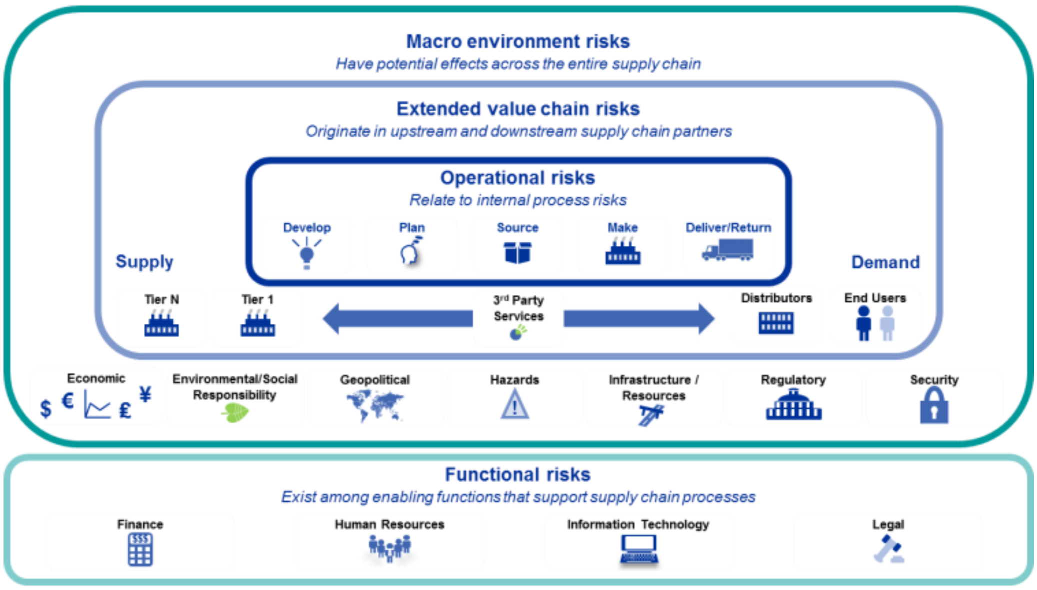
Supply chain risk

Recent research shows risk management is now on the boardroom agenda: 81% of companies explicitly manage strategic risks and nearly all (94%) respondents recently changed their approach to strategic risk management[1]. The supply chain is one of the most vulnerable functions to these risks and the volatile environment, especially regarding external risks and demand fluctuations – but only a handful of companies are able to use volatility and supply chain risks to their advantage.

From [‘The Ripple Effect’ (Deloitte)](), based on extensive research under 200+ companies



The figure above shows that risks can come from both in and outside your company, and that they affect different levels in the value chain. Internal factors include higher frequency of (trade) promotions and new product introductions, outsourcing, consolidation of suppliers, and the increased role of just-in-time and lean. Likewise, external factors such as globalization, the impact of natural events, shortened product life cycles, and price fluctuations also contribute to the volatile environment. All these factors imply risks, but for well-prepared, resilient organizations they can also be potential business opportunities.

What to do?

It is key to start at the beginning: knowing and understanding your vulnerabilities. This is the starting point to prioritize and address resilience through selected and specific strategies, following the five step approach described on the next page.

[1)] Research under 300+ global companies done by Forbes Insight on behalf Deloitte in spring 2013. Link to article

Risk management approach

1.Understand

Map supply chain risks

- Determine potential vulnerabilities in the organization
- Assess probability and financial impact per identified risk
- Analytics and visualization tools can support this

2. Prioritize

Distinguish between risks that are acceptable and that require action

- Quantify identified risk areas based on probability and impact in value
- Prioritize risks in line with risk tolerance and corporate strategy

3. Plan

Choose and plan resilience strategies for selected risk areas

- Choose appropriate resilience strategies (see next section)
- Define the cost and benefits per strategy, and select which to implement
- Plan objective, scope, and implementation using a defined roadmap

4. Implement

Implement resilience strategies

- Implement chosen strategies according to roadmap
- Manage implementation and track follow-up

5. Monitor

Evaluate strategies and monitor risks

- Monitor and manage new emerging vulnerabilities
- Track benefits of implemented strategies

Resilience strategies

Resilience is a critical attribute of supply chain management in this volatile environment: a resilient supply chain balances risk and costs to prevent or recover quickly from potential disruptions. Our approach defines resilience strategies in a generic way, as they can be very diverse depending on the risks and organization. We group them by visibility, flexibility, collaboration, and control, as shown through a number of examples:

Case studies

The following three case studies present examples of the application of resilience strategies to practical client cases. Their application forms part of the overall approach presented above, all answering specific client questions to incorporate volatility and supply chain risks into an enhanced supply chain performance.

Case studies

Supply risk – sourcing and supplier relationships

As companies grow larger and competition in the market increases, there is also more pressure on reliable supply of materials in order to remain competitive. On top of that, through mergers and acquisitions the number of supplier increases, which forces companies to look at strategic sourcing to review and consolidate their supply.

A key element in this process is managing the supply risk:

- Are we not too dependent on one supplier for material X?
- Are all our suppliers compliant with regulations?
- Are our materials supplied in time and in the right quality?
- Are lead times and prices stable and predictable?

Deloitte supported a major pharmaceutical company with a sourcing assessment and designing a new supplier management process. The support focused on strategic relationship management (SRM) with a large interest in risk. Suppliers were ranked on supply performance and risk using a customized segmentation scorecard. This was assessed and managed through three tools: a preliminary hazard analysis, a risk analysis based on engineering principles, and risk ranking and filtering to determine the audit frequency. This provided the client with a structural process to actively control and manage supply risk going forward.

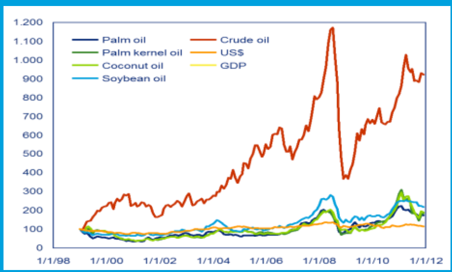
Typical benefits of such a project include a significant lead time reduction, more reliable supply – both for on-time in-full (OTIF) and material quality –, and a better control and response of issues and unexpected events. Clients also mention the supplier relation process brings a major benefit in facilitating discussion and understanding between supplier and customer.

![Deloitte.]

Case studies

Volatile commodity prices

Price volatility is an important element in managing the supply chain. And – vice versa – supply chain risks can also be a direct reason for price risks. Lack of commodity availability – for instance - can cause both volume and price risks in the chain.



Commodity prices historically showed a fairly stable growth year-on-year, but this changed completely in 2008 with the price for crude oil doubling within one year and then losing 2/3rd of value.

This might result in stocks losing value or steeply increasing costs. Ideally you want to understand and mitigate these risks. Initiatives that support this goal include shortening the lead time, risk tolerance rules, or hedge prices to protect against extreme short-term price changes. All depending on your strategic objectives, risk appetite, organizational capabilities, and commodity management plan[2].

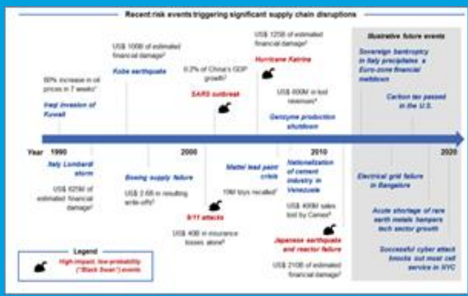
Deloitte has supported this process for a major vegetable oil producer, by making visible how these decisions are made, realizing quick wins in the purchasing process, and defining and setting up initiatives for reporting and visibility into risks and performance.

Category	Risk event	Frequency	Impact
Fluctuation in supply	Shipping delay		
	No space in terminal		
	Supply quantity/quality not in line with order specs		
	Use of different composition due to supply		
Fluctuation in demand	Contract call-off outside contract window		
	Customer request for very long/short delivery time		
	Customer changes order		
	Customer has increasing outstandings		
	Customer requests a delivery split		

Exceptional events

Not all events can be planned or anticipated. Think of the earthquake in Japan, political instability in the Middle-East, or government deficits in Europe, which all form potential risks.

We do not claim that these 'exceptional events' can be avoided or changed. However, a keen reaction and prepared action plans can help you overcome such events, even impressing your stakeholders by so doing (Black Swan Analysis).



Deloitte recently showed a successful example of this, supporting a major consumer electronics company whose affiliated distributor's warehouse burned down during the London (UK) riots.

Key in managing this unfortunate event was a cross-functional team, supported by the management team with a mandate to make decisions and communicate with customers.

This interim structure enabled the team to set priorities and manage expectations of key customers. These truly appreciated the team's honest and action-oriented approach. As such, the setback translated into a major improvement in the trusted relationship with customers.

[2] For further details refer to the Deloitte's Integrated Commodity Management framework (available on request)

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What does this mean for you?

It all starts with acknowledging that volatility is not necessarily a problem but rather an opportunity to create competitive advantage. For supply chain executives this means that an inward looking approach and a focus on internal operations is no longer the complete answer nor the critical success factor. It starts by knowing your end-to-end supply chain risks, in order to make conscious decisions how to prepare and implement into the integrated business planning process. Possible actions in the supply chain planning area include supply chain modelling, chain collaboration, scenario planning, and planning parameter optimization.

"Deloitte is the strongest in integrating supply chain and overall enterprise risk management" – Kennedy Research[3], 2012

We do not advise controlling events you cannot control or over-protecting your business. Yet we do recommend to make conscious and informed decisions using an end-to-end analysis of your processes to show what your risks are and what impact they might have. It helps you decide which risks to mitigate, what to do in exceptional events, and which volatilities can translate into a competitive edge. Understanding your risks and implementing resilience strategies will enable this edge. However, capturing such opportunities requires all business functions to be actively involved in both preparation and execution. Core enablers for synchronizing the business this way is a mature Sales & Operations Planning process and an entrepreneurial mind set.

It is evident that volatility is the new reality and requires a new way of analysing and visualizing information. Knowing and managing your risks is crucial to being resilient and successful. Have you defined the impact of your risks and agreed upon actions? Is your supply chain resilient enough to stand out?

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[3)] Kennedy Research acknowledges Deloitte's great track record in combining supply chain risk management and planning of supply chain and operations: "Deloitte offers the most comprehensive of the 'programmatic' approaches to risk management (in contrast to the more bespoke approaches of the strategy firms)".