



Supply Chain Risk and Resilience

A CIPS introduction to good practice



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As the CIPS Risk Index, powered by Dun & Bradstreet, shows, risk is on the increase. The tipping point of economic risk came in 2008, when the full effect of the recession hit globally, but we've also seen that the shockwaves from major environmental disasters, such as the Japan earthquake in 2011, and social unrest on every continent, can ripple and resonate across supply chains, turning, at a stroke, the best of plans upside down.



Although the risk landscape is getting bleaker, the profession has been talking about managing risk, for decades. Indeed, along with business continuity it is the only approach most procurement and supply professionals ever consider; but looking forward, shouldn't we be talking more about resilience?

According to a recent survey of our procurement community, it is evident that our profession should be doing more to protect their business when it comes to resilient supply chains, and to take more responsibility for managing disruptions.

For instance, of those surveyed, almost 46% only 'sometimes' had risk management strategies in place for their suppliers and yet 52% expected the same level of service from their suppliers in the event of a disruption.

The survey also highlighted a lack of understanding around the financial implications of a disruption and what resilience actually means.

Over 50% of respondents were either unable to undertake a cost benefit analysis of the costs associated with a disruption in their supply chains, or 'didn't know' if they could do the analysis at all. More than 60% thought resilience was only risk and business continuity, while over a third of our respondents were divided between whether it was one, the other, or something else.

With around 50% of respondents from the private sector, this lack of focus on resilience in supply chains means that business and economies are under threat. And with 20% of those surveyed believing that supply chain risk management alone is enough to build resilient supply chains, the overall picture gets darker and more threatening as you read the results.

An unexpected incident can be costly in terms of bottom line, but also reputation. Any negative impact on how consumers perceive a business can rattle around for years.

This guide is an introduction to the work CIPS is doing to produce a good practice guide and online tool that can be used to help develop an organisations' end-to-end supply chain resilience.

It's time to put resilience to the forefront of our minds.

A handwritten signature in dark ink that reads "David Noble".

David Noble, Group CEO, CIPS

Background

The last fifteen years has seen a significant growth in organisational discussions around the topic of 'Resilience'. Over this period there have been numerous examples where risks have materialised, impacted, and been seemingly absorbed by some organisations, while other organisations have never really recovered. What differentiates the overall effect of the impact is how prepared these organisations were to deal with the risk once it materialised.

With the growth of outsourcing and the evolution of multi-tiered global supply networks many organisations now face direct and growing operational and legislative risk from disruption or malpractice in their supply chains. Strategically focused procurement and supply professionals have begun to investigate what is important to the organisation and the end-customer in order to identify what delivers both customer and shareholder value.

Once you have established what the important issues are, you then begin to understand the risks and vulnerable points and can start building a resilience plan.

The role of procurement is to understand risk, manage and mitigate it, and build robust supply chains, both upstream and downstream, that can weather disruptions with minimal impact and stay resilient.

Whilst the eternal pressures of achieving best price and value for money will never disappear from the buyer's agenda there is a growing realisation that an unexpected risk can wipe out a negotiated cost saving many times over, damaging reputation in its wake.

CIPS suggests that risk can be defined as 'the probability of an unwanted outcome happening'. Risk management facilitates the taking of decisions and actions to control risk appropriately by providing a disciplined and objective approach.

But what is 'resilience'?

Definition of Supply Chain Resilience

Managing risk and developing in-built mitigation has now become a key part of any procurement and supply professional's daily activity. It not only applies to potential new purchases but also to contracts that are ongoing. CIPS sees supply chain resilience (SCR) complementing the traditional rather reactive approaches to risk management and business continuity and drawing on the best of each. CIPS focus is on taking proactive rather than reactive measures. The Good Practice Guide will concentrate on what measures can be taken to build resilience into all stages of a typical supply chain from conception of a demand through to end of life of product or service.

Correctly deployed supply chain resilience measures can leave an organisation in a no less favourable position after an 'event'. Developing an understanding of potential resilience disruptors and where their consequences may have most impact within an organisation, and what the overall cost of that disruption is, must be the foundation of any attempt to develop a SCR approach.

SCR is an organisation's ability to proactively plan and design the supply chain network in a way that they anticipate unexpected disruptive (negative) events, can understand the financial impact, and respond adaptively to these disruptions whilst maintaining control over the process, desired outcomes and any legislative obligations in place. Risk management involves four key activities: Risk recognition, risk analysis, risk assessment and risk mitigation.

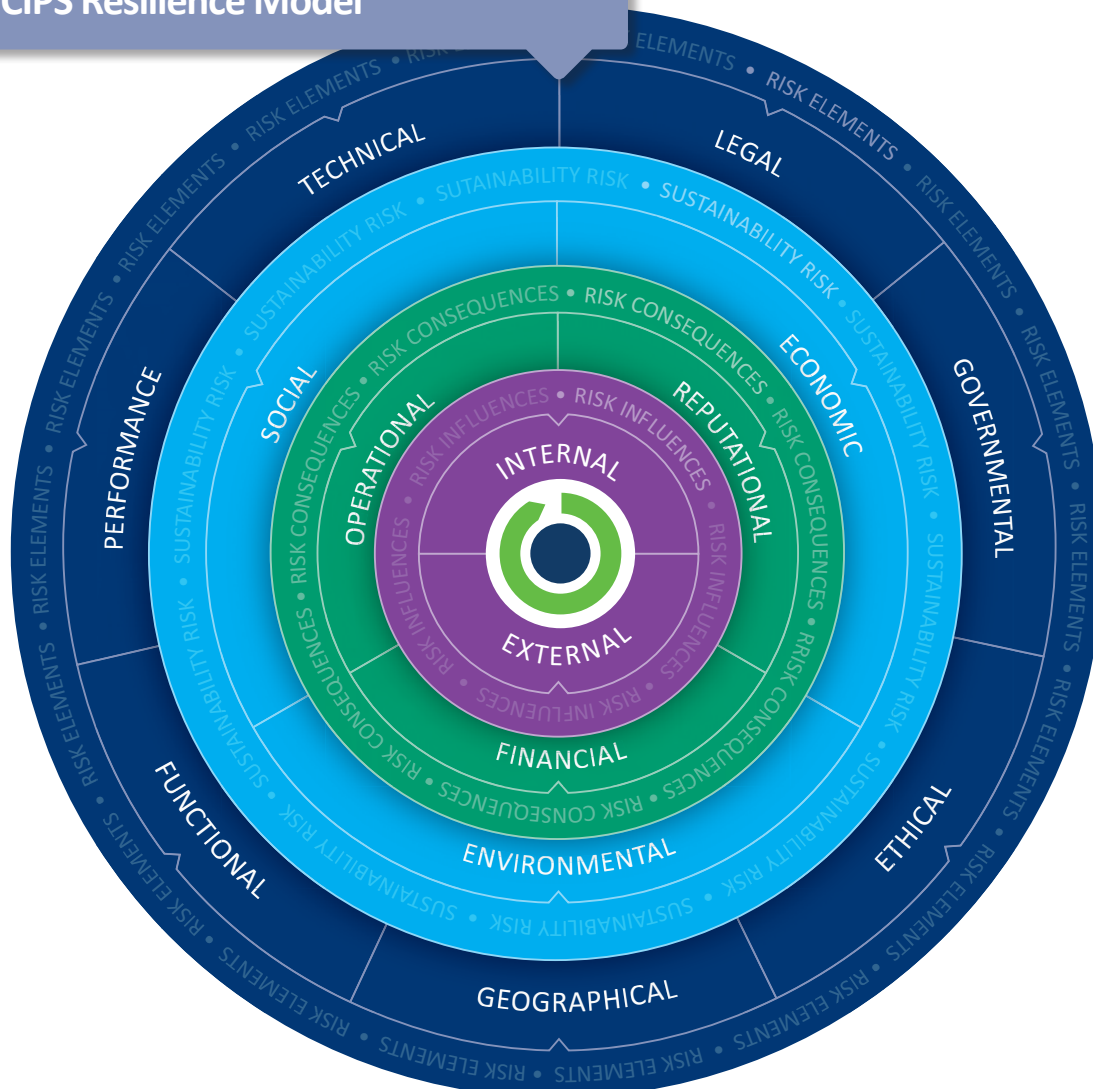
A GOOD PRACTICE STANDARD AND ONLINE TOOL

Whilst there are numerous BSI and ISO standards developed for business continuity, risk management and organisational resilience there is no global benchmark that can be used to test and develop an organisation's end-to-end supply chain resilience. The objective of this CIPS introduction along with the forthcoming good practice guide and online tool is set to fill this gap. This will help procurement and supply management professionals support the survival of their organisations by identifying supply chain risks whilst protecting shareholders and the general public against the effects of disruption and malpractice.

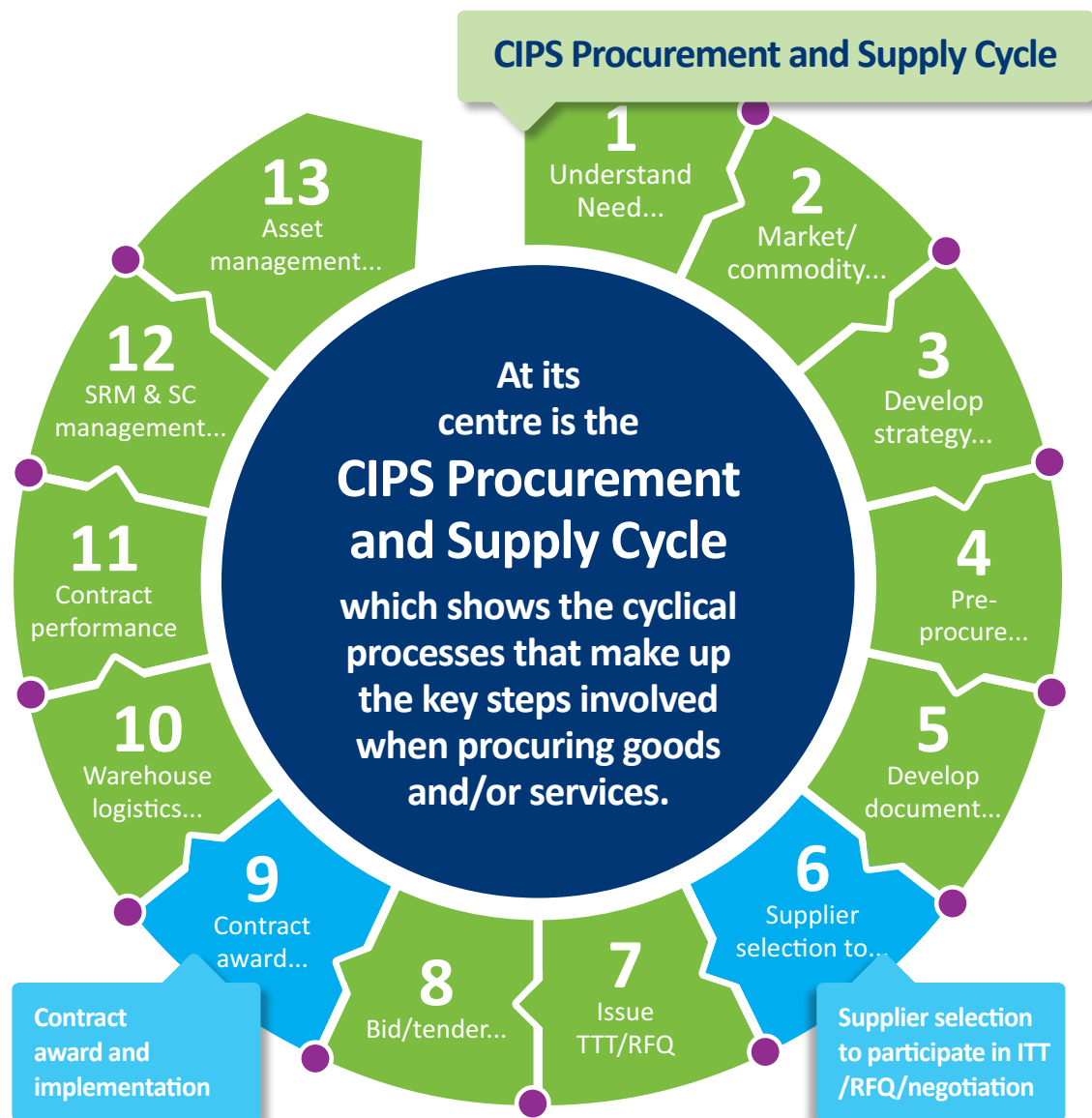
The CIPS Resilience Model

To help the reader identify potential risk categories and understand their organisation CIPS have developed the CIPS Resilience

CIPS Resilience Model

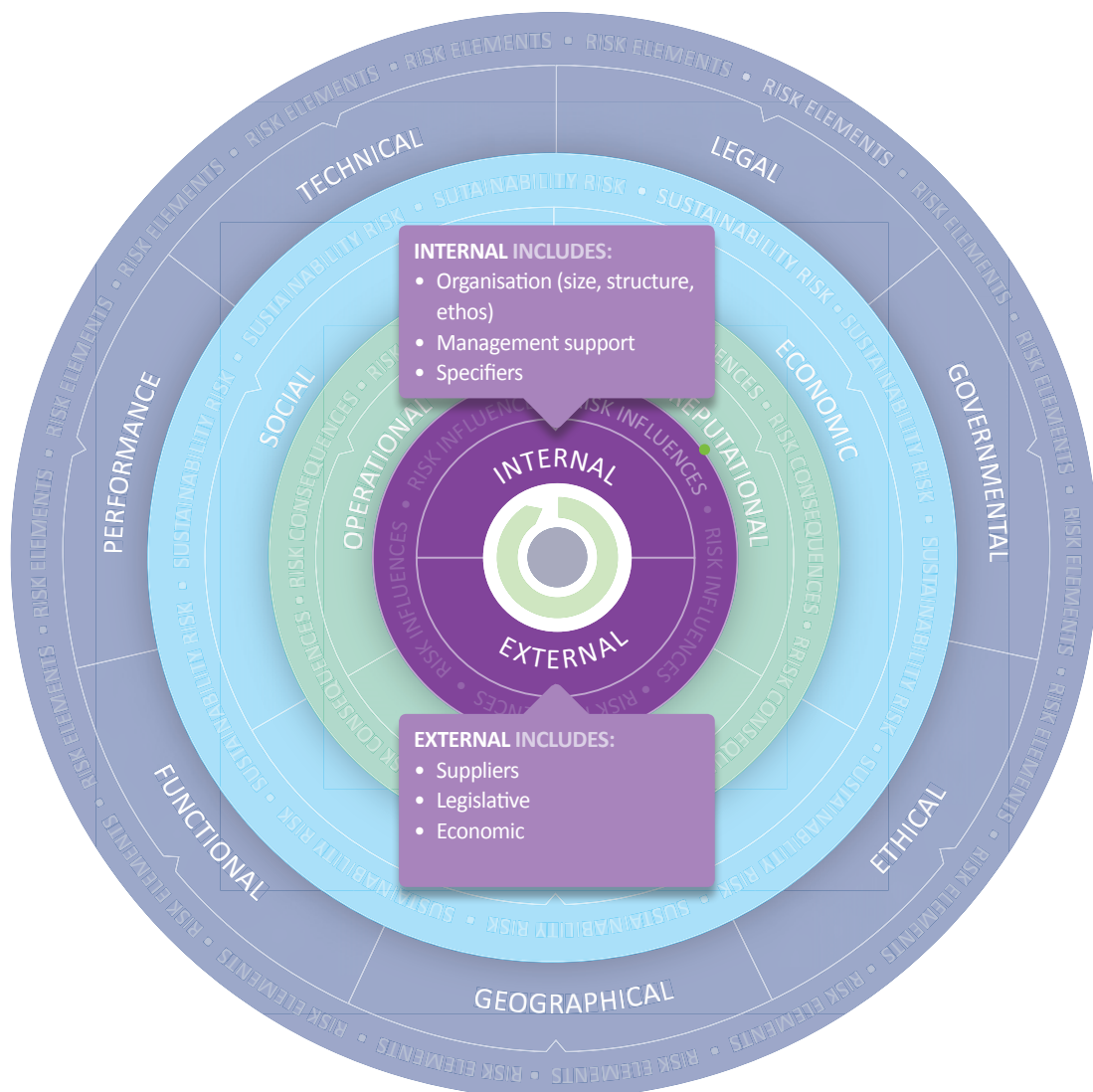


erstand where the impact of such a risk might occur within Model, which has a number of constituent parts.



The CIPS Resilience Model

The Risk Influences



A Risk Influencer is any combination of people, activities and circumstances that have the potential to generate a supply chain risk, or be a risk in their own right. When looking at areas of risk, it is key to understand where these may be generated so that you can develop appropriate initiatives that support your overall resilience strategy.

There are two specific areas under which risk influencers are categorised – those generated within an organisation's **INTERNAL** environment and those **EXTERNAL** to an organisation's environment.

The **INTERNAL** environment risk influencers include the following:

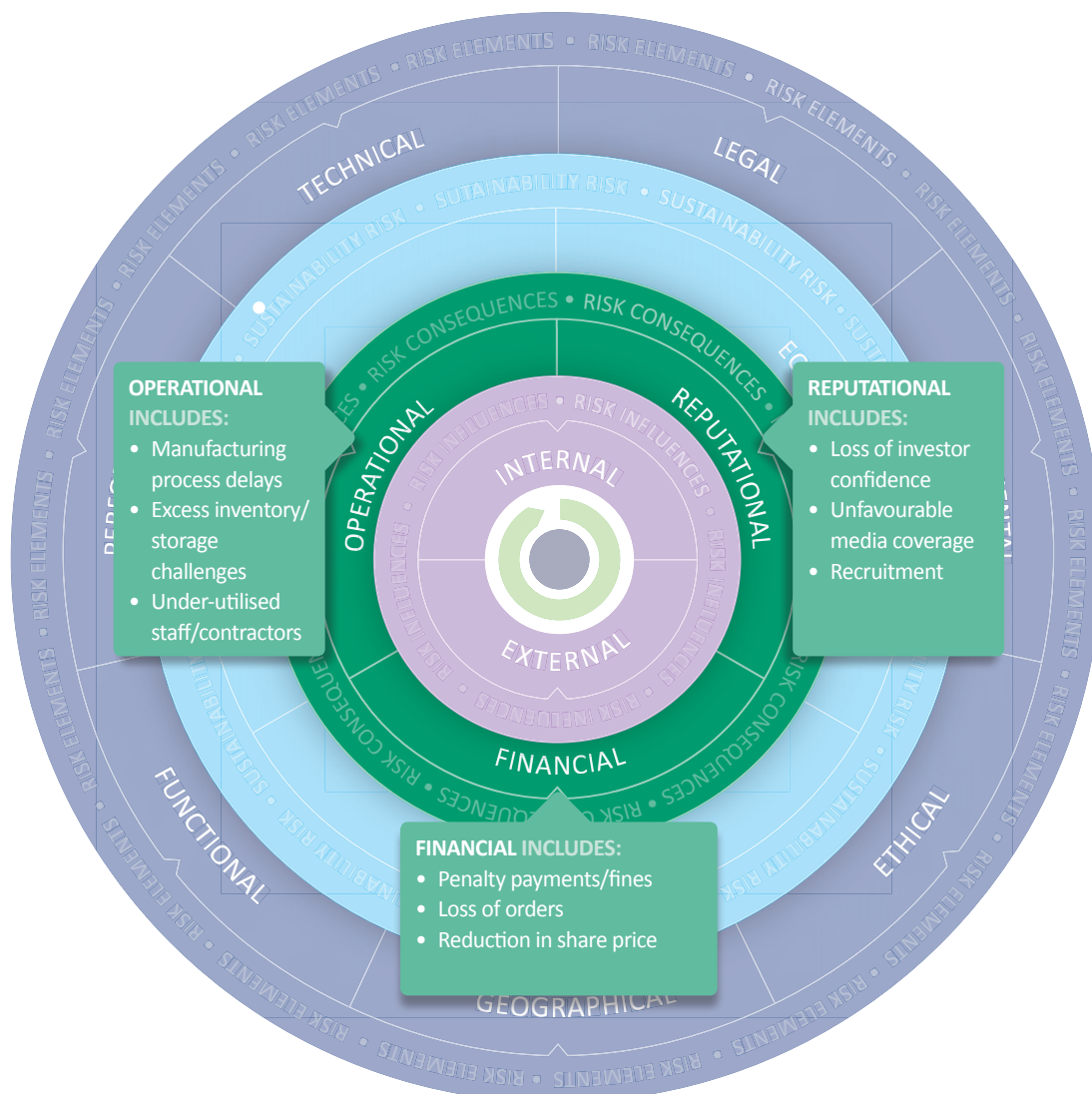
- **Organisation size**
Large organisations have inbuilt complexities that make it difficult to identify and manage internally generated risks
- **Organisation ethos**
A highly entrepreneurial/risk-taking culture in an organisation can transmit down to its supply chain
- **Organisation structure**
Lack of procurement discipline leading to a lack of control by procurement and supply management over external purchases
- **Management support**
In SME or owner-led organisations, addressing supply chain risk may not be seen as a priority, while in larger organisations, the need for management to support risk avoidance/mitigating is crucial
- **Specifiers**
These are the key internal stakeholders who can sometimes take unilateral action that unwittingly undermines resilience of supply chains
- **Procurement and supply team**
A procurement and supply team that does not have a good understanding of how to identify, mitigate and/or avoid supply chain risks is a key risk creator for their organisation and weakens supply chains.


The **EXTERNAL** environment risk influencers include the following:

- **Suppliers**
The selection of and actions by suppliers throughout the supply chain are arguably the most frequent source of supply chain risk
- **Geography**
Where a supplier is in the world can significantly increase a range of risk factors. The risk areas that this may cover include environmental, logistical, economic, financial (eg fx fluctuations), social (eg modern day slavery, child labour) and cultural (eg bribery and corruption)
- **Political**
Political actions in your supplier's country may generate insecurity, or result in generally poor trading conditions. Within your own country, political decisions and responses can generate risks such as trading restrictions and import tariffs/controls
- **Legislative**
Laws passed by both your and other related countries/regional bodies may create a new supply chain risk in respect of non-compliance within the supply chain. They may cover but not be limited to employment, product, and environment related areas
- **Economic**
The economic stability in your country can typically create currency exchange risks and sometimes an unwillingness to trade on acceptable terms whilst economic risks with the supply chain host countries can not only create cost/FX risks but also general instability often fuelled by price inflation that may lead to an inability to supply
- **Climate**
Climate can contribute to significant supply shortages and high price rises in areas such as agricultural products (eg crop failures), and raw materials. Climate may also generate logistical challenges (hurricanes affecting shipping schedules) as well as catastrophic events that reduce/eliminate a supply resource.

The CIPS Resilience Model

The Risk Consequences





Risk consequences can be split into three types, **OPERATIONAL**, **FINANCIAL**, and **REPUTATIONAL**. These are where the effects of any realised risks would be felt. It may be that certain risks have the capability to create an impact in two or even all three of these areas.

For example, a defined risk may be that one of your suppliers is found to be using child labour. You are highly likely to suffer **REPUTATIONAL** consequences due to this revelation **OPERATIONAL** delays in supply while changing the supplier and **FINANCIAL** consequence of reduced orders from customers who care about this issue.

As part of our overall risk resilience approach you will be able to understand potential consequences across a significant range of individual risk topics.

Below are some of the potential consequences a risk can create in each of the three categories:

Operational consequences include:

- Manufacturing process delays
- Project delays
- Excess inventory/storage challenges
- Under-utilised staff/contractors
- Disrupting plans/customer deadlines.

Financial consequences include:

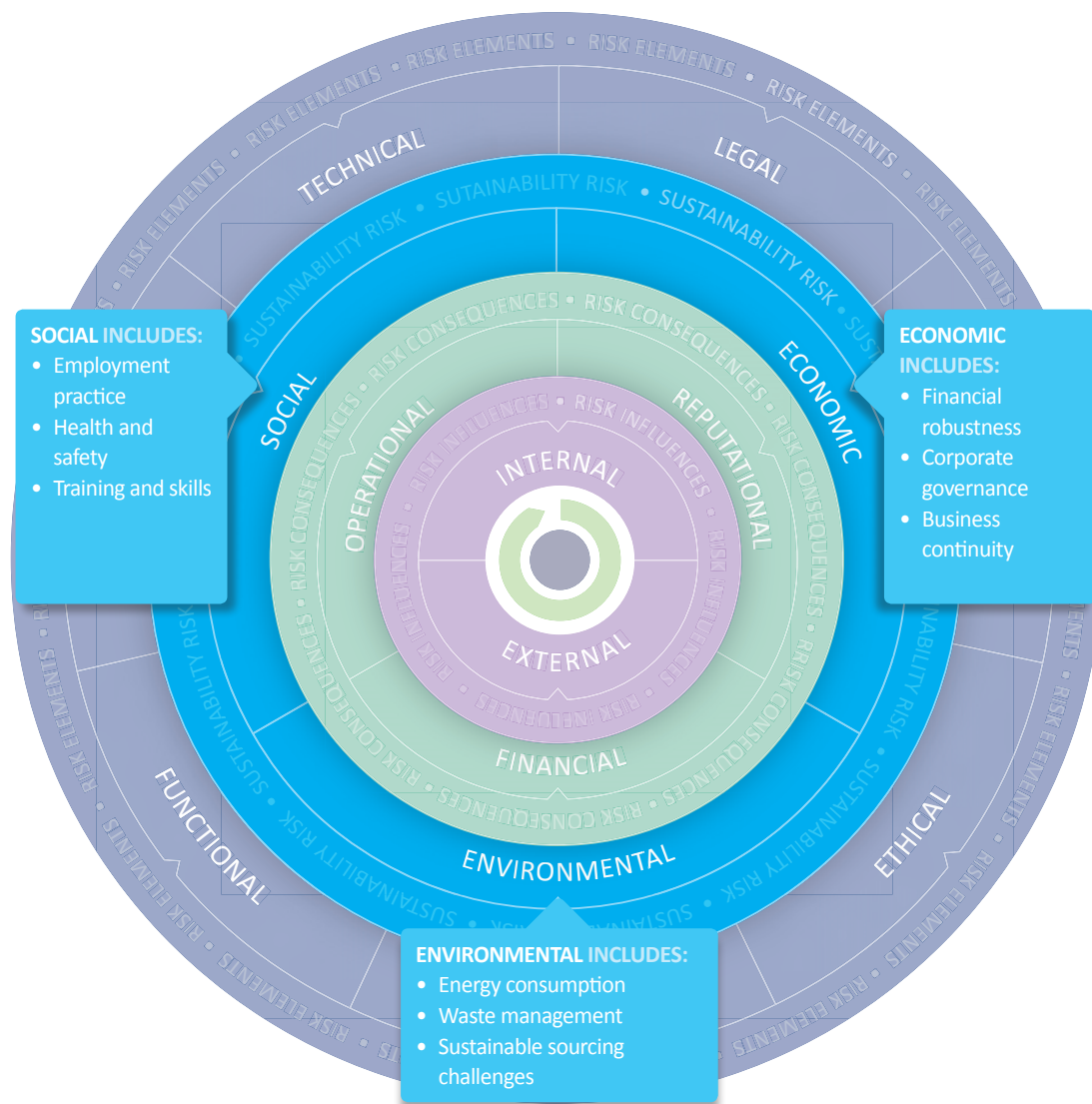
- Cost overruns
- Penalty payments
- Payment of fines
- Loss of current/future orders
- Reduction in share price.

Reputational consequences include:

- Loss of investor confidence
- Unfavourable media coverage
- Negative customer experience
- Future recruitment challenges
- Give competitors an advantage.

The CIPS Resilience Model

The Sustainability Risks



Another important layer is the one that categorises risks into one of the three recognised Sustainability 'pillars', **SOCIAL**, **ECONOMIC** and **ENVIRONMENTAL**. Most organisations have a well-defined approach to sustainability which will usually include the role that they expected from their supply chain as the close relationship connecting a supplier's sustainability performance to potential customer risk is now well established. The procurement and supply team are normally the guardians of this activity therefore any risk analysis they undertake will be enhanced by understanding its sustainability impact.

As part of our overall risk resilience approach you will be able to understand where a particular risk topic is likely to have a sustainability impact.

Social risks are typically in the areas of:

- Employment practice
- Social legislation compliance
- People management and development
- Modern slavery
- Use of child labour
- Health and safety
- Training and skills.

Economic risks are typically in the areas of:

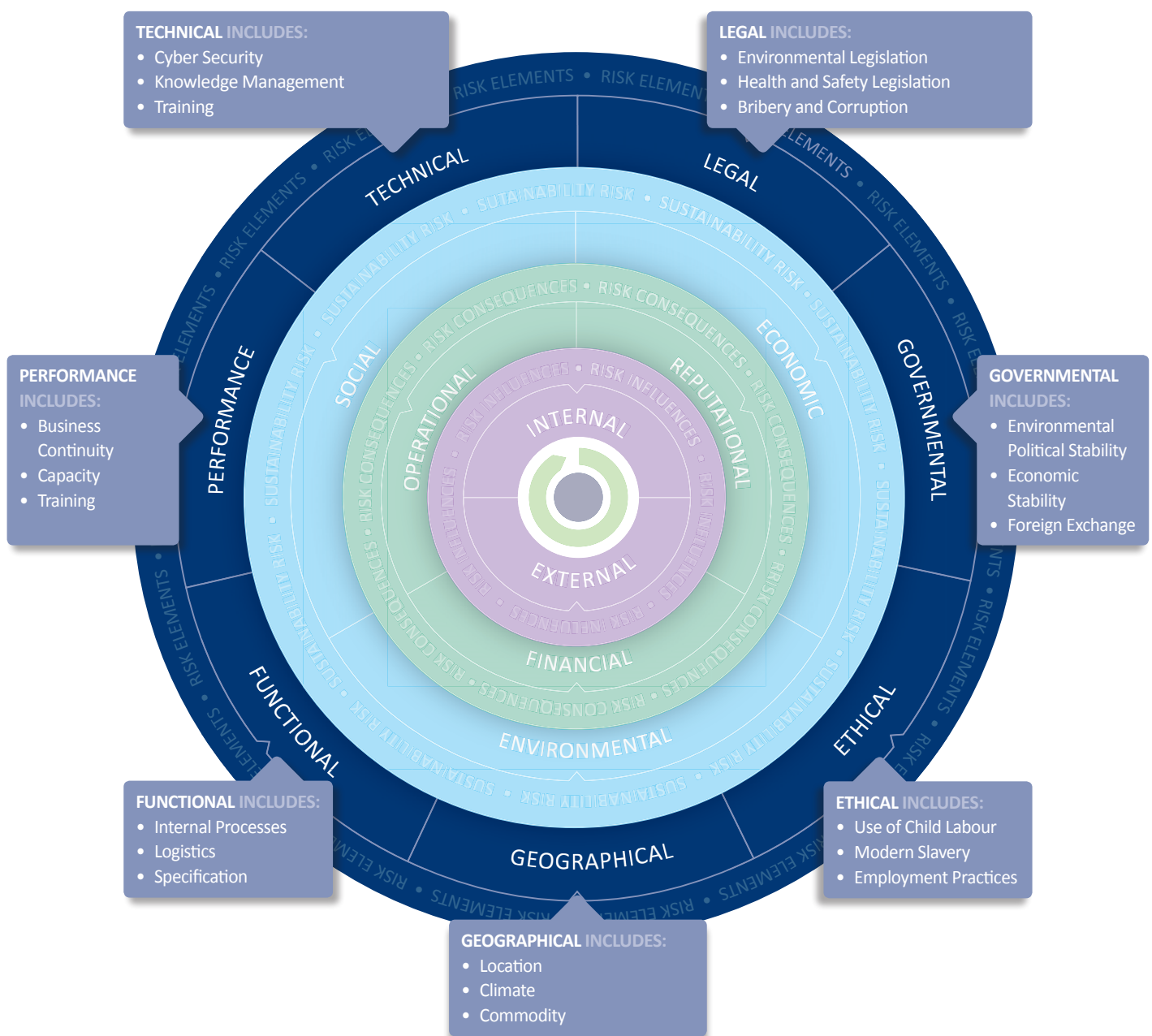
- Corporate governance
- Financial robustness
- Business continuity
- Innovation capacity
- Business integrity and ethics.

Environmental risks are typically in the areas of:

- Environmental management
- Greenhouse gas emissions
- Energy consumption
- Waste management
- Water resource management
- Sustainable sourcing challenges
- Materials and resource use.

The CIPS Resilience Model

The Risk Elements



These elements represent the individual risks' that can be experienced at some point during the supply chain process. For each of these risks an organisation has to assess the likelihood of them occurring, the potential consequences for their organisation and then ensure they have in place an appropriate risk resilience strategy for each likely event. This resilience strategy will include risk avoidance measures and risk occurrence actions.

When relating risk elements to The CIPS Resilience Model it is important to recognise that a risk may be reflected in more than one area.

For example, a supplier found to be using child labour, the resilience model will show it has the following characteristics:

- Externally influenced with likely area to be supplier and geography
- Probable reputational and possible operational and financial consequences
- Impacts on an organisation's social sustainability credentials.

Risk cluster groups

We have identified a list of risk elements which, whilst not exhaustive, does provide procurement and supply professionals with a very strong basis on which to carry out a significant analysis of potential supply chain risks associated with the goods and services that they procure.

We have grouped risk elements of a similar sort into risk clusters. This will enable buying organisations to segregate the groups of risks they analyse to potentially develop internal expertise in particular areas of risk and also to prioritise the clusters they analyse by category and/or supplier.

FUTURE WORK

Early in 2017, CIPS will be following-up on this introduction to Supply Chain Resilience with a Good Practice Guideline that will provide practitioners with the basic tools and techniques necessary to identify and mitigate against the risks outlined above and suggest approaches to embedding resilience into the sourcing and pre-contracting phases of supplier engagement.

CIPS will also be introducing an on-line assessment platform during 2017 that will help practitioners identify where specific risks exist in their supply chains.

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