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A LEADER IN ENTERPRISE RISK MANAGEMENT

Risk Management: Supply Chain Risk

Are You The Weakest Link?

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Risk Management: Supply Chain Risk

Are You The Weakest Link?

Introduction

The Supply Chain in your organisation starts with <u>your</u> providers, links with you and stretches through your sales channel to your customers. Like all chains it is only as strong as the weakest link. The consumers demand for more, cheaper, sooner, has forced manufacturers and producers to go further afield in search of products, lower cost raw materials, components, sub-systems and services. Globalisation has brought lower cost, but it has also brought higher risk. The chains have grown and with it the need to monitor every link more effectively. Weak links need to be strengthened or replaced from concept to customer and back through the payment channels.

This article looks at how enterprises might approach the task of Supply Chain Risk Management and ensure that the benefits reaped by extending the supply chain are not nullified by the occurrence of an event that could have been foreseen, planned for or avoided. Recognising the extent, likelihood and consequence of any inherent risk is the platform from which to mitigate it.

The approach described here is built around best practice Enterprise Risk Management and begins with defining the context.

Context Defined

What are your company's objectives and what does the achievement of these objectives depend upon? Who do you depend upon? Typically your enterprise depends on others who supply **you** with goods, services, finance and utilities. It may also depend on others to supply **your** customers with **your** goods and services and deliver the revenue back to you.

What are your Dependencies?

- Regular Supply
- Constant Quality
- Delivery within committed deadlines
- Confidentiality
- Regulatory compliance
- Ethical Behaviour
- Cash Flow

In modern complex supply chains there are risks induced by distance. In many cases cost is driving businesses to extend their dependencies to outsourced facilities thousands of miles from their customer bases. The risk of doing this outweighs the risk of not doing it in a competitive environment where the cost is important to the customer.

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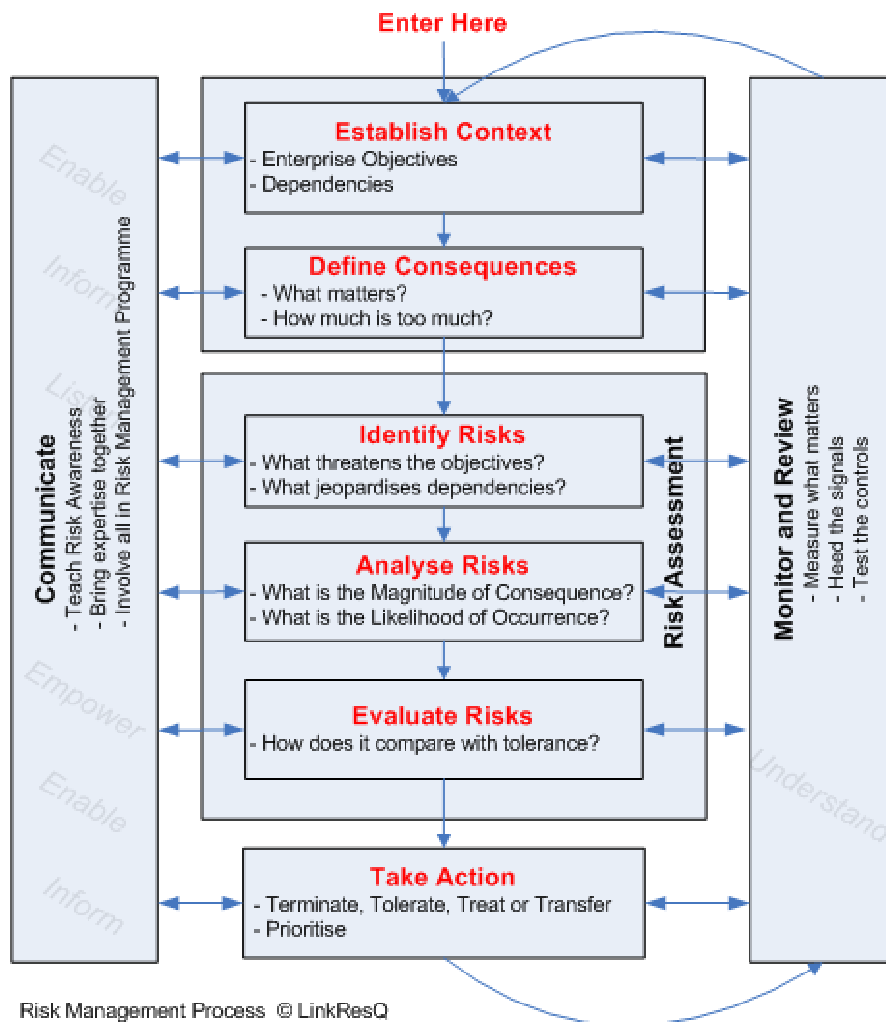

The structured application of common sense

Consequences Defined

Measuring the level of risk is different in every organisation, because the consequences are specific to each one. In order to be able to evaluate and prioritise risks it is important to define consequences in terms that are relevant to the organisation and on a scale that is repeatable. For example if your organisation is a supplier of product to a hospital, failure to deliver the right product on time could, at the lowest level, mean the loss of an order. Or it could mean the loss of a contract, resulting in lay-offs in your company. At the high end of consequences it could mean the loss of a life and possible litigation against your company. Loss of reputation and trust could follow, from which the organisation may not recover.

If your organisation is a supermarket, your customers are depending on you for a regular supply of groceries. What would be the impact if, say, your bread supplier fails to deliver. If you only had one bread supplier then the impact would be significant and if you had no bread for several days the loss in revenue might be substantial as customers go elsewhere to buy their groceries. Some may not return, meaning you've lost market share. Using terms that are relevant to the objectives of the organisation describe the consequences on a scale from 1 to 5, where 5 is Substantial and could threaten your survival.

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Consequence Scale

1. Negligible
2. Minor
3. Moderate
4. Significant
5. Substantial

Definitions might include; direct cost, impact on reputation, market-share, production, delivery times, reduction in sales and impact on cash flow.

Likelihood is the other component in the measurement of level of risk. The definition of the Likelihood scale is more straightforward.

Likelihood Scale

1. Very Rare
2. Low
3. Medium
4. High
5. Very High

Very Rare might equate to once in 30 years or more and Very High might mean several times per annum.

Supply Chain Risk Identification

Risk Management is about being systematic and methodical. Having defined the context one now needs to systematically go through all the relevant links in the chain to identify the uncertainties. Do you know your suppliers and have you calculated your level of dependency. What proportion of your suppliers business do you represent? How diverse is his customer base? How diverse is yours? Are your suppliers able to support your upside opportunities? Are they likely to be stressed by your upturns and your downturns? Have they the wisdom, the relationship and the communication channels to let you know?

Who are your suppliers? Traditionally we think of materials and procurement when we think of supplies. But supplies of water, electricity and telecommunications are equally vital to organisations, as is the supply of finance from banks and investors. The links in the Supply Chain from you to your customer must also be considered. What are the risks to your business if there are failures in the supply of your product to your customer? The timely remittance of payment by your customers to you should also be considered as part of the Supply Chain. Depending on the currencies you deal in there may be significant exposures that could impact your operations.

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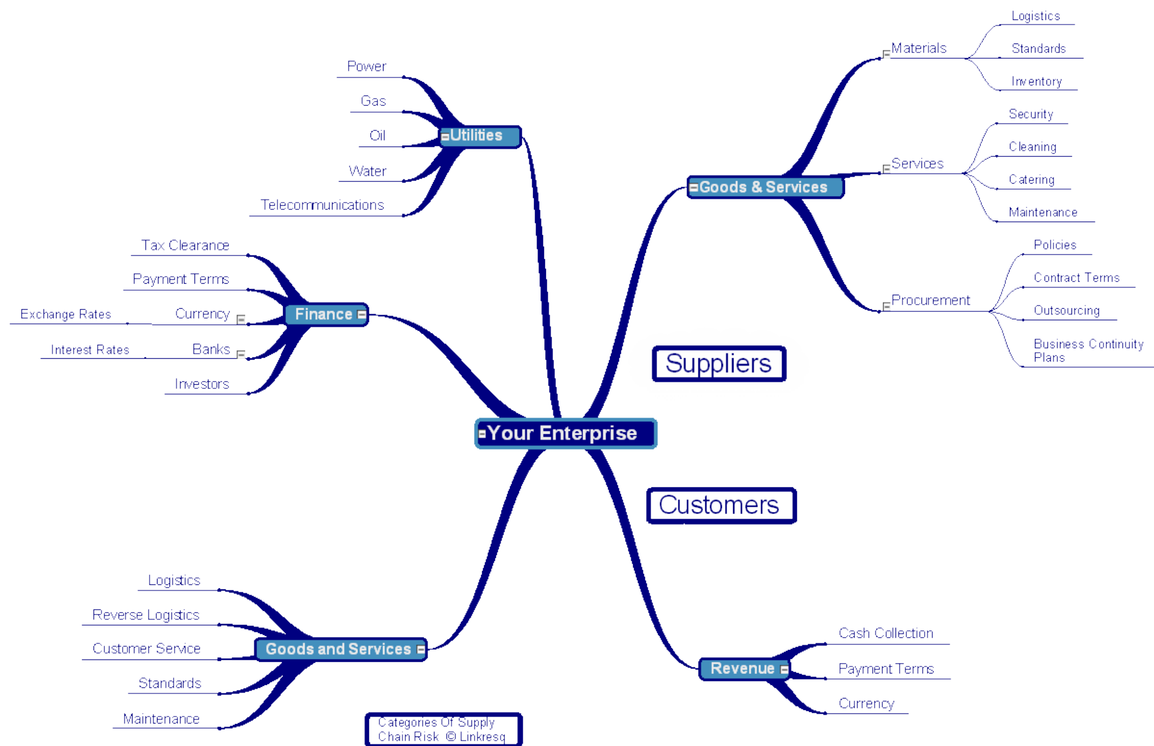
The figure below is an example of the categories one might consider when beginning the process of Risk Identification. It will be different for each organisation. The definition of the context will inform the decision on what categories need to be considered.

Risks to be considered include: Infrastructure risk, product risk, (quality, fraud) Financial risks (exchange rates, interest rates, cash flow) ethical risk, natural disasters, terrorism, intellectual property, confidentiality, political and pandemic.



Categories of Supply Chain Risk © LinkResQ

Analysing and Evaluating the Risks

In analysing the risks in the Supply Chain it may be necessary to examine some key suppliers in closer detail. What are their dependencies? Where multiple suppliers are chosen to spread the risk it's important to understand that they do not share dependencies themselves. Could the same earthquake in Asia equally affect both suppliers?

Risk analysis is about deducing the level of risk. After an inherent risk has been identified, the existing controls or mitigation factors need to be understood so that the Residual Risk can be calculated. At this stage one should be able to answer the question; does it matter? If it is still outside the corporate risk tolerance then further "treatment" is required.

Risk Treatment (Mitigation)

When the Toyota motor company first revolutionised manufacturing supply chains with their Just In Time methodology they accepted one principle; the supply chain, on which there is dependency, has to be flexible and resourced. One of their risk mitigations was to invest capital in redundancy of crucial processes and suppliers, combined with component standardisation. Just In Time was based on supplier support and in some cases part ownership. At all times they know the state and condition of the suppliers on whom they depend.

One has four choices in deciding how to deal with a risk; one can either, Terminate, Tolerate, Treat or Transfer the risk. Terminating the activity that gives rise to the risk is the simplest treatment but not always an option, if the risk is within the company's tolerance level then it can be "tolerated" or accepted. Treating a risk means investment in controls, redundancy and resilience to reduce the likelihood and/or the impact of a risk. For example you might: have dual suppliers for critical components, train suppliers in your methods, insist on application of appropriate standards, etc. Transferring risk or sharing risk can involve taking out appropriate insurances and sub-contracting or outsourcing elements of the business process. Sharing can extend to sharing the upside (Risk is about threats and opportunities). If the budget for risk treatment is limited then the treatment plan should prioritise the order in which risk treatments are implemented.

You may transfer the tasks, and the risks that go with them, to a supplier but **you** retain responsibility. Remember it's your chain and only as strong as the weakest link.

The Benefits of Managing Supply Chain Risk

If you manage your Supply Chain risks effectively then you will:

- ⇒ Have fewer surprises
- ⇒ Make better decisions
- ⇒ Achieve a better balance between opportunity and threat
- ⇒ Be in a stronger competitive position
- ⇒ Manage your suppliers more effectively

Risk Management is about discovering the "unknown unknowns" and taking action that optimises the upside and minimises the downside. Applied to the Supply Chain it restores the balance of control and strengthens each link in the global relationship.

Supply Chains are complex expensive business arteries capable of driving growth, or sapping resource. For some enterprises they are "what we do". For others they are essential "must-haves". Their management is a skill that has defined the success of many. Businesses, who now consider SCM as a core competence, where cost, speed to market, and Use-By-Dates have taken us from the "I'd prefer to be looking at it than for it" days, are run by prudent managers, who identify and treat risk, all along the chain.
Be careful out there!

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