

WHITE PAPER

The Importance of A Supply Chain Perspective In Procurement Decisions



– Ramona Prescott & Simon Coates

Key Challenges in Today's Environment

The concept of procurement, the acquisition of goods or services, has been around for thousands of years. While the objectives in procurement have not dramatically changed, the ability to acquire a product or service at lowest possible costs while meeting the buyer's needs in terms of quality, quantity and time, has become increasingly complex.

Similarly the fundamentals of the supply chain have been deployed since prehistoric

hunter/gatherer times although the objectives have moved well beyond survival and are now congruent in many ways with those of procurement namely to meet customers' needs in terms of quality, quantity and time whilst minimising transport, storage and working capital costs.

Both disciplines are key to business success and their similarity in scope is evidenced within organisational structures globally where procurement may report into supply

chain or vice versa or they may remain as independent departments with either a seat at the executive table or reporting typically through to the COO or CFO.

The table below lists a number of criteria that keep CEO's awake at night as they work out how to deliver value to their shareholders. Well planned and executed supply chain and procurement functions can contribute significantly to the overall performance of a business.

Key Criteria	Supply Chain Influence	Procurement Influence
Revenue Growth	Improved Customer Service <ul style="list-style-type: none"> • Product availability • Reduced lead times • Responsiveness 	Improved Customer Service <ul style="list-style-type: none"> • Component quality • Supplier reliability
Net Operating Margin & EPS	Lower Supply Chain Costs <ul style="list-style-type: none"> • Manufacturing • Transport • Warehousing • Administration 	Lower costs through procurement <ul style="list-style-type: none"> • Raw materials • Goods for resale • Services (Including 3PL service providers)
Cash Flow & Return on Capital Employed	<ul style="list-style-type: none"> • Optimised network • Demand forecasting and replenishment • Inventory optimisation 	<ul style="list-style-type: none"> • Capital procurement
New Product Development	<ul style="list-style-type: none"> • Speed to market • Responsiveness • Robust planning • Packaging design 	<ul style="list-style-type: none"> • Raw materials/ component procurement
Reputational Risk	<ul style="list-style-type: none"> • Chain of responsibility • OH&S • Minimising greenhouse emissions 	<ul style="list-style-type: none"> • Sustainable procurement • Quality

In addition, increasing customer and society expectations are placing more contemporary demands on the supply chain. These include:

- **Sustainability:** Transport is the fastest growing source of greenhouse emissions and is estimated to be responsible for >20% of carbon dioxide emissions in the future. With the introduction of the carbon tax the costs to supply could change dramatically.
- **Globalisation:** Products are being sourced globally to take advantage of such elements as labour rates and specialised manufacturing, impacting lead times and inventory requirements. (see figure 1)

How many countries does it take to make a coat?

To make this jacket for the UK market, Hong Kong garment producer Li & Fung ordered materials from factories in five countries and had them delivered to Thailand, where the jacket was stitched together. Using a network of websites, Li & Fung stays in touch with its worldwide suppliers and can compress the time it takes to get items into stores.

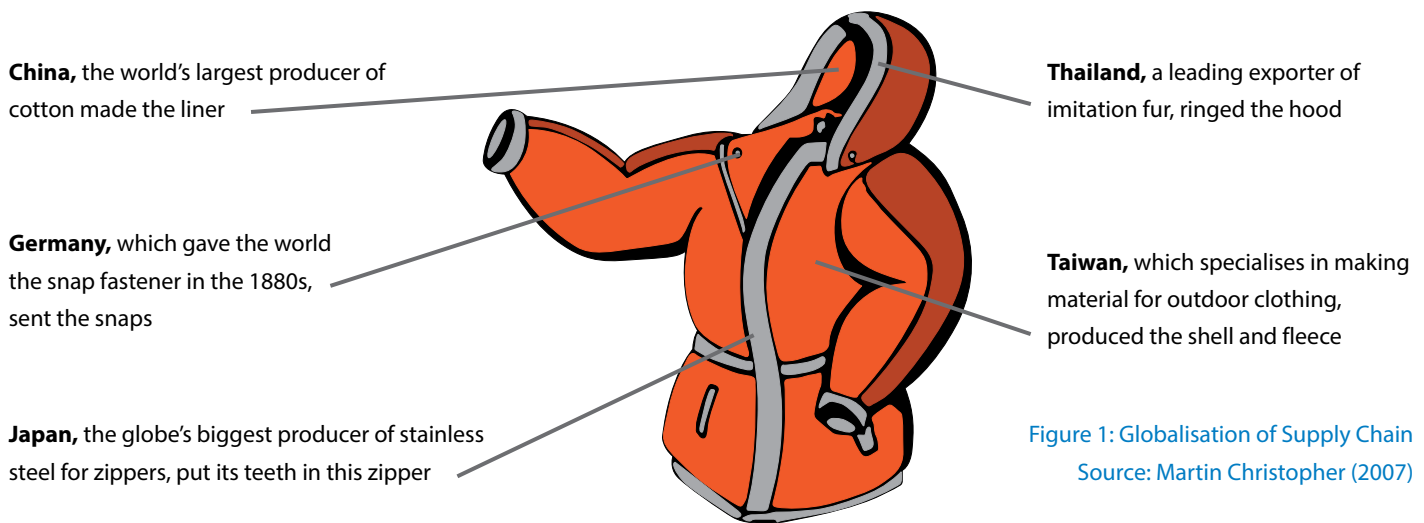


Figure 1: Globalisation of Supply Chain
Source: Martin Christopher (2007)

Whilst globalisation is here to stay it remains truly dynamic. Business cases that closed Australian factories to source ex Southern China made sense 6 or 7 years ago however increasing labour costs in China, improved technology and efficiency in Australia, customer demands for shorter lead times and lifecycles along with large increases in sea freight now make these cases far less compelling.

- **Increased Risk:** Business decisions to dramatically reduce working capital, consolidate the supply base and outsource operations reduce 'buffers' to react to unplanned changes. This is in a time where the risk of environmental issues (e.g. natural disasters) appears to also be increasing.

In a study of 800 companies that announced a supply chain disruption between 1989 and 2000 Singhal and Hendricks identified that over a 3 year period, affected companies delivered 33% – 40% lower stock returns relative to their industry peers and it typically required in excess of two years to fully recover.

- **Product Proliferation and Reduction in Lifecycles:** The variety of products offered often increases the number of inputs and suppliers (see figure 2), while the typical life cycle of a product has decreased causing increased product (and material) write-offs/downs.

In addition to brand/SKU proliferation retailers globally are pushing to increase

the penetration of their own private labels which are often supplied by the brand manufacturers at greatly reduced margins requiring lower cost supply chains and lower cost of input materials.

Product complexity and proliferation impact areas of the organisation that include: customer order processing, manufacturing planning and scheduling, purchasing, inventory management, and quality.



Brand



Variants and Package types

For example, the brand Coca-Cola has many variants - Vanilla Coke, Diet Coke, Coca-Cola Classic, Coca-Cola Zero, to name a few. Each of these brand variants have their own unique packaging, which may require different suppliers.

Figure 2: Product Proliferation

- **Business alignment:** Customer requirements (e.g. multi/omni-channel, many variants) often conflict with internal objectives (e.g. lean) and supplier capabilities requiring procurement to play a balancing act with stakeholders.

How Can This Risk & Complexity Be Addressed?

For these risks to be properly managed Procurement needs to first gain a better understanding of the supply chains for the various products and services it is acquiring. This includes:

1. Understanding the demand and supply characteristics of the product. Is demand highly variable? Is supply reliable?
2. Mapping out all of the steps to get the product from the supplier to customer, identifying areas of potential waste and risk.
3. Determining strategies that could be utilised to mitigate risk or reduce waste for discussion with key stakeholders.
4. Utilising (or developing) metrics to measure and communicate areas of performance (and risk) to the broader business.
5. Understanding the true “cost to serve” of a product through its lifecycle.

Once this knowledge has been acquired, Procurement can work more closely with Supply Chain in determining the total cost of ownership and managing the inherent risks that various options provide. The table below outlines how supply chain and procurement can effectively work together across various activities:

Activities	Procurement's role		
	Lead	Support	Informed
Sales Forecasts			✓
Demand Plans			✓
Supply Plans		✓	
Sales & Operations Planning		✓	
Manufacturing Scheduling			✓
Sourcing	✓		
Ordering		✓	
Customer Collaboration			✓
Supplier Collaboration			
Category Management			

Total Cost to Serve

Contractually agreed direct costs of a logistics contract are the only visible part of the total cost and are reflections of the underlying cost drivers. These costs need to be fully understood by the procurement team to effectively source products and services:

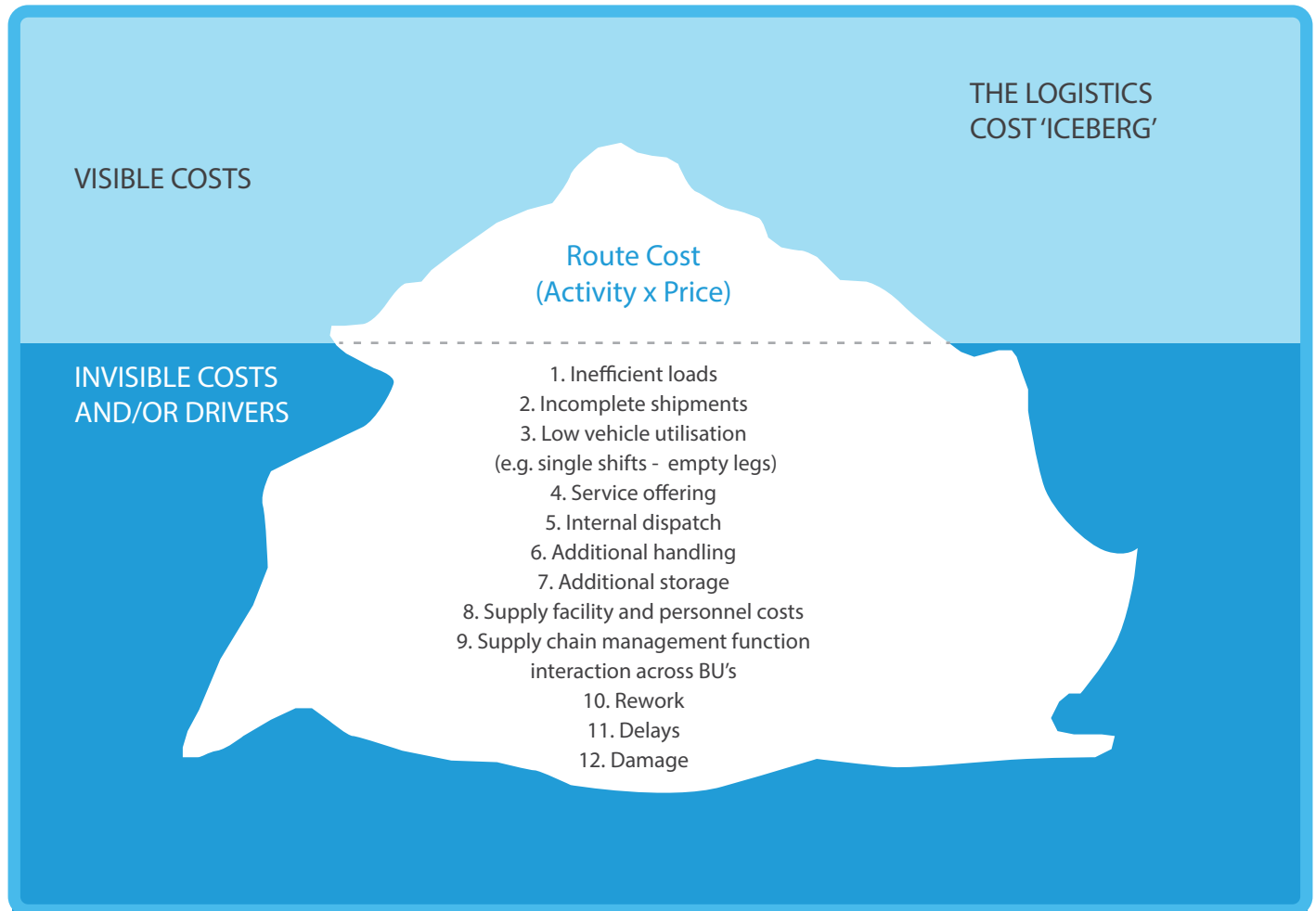


Figure 3: Cost to Serve Iceberg

Case Study

Here is an example of an Australian manufacturing business where a lack of understanding the principals of total cost to serve has resulted in a major strategic shift to off shoring manufacturing resulting in increased cost and reduced customer service. This case study demonstrates what took place and why they did not achieve their desired objectives:

Background

- Australian consumer goods company manufacturing, marketing and distributing consumer products into various retail channels

- One main manufacturing hub of its key product line
- Converting facility in Brisbane of another product line with raw materials imported partly from China
- Current network of 2 NDC's and state based 'X-Docks' in other states

Change

- Outsourced manufacturing of main product line to China
- Closed factory
- Closed one NDC
- Brisbane site established as de-facto single NDC

- All China imports into Brisbane NDC with land transport to regional 'X-Docks' to combine volume with converting plant products

"The Good"

- Initial significant savings on production
- Initial savings on Linehaul freight Adelaide – Brisbane

"The Bad"

- Decline of the AUD significantly eroded product cost savings
- Inventory increased significantly leading to the need for outside overflow storage



- Outside storage requirement led to poor IT integration between ERP and WMS leading to lack of visibility of stock, missed orders and poor freight utilisation
- Domestic sales volume declined due to poor economic climate in Australia
- Domestic freight costs ‘exploded’ due to lower than expected freight utilisation completely negating the original line haul savings
- Longer domestic lead times led to rapid decline in customer service levels (~45%)
- **Total Supply Chain Cost more than doubled to 19.6% of Revenues**
- Company profitability reduced to very low single digit margins
- No rigorous modelling of domestic logistics costs impact
- No rigorous modelling of future inventory position due to longer cycle and response times to estimate working capital impact
- Total Cost of Ownership calculation limited to product and high level logistic cost impacts
- No sensitivity analysis on business case
- No redesign/remodelling of domestic distribution network to develop best solution
- No changes to current supply chain planning (including inventory management) capabilities
- Currency risk not hedged - eroded product savings significantly
- Taking ownership of the total “Cost to serve”
- Taking a lead role on sustainability for products and services procured and understand the implications of various supply scenarios
- Training the procurement team (and the rest of the business) in total cost of ownership
- Assisting in off-shoring/outsourcing activities to ensure a comprehensive view is established
- Conducting workshops to identify vulnerabilities/volatility in inbound supply chain & action them (this could include the supplier)
- Developing contingency plans and strategies based on potential outcomes
- Engaging key stakeholders across business in pursuit of goals. Timely, crossfunctional meetings need to become part of the culture

This company did not rigorously model the true impact of its decision and understand the associated cost and capital changes across its supply chain, so how did things go so wrong?

Keys to Success

For procurement to be successful it needs to take the initiative in a number of areas, including:

- Engaging key stakeholders across business in pursuit of goals. Timely, crossfunctional meetings need to become part of the culture

How to make a start?

1. Identify an obvious category or product, within your current sphere of influence, with a high (hidden) supply chain cost attached to it
2. Talk to the supplier(s) about those costs and build up an understanding of the cost drivers
3. Involve your Supply Chain colleagues or other experts in identifying opportunities to reduce these costs
4. Make some small, quick improvements to build confidence and support

Conclusion

The challenges identified in this paper will only intensify in the future and it is important that your organisation's Procurement function understands the diverse product and service supply chains that exist and work closely with key stakeholders to address and manage the various risks involved. Those that do it well are less likely to be impacted by the various challenges of today's operating environment and quicker to react when unforeseen events occur.



About the Author



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