Risk management reloaded
A procurement perspective

An international survey conducted by BrainNet in association with European Leaders In Procurement Network
People Creating Connected Solutions
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Risk management and procurement – two areas that have recently been the focus of numerous studies, discussions and scientific journals and articles. It sometimes seems that everything that needs to be said about these topics has in fact been said – just not by everyone. Yet so often, these disciplines are regarded as discrete entities, which in turn leads to the interface between procurement and risk management becoming a blind spot. And this is precisely where this study comes in.

On this background, the object of this study is more than just to investigate the damage potential and the likelihood of it occurring in relation to procurement processes. Even though the study offers a deeper insight into the most important procurement risks and strategies on how to deal with them, our objective goes further.

This study follows on from the fact that risk management in a procurement organization is perhaps one of the most important indicators of the organization’s strategic and tactical performance. After all, strategic thinking and tactical action can only lead to success if they are supplemented with the skill of recognizing and successfully managing risks and uncertainties.

Risk management skills are not everything – but without them, everything is nothing.

Alongside the skill of generating savings and buying in innovations, risk management is now one of a procurement organization’s core skills. Finally, risks and opportunities are two sides of one coin. Indeed, this highlights the fundamental importance of risk management for the procurement organization’s competitiveness and chances of future survival. It also raises the question of its basic self-understanding and its increasingly entrepreneurial role within the company.

All this considered, there are three basic issues which procurement is facing today: a strong necessity for focus amplification in risk management towards major current and future challenges. There is also an exigency for a reconceptualization of procurement’s role in the company. After all, the probability and damage potential of many risks is continuously rising, there is a strong need for immediate action.

Dr. Lars Immerthal
Head of Risk Management Practice, BrainNet

Sven T. Marlinghaus
Partner, BrainNet
2. Procurement is taking significant steps into new areas

There are some significant findings in this study and readers and members of our European community will find these results both interesting and useful in managing their business and procurement risks.

The issues discussed, and the subsequent results are relevant to all major organizations and we were delighted to work with BrainNet to bring these to the forefront.

In putting the results together, we reached out to over 9,000 executives, including members of the European Leaders Network, readers of European Leaders In Procurement magazine and additional academics and thought leaders operating in the procurement and supply chain arena. We would like to take this opportunity to thank those respondents for their time and input.

Procurement is taking significant steps into new areas and we are delighted to help drive debate in new fields of discussion. The answers provide a comprehensive map of procurement risks and give you new insights into the strategies and activities procurement organizations are adopting across Europe.

We look forward to, and welcome your comments on this study.

Mark Perera
Editor-in-Chief, European Leaders In Procurement Magazine & European Leaders Network
3. Analytical focus and survey design

The aim of the study was to research the most important risks in procurement, query the status of risk perception and management and identify the central analytical indications. Moreover, the study highlights the close relationship between strategy and risk management.

On this basis, the tasks were then to determine the most urgent requirements for action in the face of dramatically-changing framework conditions. To answer this question as comprehensively and as representatively as possible, more than 200 respondents were surveyed. The methodical approach was to examine the risk perceptions of participants as well as their risk management efforts in a networked way, paying attention to the interdependencies between specific risks and risk management strategies.

### Survey participants by industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Services</td>
<td>12.72%</td>
</tr>
<tr>
<td>Retail/Leisure</td>
<td>9.83%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>9.25%</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>7.51%</td>
</tr>
<tr>
<td>Utilities</td>
<td>5.20%</td>
</tr>
<tr>
<td>Public Sector</td>
<td>4.62%</td>
</tr>
<tr>
<td>Logistics &amp; Transportation</td>
<td>3.47%</td>
</tr>
<tr>
<td>Energy &amp; Mining</td>
<td>3.47%</td>
</tr>
<tr>
<td>Oil</td>
<td>2.89%</td>
</tr>
<tr>
<td>Chemicals</td>
<td>2.89%</td>
</tr>
<tr>
<td>Media</td>
<td>2.31%</td>
</tr>
<tr>
<td>Aviation</td>
<td>2.31%</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>2.31%</td>
</tr>
<tr>
<td>IT</td>
<td>1.73%</td>
</tr>
<tr>
<td>Consulting</td>
<td>0.58%</td>
</tr>
<tr>
<td>Others</td>
<td>28.90%</td>
</tr>
</tbody>
</table>
The majority of the companies surveyed operate on several continents (45 per cent globally and 30 per cent EMEA) and must thus manage the complexity and risks of global procurement, socio-cultural differences, international regulations and geopolitical uncertainties.

The companies surveyed represent a cross-section both in terms of their industry affiliation and in terms of their sales and procurement volumes. At the same time, they also represent a major macro-economic weight: More than 60 per cent of the companies surveyed have turnovers of more than Euro 1 billion; the average volume of procurement among the study participants was Euro 1.2 billion.
The study questioned decision-makers who, by virtue of their position, were directly responsible for risk management in procurement. Consequently, the respondents were senior managers with an average head count of 114 staff.

### Job titles of survey participants

<table>
<thead>
<tr>
<th>Title</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Executives</td>
<td>50%</td>
</tr>
<tr>
<td>Directors</td>
<td>26%</td>
</tr>
<tr>
<td>CPOs (incl. CEOs, CFOs, COOs)</td>
<td>14%</td>
</tr>
<tr>
<td>Others</td>
<td>10%</td>
</tr>
<tr>
<td>Others</td>
<td>1%</td>
</tr>
</tbody>
</table>

### Responsibilities of survey participants

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement</td>
<td>77%</td>
</tr>
<tr>
<td>Purchasing</td>
<td>43%</td>
</tr>
<tr>
<td>Supply Chain Management</td>
<td>30%</td>
</tr>
<tr>
<td>Others</td>
<td>9%</td>
</tr>
<tr>
<td>Operations</td>
<td>6%</td>
</tr>
<tr>
<td>Finance</td>
<td>1%</td>
</tr>
</tbody>
</table>
4. The risk evolution

The "story of risk" began in Europe with commercial shipping in the 13th century and the forerunners of modern-day insurance companies. The origins of the modern understanding of risk, which is based on the fundamental equation of risk = probability of event x damage, lie in the development of the calculation of mathematical probability in the 17th century by Jacob Bernoulli and other mathematicians. Over the last few decades, the centuries-old image of risk has broadened greatly. This paradigm shift is driven primarily by three key factors.

On the one hand, new risk management theories no longer regard risk solely as a mathematical equation, but rather as a "social construction" which is communicated by different kinds of media and is capitalized by markets. In other words, risks are generated through communication. So, a risk manager should be able to perceive risks as more than a real threat but also as damage potential that is made and evaluated constantly by markets, shareholders and stakeholders.

On the other hand, the growing networking and acceleration experienced by modern day society and its economy is also resulting in the networking of risks, and consequently an exponential rise in relevant risk events and damage potential for each individual member of the business system. The tightened regulations and legal formalization of risk management that have been introduced in recent years, especially the developments that make top managers personally liable, is also confirmation of the survival-critical importance of inadequate risk management.

The third trend lies in the growing diversity of opportunities and scope for action that companies nowadays enjoy: As already mentioned, risks and opportunities are two sides of one coin. Managing the company's risks so that they open up opportunities and generate competitive advantages therefore makes risk managers a central, driving force behind the company's development.
Procurement has steadily gained in importance over the last few years as a strategic cross-departmental function. A large number of the processes that take place between the company and its social, ecological and economic environment are related to procurement. Firstly, this means that procurement-related processes are subject to outside scrutiny and that the way we organize these processes considerably affects how the company is viewed by its stakeholders — and therefore also on how the opportunities, risks and potential created by corporate actions are perceived.

Conversely, it means that major social and economic trends and the basic values and social responsibility of the company are reflected in the procurement organization and must set the boundaries for its actions.

One key development within this wider context is the growing interest in green procurement. Although there is still no standard definition of this term, it is possible to define green procurement as procurement based on a total cost approach. In addition to traditional criteria such as product, quality and coordination costs, this approach takes account of additional direct and indirect costs of procurement. In particular, this includes the costs of environmental pollution and damage caused during the production and delivery of preliminary products. It also takes into consideration the reaction of the markets and other social players to compliance or non-compliance with environmental standards. Finally, more and more businesses are operating within the framework of all-embracing corporate sustainability standards intended to reflect the company’s aim to be a good corporate citizen.

5. A glance at green procurement
From a risk management standpoint, increasing the number of decision-making criteria turns the spotlight on risks which, in some cases, were previously assigned little importance. Green procurement also represents a focal point for the linking-up of special risks. Green energy procurement is a particularly good example of this. Using alternative sources of energy to cover an increasing portion of business energy requirements is becoming a realistic option for more and more European companies. Firstly, this reduces the damage potential of supply risks, energy price risks and geopolitical risks. Secondly, the use of alternative sources of energy allows companies to comply with the sustainability standards which they set themselves and which are required by the markets and other social players.

Looking at the green procurement development we should take one crucial point into account: Green procurement is not only about sourcing “green products”. First and foremost it is about an integrated “green supply chain” meaning that a green procurement strategy should also focus on the production of preliminary products and logistical processes. Especially in a global procurement organization this approach gains great importance.
6. Risk management in procurement

6.1. Procurement risk management landscape

Over recent years, procurement has increasingly become a strategic crossover function within the organization and one of the main interfaces to the organization’s environment with a significant impact on overall business results. This is why procurement takes center stage in risk evolution. The procurement manager needs to address these challenges by working together with other sectors of the company, but also with his strategic and tactical supplier base, to develop new tools and processes that facilitate the early identification, precise analysis and effective management of risks.

This study investigates risks that can have a negative effect on the results of procurement. The current most important risks from the procurement executives’ perspective are reflected by the extent to which certain risks are perceived as likely or very likely to occur and as having high or very high damage potential by their perception as lethal risks.

<table>
<thead>
<tr>
<th>Which of these risks do you think are (very) likely to occur?</th>
<th>Which of these risks do you think have a (very) high damage potential?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw material price risks</td>
<td>Loss of intellectual property</td>
</tr>
<tr>
<td>Availability of qualified procurement employees</td>
<td>55%</td>
</tr>
<tr>
<td>Energy price risks</td>
<td>Outsourcing</td>
</tr>
<tr>
<td>Foreign currency risks</td>
<td>Supply risks</td>
</tr>
<tr>
<td>Organizational risks</td>
<td>Compliance</td>
</tr>
<tr>
<td>Compliance</td>
<td>Supplier risks</td>
</tr>
<tr>
<td>Process risks</td>
<td>Raw material price risks</td>
</tr>
<tr>
<td>Supply risks</td>
<td>Availability of qualified procurement employees</td>
</tr>
<tr>
<td>Geopolitical risks</td>
<td>Energy price risks</td>
</tr>
<tr>
<td>Loss of intellectual property</td>
<td>Market risks</td>
</tr>
<tr>
<td>Market risks</td>
<td>Geopolitical risks</td>
</tr>
<tr>
<td>Outsourcing</td>
<td>Fraud risks</td>
</tr>
<tr>
<td>Fraud risks</td>
<td>Organizational risks</td>
</tr>
<tr>
<td>Supplier risks</td>
<td>Foreign currency risks</td>
</tr>
<tr>
<td></td>
<td>Process risks</td>
</tr>
</tbody>
</table>

Rounded figures
The survey shows, however, that the current focus of risk management in procurement is in places very different from the risks that the respondents believed to have the greatest damage potential and highest likelihood of occurrence.

What procurement risks does your risk management focus on?

- Supplier risks: 86%
- Supply risks: 61%
- Compliance: 60%
- Raw material price risks: 49%
- Market risks: 47%
- Loss of intellectual property: 45%
- Energy price risks: 42%
- Outsourcing: 41%
- Process risks: 40%
- Fraud risks: 36%
- Organizational risks: 29%
- Availability of qualified procurement employees: 24%
- Foreign currency risks: 23%
- Geopolitical risks: 16%

Rounded figures
The procurement risk management landscape shows the weighted averages of the perceived damage potential and probability of a risk and is complemented by the current focus of procurement risk management on evaluated risks.

The risk management landscape marks not only an interesting relationship between the specific risks. It also indicates an immediate need for action especially with regard to energy price risks, raw material price risks, loss of intellectual property, supply risks and the availability of qualified procurement employees.

Procurement risk management map

- Lethal = 6
- Damage Potential
- Low = 1
- Unlikely = 1
- Probability
- Very likely = 6

Bubble size reflects focus of risk management by respondents
Supplier risks

86 per cent of the respondents focus their risk management on supplier risks which thus assume the most important role by far within risk management. Nevertheless it seems like supplier risks are underestimated with regard to their probability and their close connection with preceding risks like supply, price and process risks.

41 per cent believe supplier risks to be very high or even lethal. And although only just under 2.5 per cent of those surveyed anticipate a high or very high likelihood of damage occurring, this value can vary quite considerably depending on the industry in question or indeed the company’s size. For example, 46 per cent of the respondents from the manufacturing industry regard supplier risks as lethal and 7.69 per cent think that this risk is likely to occur.

Key actions:
- Consideration of preceding risks
- Supplier development and collaboration to anticipate risks
- Early involvement of the procurement department in the product development process
Supply risks

Although supply risks are already the focus of attention for most respondents, their increasing probability is still greatly underestimated.

The growing scarcity of certain raw materials is thus becoming perceived as the most serious problem. Price rises on the raw materials markets are increasingly leading to poorer supply performance and can, in some situations, not only hamper the expansion of production but also the fulfillment of existing production and marketing plans.

The increasing probability of supply risks is still greatly underestimated.

One example of this is the scarcity of silicon, which is becoming a serious threat both for the chip and photovoltaic industry and for downstream sectors. Even of greater importance for the most industries, and indeed global economies as a whole is the scarcity of steel as well as non-ferrous metals and energy. It is therefore not surprising that in the processing industry especially, supply risks are graded as particularly probable and existence-threatening.

Key actions:
- Unlocking of alternative sources of supply
- Establishment of close partnerships with suppliers
- Governmental support for supply securing
Compliance risks

Compliance risks rank high in terms of attention – 60 per cent of those surveyed lay the focus of their risk management on compliance. Yet despite this tremendous importance, the serious consequences that compliance risks can have when they develop continue to be underestimated.

Compliance risks can not only cause major damage, but can also, in extreme cases, lead to the downfall of the company and – especially against the background of new or current legal rules such as the Sarbanes Oxley Act, Basel II, the Turnbull Report in the UK or the Control and Transparency in Business Act (KonTraG) in Germany – to criminal proceedings being brought against the company’s managers.

However, it should not be forgotten that compliance includes not only abidance by the law but also complying with social and cultural rules as well as with company’s internal standards.

Key actions:
- Clear definition of supply chain processes
- Establishment of collaboration management
- Building of commitments to defined standards and rulesment into the product development process
Raw material price risks

No other risk was assigned such a high probability by the respondents as that of raw material price risk. At the same time, almost half of those surveyed believe raw material price risk to be existence-threatening or very existence-threatening.

This ranking is even more dramatic in industries that are heavily dependent on raw materials (e.g. chemicals, utilities or automotive): In the chemical industry, for example, every single respondent anticipated a high or very high probability of this risk occurring; in the utilities industry, the proportion of respondents who shared the same view was 60 per cent.

*Raw material price risks are not only a serious threat, but they are also directly linked to other types of risk.*

Against this backdrop, the relatively low focus placed in the risk management matrix on raw material price risks and their apparently isolated consideration are cause for concern. This is because raw material price risks are not only a serious threat, but they are also directly linked to other types of risk, such as market or supply risks, and can in fact entail these.

**Key actions:**
- Adoption of new tools, e.g. financial derivatives
- Optimization of forecasting
- Process improvement via the whole supply chain
Market risks

Market risks are generally evaluated as less critical and likely. However, industries such as energy & mining, aviation or utilities, which operate on oligopolistic markets with long investment cycles, consider market risks as much more critical.

Regardless of the industry a procurement professional should put market trends on his radar screen. This means he has not only to anticipate and evaluate trends and changing conditions of his supply markets. He has to be aware of his company’s sales markets and consumer trends to assure supply and to absorb price and delivery time fluctuations. Looking backward and forward at the same time not only reveals a close relationship between market and supply risks but also demonstrates the need to broaden the perspective of procurement.

Key actions:
- Optimization of market tracking systems
- Establishment of closed communications with sales department
- Development of an entrepreneurial self-conception
Loss of intellectual property

No other risk in procurement is assigned as much damage potential as that of the loss of intellectual property. Even though only six per cent of respondents anticipate a high probability of this risk occurring, the danger is more acute.

The reasons for this include the increasingly globalized added value chains and the need to purchase innovations. This trend and the high damage potential justify a closer look at the current strategies deployed for handling risks relating to the loss of intellectual property.

The identification and harnessing of innovations and patents in the added value chain is already a key innovation driver for companies.

When it comes to protecting intellectual property, the companies surveyed in particular make use of the establishment of technical standards (50 per cent) that are associated with the brand. What’s more, as well as aggressive legal pursuit (37 per cent), the most important tools include an increased control density in the sales channels (27 per cent) and added value chain (22 per cent), along with a rapid innovation cycle (26 per cent). Purchasing plays a key role in this: The identification and harnessing of innovations and patents in the added value chain is already a key innovation driver for companies.

Key actions:
- Redefinition of procurement towards risk and innovation management
- Shaping of comprehensive monitoring systems
Energy price risks

Energy risks are likely to occur, but for a long time it has been possible to transfer them either to suppliers or customers. Thus, they are still perceived as less critical in terms of their damage potential.

As for raw materials, this is an acute risk that is however accorded less attention provided the risk can be offset through currency or passed on to suppliers. Nevertheless energy price risks seem to be underestimated, especially with regard to their interdependencies with geopolitical risks, exhausted willingness of customers and suppliers to accept risk transfers and global energy austerity on the horizon.

Against this background it is obvious that companies which have not learned to hedge energy price risks will suffer from significant competitive disadvantages over the coming years. This applies especially to airlines:

Some of those who have not established efficient fuel management have even vanished from the market.

Key actions:
- Optimization of supply chain management
- Deployment of intelligent hedging tools
Outsourcing risks

Although more than half of the companies surveyed believe the risks associated with outsourcing to be existence-threatening, outsourcing is an area of focus in risk management only among a minority.

This can be explained in certain circumstances by the relatively low probability of occurrence that the respondents associate with outsourcing risks. Two crucial factors are being overlooked here, however. Firstly, outsourcing risks correlate strongly both with the risk of the loss of intellectual property and with supplier and supply risks, especially with regard to compliance. Secondly, companies’ decreasing added value depth is leading to outsourcing risks becoming more and more important both in terms of their likelihood of occurring and their damage potential.

Outsourcing risks correlate strongly both with the risk of the loss of intellectual property and with supplier and supply risks. Companies’ decreasing added value depth is leading to outsourcing risks becoming more and more important.

Outsourcing risks

At the interface with partners in the added value chain, procurement plays an eminently strategic role: Both as a risk manager that protects the company’s intellectual capital and is responsible for the efficiency and reliability of the supply chain and also as a relations manager - one which, through consistent communication with strategic and tactical suppliers, identifies risks in good time and integrates suppliers into the risk management process.

Key actions:
- Definition of core competencies and critical intellectual assets
- Enhancement of supplier collaboration
Process risks

Process risks are perceived to be less lethal and likely in regard to other risks. At the same time, process risks are an area of focus for only 40 per cent of the companies surveyed.

These results are surprising since, especially given the critical importance of compliance risks and strategic business impact of procurement, the establishment of adequate internal control systems and processes is a core task. Experience has shown that procurement process controls are rarely effective or even in place – so there is a strong need for action.

That should be changed immediately. On the one hand the optimization of processes retrieves a huge savings potential. On the other hand process quality has a direct impact on the company’s ability to handle most other sourcing risks, especially fraud, outsourcing, and global sourcing.

Key actions:
- Buy-in of third party stakeholders
- Realizing global process compliance
Fraud risks

Although only 4 per cent of the companies surveyed regard the likelihood of fraud risks as high, one in three companies focuses its risk management system on it.

While only 27 per cent, on average, regard fraud risks as existence-threatening, the banking sector stands out: Here, over half of the respondents regard fraud risk as a significant problem. Yet procurement organizations in other industries will also need to tackle fraud risks more often in future: The discovery of such risks cannot be left to internal auditing alone, as is currently the case.

Procurement process controls are rarely effective or even in place – so there is a strong need for action.

Internationalization and complex supplier networks will allow the likelihood of fraud risk occurring in purchasing to rise continuously. And since purchasing processes can account for up to 40 – 60 per cent of the company’s overall processes, fraud can become a serious problem for the entire firm. This issue is exacerbated by the inability of internal control systems to anticipate and detect fraud, stated by every third participant.

Key actions:
- Optimization of internal processes and controls
- Realizing process compliance
Organizational risks

Only 12 per cent of respondents believe that organizational risks have a high probability of occurring. In terms of existence-threatening damage potential too, the respondents' estimates are relatively low, at 26 per cent.

Although 60 per cent of those surveyed focus on the management of organizational risks, the question arises of whether the explosiveness of an inefficient organizational structure is not being significantly underestimated.

To manage the associated economic, process-related, legal and socio-cultural complexity, efficient, transparent and flexible organizational and communications structures are essential.

The face of procurement is undergoing a fundamental change. This change is partly a result of changed framework conditions: Tougher global competition, the increasing dissolution of corporate borders within added value networks and the fact that new legal regulations are making their mark on the business sector. To manage the associated economic, process-related, legal and socio-cultural complexity, efficient, transparent and flexible organizational and communications structures are essential.

Key actions:
- Adjustment of organizational structures
- to new challenges especially with regard to outsourcing and global sourcing
- Establishment of variable and flexible networks
Risk of insufficient availability of qualified procurement employees

The “war for talents” is a reality – but one that is as yet unaddressed by risk management. It is clear that the new challenges that procurement is facing nowadays call for new and more exacting skill sets.

Although 39 per cent of respondents regard the risk of inadequately qualified procurement staff as highly threatening to lethal, and one in four believes that the problem has high or very high probability, risk management is not allocating sufficient importance to this challenge. Only 24 per cent of respondents focus on the risk that can arise from a lack of skilled managers and professionals in procurement. Procurement undeniably needs strategic thinking. That means it needs strategic thinking professionals. Procurement will only be able to carry out its role as a driver of innovation and change if it either has the right people or if it develops systematically. It can be assumed that the topic will become tremendously more important over the next few years and will become one of the key challenges both for procurement and the HR organization.

Key actions:
- Strengthening of procurement’s image as “career boost”
**Foreign currency risks**

Foreign currency risks currently seem to be among the conveniently neglected risks which procurement will have to address in the future.

The extremely high probability of the occurrence of an existence-threatening currency risk is perceived by a relatively high number, 16 per cent of the participants. The damage potential, on the other hand, is ranked as relatively low. As with raw materials, this risk is an acute one. The relatively low attention accorded to it can be partly explained by the fact that the matter is often dealt with by the treasury department.

Additionally, there is no appreciable know-how transfer between the procurement and the treasury department. Thus, the set of tools and techniques to protect against currency risks often is not applied to energy and raw material price risks which the procurement department has to deal with and the interdependence of currency and energy or raw material price risks is frequently relegated to a back-seat role. It is undeniable that procurement will in future also have to get to grips with this issue more: Early integration of procurement in the corporate strategy and financing and product development can have a significant positive effect, since all market and price risks can be influenced positively by procurement. In other words, procurement particularly with regard to risk management must become a cross-departmental function in the company.

**Key actions:**
- Enabling of know-how transfer between procurement and treasury
Geopolitical risks

One almost gets the impression that geopolitical risks are neither on the perception radar of procurement managers nor part of the practical risk management matrix. This is somewhat surprising, since geopolitical risks such as miners’ strikes, war, politically-motivated reductions in the export of raw materials, embargos or nationalization processes can have dramatic impacts. Take for example insurance companies, which, in certain contexts, evaluate geopolitical risks even higher than economic risks.

This especially applies to raw materials prices, but also to the availability of the supply chain.

Geopolitical risks are not a single event, but rather a highly networked phenomenon that has a long-term influence on the likelihood of numerous other risks occurring.

The reasons for this surprising ranking are primarily to be found in the isolated way in which they are regarded: Geopolitical risks are not a single event, but rather a highly networked phenomenon that has a long-term influence on the likelihood of numerous other risks occurring. In other words, geopolitical risks cannot be neutralized solely through sourcing from and the creation of strategic suppliers in apparently ‘safe’ countries with high political stability. And ultimately, stability is itself often a fragile condition.

Key actions:
- Continuous observation of geopolitical trends
- Take insurance companies as a raw model
However, procurement risk management is not a uniform affair: Results vary greatly, depending e.g. on the company’s size and industry. The risk exposure of blue chips is reflected by greater alignment of the attention paid to certain risks and the risks’ perceived probability and damage potential.

**Risk maps of blue chips and mid caps point on different risk appetite and focus.**

![Procurement risk management map of blue chips (turnover > € 1bn)](image)

- **Loss of intellectual property**
- **Supplier risks**
- **Compliance**
- **Market risks**
- **Geopolitical risks**
- **Fraud risks**
- **Process risks**
- **Organizational risks**
- **Outsourcing**
- **Availability of qualified procurement employees**
- **Raw material price risks**
- **Energy price risks**
- **Foreign currency risks**

**Bubble size reflects focus of risk management by respondents**

- **Low = 1**
- **Lethal = 6**
- **Unlikely = 1**
- **Very likely = 6**
- **Probability**
Some risks seem to be not fully focused by mid caps. Procurement’s underdeveloped role as a risk manager is especially striking when looking at the perceived human resource risks. Another striking difference is the perception of raw material price risks. Whereas mid caps perceive a minor likelihood they view the damage potential as being much higher.

Procurement risk management map of mid caps (turnover € 0-1bn)

- **Loss of intellectual property**
- **Supplier risks**
- **Supply risks**
- **Organizational risks**
- **Compliance**
- **Process risks**
- **Market risks**
- **Energy price risks**
- **Raw material price risks**
- **Geopolitical risks**
- **Foreign currency risks**
- **Availabilty of qualified procurement employees**

**Probability**
- Unlikely = 1
- Probability
- Very likely = 6

**Damage Potential**
- Lethal = 6
- Low = 1

**Bubble size reflects focus of risk management by respondents**
6.2. Procurement risk management – a call for resetting

The current focus of procurement’s risk management appears to be out of line with the perceived damage potential and probability of certain risks. Consequently, there is a strong need for focus amplification in risk management towards major current and future challenges. There is also an exigency for a reconceptualization of procurement manager’s role in the company. Today, more than ever he must act as a relationship manager.

Looking at the risk management landscape an urgent need for action is detected with regard to loss of intellectual capital, outsourcing, raw material and energy price risks, supply risks and human resource risks. At the same time, the way procurement deals with supplier, compliance and market risks calls for reconceptualization. Finally, procurement needs to amplify its focus in regard to fraud, process and organizational risks and take part in the management of geopolitical and foreign currency risks.
The diversity of risks and the complexity of the tasks faced by procurement nowadays call for a transparent and efficient risk management system that takes account of all relevant procurement processes.

If one takes a look at the current situation in companies, it becomes clear that this challenge is not yet reflective of reality. 30 per cent of participants do not integrate risk analysis into the strategy definition process. Often they just start their risk management when they choose their supplier, which can have fatal consequences. As well as defining the procurement strategy, risk management can be seen especially in the selection of suppliers. This result corresponds to procurement's generally high focus on supplier management.

These figures also clearly indicate that the close relationship between strategic processes and risk management is still not a matter of course, survey respondents don’t make risk analysis part of their strategy development.

**Close relationship between strategic processes and risk management is still not a matter of course.**

Even when it comes to choosing a method for managing risks, the respondents focus on supplier-oriented approaches, and in particular on closer collaboration in the added value chain, the setting of performance agreements and the monitoring of suppliers’ performance.
How do you ensure that risks are kept manageable?

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration with suppliers</td>
<td>73.83%</td>
</tr>
<tr>
<td>Increased supplier performance/increased collaboration</td>
<td>70.47%</td>
</tr>
<tr>
<td>Performance contracts with suppliers</td>
<td>67.79%</td>
</tr>
<tr>
<td>Supplier audit</td>
<td>59.73%</td>
</tr>
<tr>
<td>Performance and risk controlling</td>
<td>55.03%</td>
</tr>
<tr>
<td>Supplier rating</td>
<td>49.66%</td>
</tr>
<tr>
<td>Insurance</td>
<td>29.53%</td>
</tr>
<tr>
<td>Usage of software solutions (e-procurement, risk management etc.)</td>
<td>26.85%</td>
</tr>
<tr>
<td>Collaboration with customers</td>
<td>26.17%</td>
</tr>
<tr>
<td>Currency hedging</td>
<td>20.81%</td>
</tr>
<tr>
<td>Commodity hedging by using derivatives</td>
<td>18.79%</td>
</tr>
<tr>
<td>Vertical integration</td>
<td>8.05%</td>
</tr>
<tr>
<td>Hand-on caused costs to the customer</td>
<td>7.38%</td>
</tr>
<tr>
<td>Other</td>
<td>7.38%</td>
</tr>
</tbody>
</table>

On the other hand, financial instruments such as insurance policies or derivatives are used by only a minority of the companies surveyed. Also surprising is the relatively low use of software solutions – although their use can make a significant contribution to the creation of transparency in performance measurement and the establishment of a valid database – and only one in four respondents used software solutions to support risk management. The crucial importance of optimal processes can not be stressed often enough: They are the basis for managing all risks which are relevant in procurement. For example, you need good forecasting to optimize your demand management. A good demand management process is important and the basis for using risk management tools as financial derivatives.
6.3. Process risks
– on the right path but still some way to go

A look at the procurement processes of the companies surveyed reveals a clear need for improvement in terms of definition, documentation and IT support.

<table>
<thead>
<tr>
<th>Procurement processes: Status quo</th>
<th>Does not apply</th>
<th>Average</th>
<th>Fully applies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process risks are managed by a highly sophisticated internal control system</td>
<td>42%</td>
<td>36%</td>
<td>22%</td>
</tr>
<tr>
<td>Standardized, clearly defined, transparent and documented processes</td>
<td>19%</td>
<td>32%</td>
<td>49%</td>
</tr>
<tr>
<td>Documented business impact, strengths and weaknesses of procurement processes</td>
<td>30%</td>
<td>33%</td>
<td>37%</td>
</tr>
<tr>
<td>Roles and responsibilities are clearly delineated and communicated company-wide</td>
<td>18%</td>
<td>21%</td>
<td>61%</td>
</tr>
<tr>
<td>Interfaces are transparent and clearly defined</td>
<td>20%</td>
<td>41%</td>
<td>39%</td>
</tr>
<tr>
<td>Processes are supported by e-procurement technologies</td>
<td>38%</td>
<td>19%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Only one in five respondents admits to having a very good and intelligent internal control system and fewer than half can call on clear and standardized processes and transparent interfaces – a fact that harbors considerable potential for problems, not least in terms of closer integration with the supply chain.
The increased use of e-procurement solutions is therefore urgently required to create more transparency and greater standardization both in terms of controls and in terms of performance measurement.

The absence of an efficient internal control system may be an explanation for the inability to prevent fraud stated by every third respondent in the diagram below. The increased use of e-procurement solutions is therefore urgently required to create more transparency and greater standardization both in terms of controls and in terms of performance measurement.

As well as boosting the effectiveness and efficiency of procurement processes, the satisfaction of national and international guidelines such as the Sarbanes Oxley Act will generate strong pressure to optimize processes. This is because the wealth of new legislation that companies have been faced with over recent years is regarded by almost one in two of the study participants as a driving force in terms of the improvement of risk management and risk steering.

### Internal control/audit: Status quo

<table>
<thead>
<tr>
<th>Description</th>
<th>Does not apply</th>
<th>Average</th>
<th>Fully applies</th>
</tr>
</thead>
<tbody>
<tr>
<td>We work and cooperate actively with our legal department/audit</td>
<td>10%</td>
<td>8%</td>
<td>82%</td>
</tr>
<tr>
<td>Legal requirements regarding risk management (e.g. SOX) have triggered improvements and made risk (e.g. fraud) easier to control</td>
<td>27%</td>
<td>30%</td>
<td>43%</td>
</tr>
<tr>
<td>Our risk management in procurement detects and anticipates fraud</td>
<td>29%</td>
<td>34%</td>
<td>37%</td>
</tr>
</tbody>
</table>
Another positive sign in this sector is the active collaboration between procurement and internal auditing and, as the graph below illustrates, the positioning of the subject of risk management on the company's management agenda.

### Regulations/legal requirements: Status quo

<table>
<thead>
<tr>
<th>Statement</th>
<th>Does not apply</th>
<th>Average</th>
<th>Fully applies</th>
</tr>
</thead>
<tbody>
<tr>
<td>The risk agenda of our procurement organization is <strong>driven by legal</strong></td>
<td>26%</td>
<td>37%</td>
<td>37%</td>
</tr>
<tr>
<td>requirements/regulations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The risk agenda of our procurement organization is <strong>actively</strong></td>
<td>16%</td>
<td>26%</td>
<td>58%</td>
</tr>
<tr>
<td>driven by our management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our <strong>compliance is based</strong> on procurement guidelines</td>
<td>13%</td>
<td>24%</td>
<td>63%</td>
</tr>
<tr>
<td>Our compliance risks are very high, because we are <strong>constantly</strong></td>
<td>41%</td>
<td>36%</td>
<td>23%</td>
</tr>
<tr>
<td>dealing with new requirements (e.g. due to dynamics of sector or markets)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We are <strong>well informed about laws/obligations</strong> with regard to our</td>
<td>17%</td>
<td>25%</td>
<td>58%</td>
</tr>
<tr>
<td>procurement activities and take these into consideration in all</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transactions</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All in all, risk management in procurement still has a long way to go: The fact that risk management is unable, due to a lack of transparency, to discover fraud, is further evidence of this, as is the fact that more than a third of those surveyed still do not anchor compliance through procurement guidelines.
6.4. In the spotlight – supplier risk management

If one looks at the quality of the methods and tools that the study respondents use to anticipate supplier risks in the context of the outstanding importance attached to supplier management, the result is somewhat surprising.

Five out of ten respondents believe their key performance indicators (KPIs) to be inadequate for anticipating supplier risks well.

With regard to suppliers, which processes does your company carry out to the necessary extent?

- Evaluation: 70%
- Pre-selection: 64%
- Supplier rating: 58%
- Qualification: 55%
- Supplier audit: 51%
- Supplier performance benchmark: 45%
- Supplier development: 42%
- Audition of fundamental values of supplier: 18%
- Integration into our own production: 14%
- Supplier phase out: 13%
- Assortment: 9%

The supplier management focus is on supplier evaluation, preselection and rating. But in regard to new challenges such as global sourcing or innovation management, supplier management has to be reconceptualized and has to amplify its focus. This implies more engagement in supplier development, its integration and its performance measurement.

The missing interest in audit values and socio-cultural aspects as success-critical factors proves that a fundamental rethink is absolutely crucial, especially in regard to compliance and process risks which can be provoked by the supplier.
This unilateral focus on classic sectors and indicators is also proven by the criteria used to evaluate suppliers.

Performance measurement is mainly focused on the quality and price of suppliers and seems to lack a perspective on strategic aspects which corresponds to the quite low weighting of risk, logistic services and the competitive position of the supplier. When it comes to global sourcing, for example, criteria such as logistical risks and intellectual property risks have to be considered and evaluated thoroughly to ensure that these actions are a success. Establishing innovations on the supplier side as a competitive advantage and managing your new suppliers are only two of many success factors that calls for a different view of suppliers.

Five out of ten respondents believe their key performance indicators (KPIs) to be inadequate for anticipating supplier risks well.

Performance criteria used

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>89%</td>
</tr>
<tr>
<td>Price</td>
<td>85%</td>
</tr>
<tr>
<td>Service</td>
<td>77%</td>
</tr>
<tr>
<td>Risk</td>
<td>47%</td>
</tr>
<tr>
<td>Quantity</td>
<td>44%</td>
</tr>
<tr>
<td>Competitive position</td>
<td>41%</td>
</tr>
<tr>
<td>Logistics service</td>
<td>36%</td>
</tr>
<tr>
<td>Information</td>
<td>25%</td>
</tr>
<tr>
<td>Others</td>
<td>13%</td>
</tr>
</tbody>
</table>
6.5. Supply chain financing

If one regards supply chain management from a purely financial perspective, the considerable financial risks and uncertainties become evident. We also took a look at the approaches taken by the study participants using legacy tools to manage their working capital.

Which of the following financial approaches do you use towards your suppliers?

<table>
<thead>
<tr>
<th>69%</th>
<th>60%</th>
<th>27%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiate price reductions for earlier payment.</td>
<td>Enforce extension of payment terms.</td>
<td>Implementation of a supply chain financing program.</td>
</tr>
</tbody>
</table>

First and foremost were the forced extension of payment goals and the negotiation of price reductions, through which the supplier is paid earlier – practices that are primarily based on negotiating power. On the other hand, the subject of supply chain financing is still clearly in its infancy. The problem with the classical approaches is that they do not envisage a win-win situation and are thus not suitable for building up long-term and stable relationships with suppliers.

Classical approaches to managing working capital do not envisage a win-win situation and are thus not suitable for building up long-term and stable relationships with suppliers.

Given the major topics already outlined, such as shared risk management and integration of the added value networks, the procurement organization needs to develop financial models that are advantageous for all partners and propose a much a higher financial impact than negotiating price reductions can do.
6.6. The lethal effect of increasing and volatile prices – the crucial importance of price risks

According to survey results every third respondent experiences price volatility as a major issue for procurement targets and stable cash flows. Although the problem with price volatility is increasingly gaining new dimensions, the tools used to counteract price change risks remain the same.

Even though the risk of price changes is apparent, the use of forwards, futures and derivatives is far from being a standard tool to counteract them. 44 per cent of the respondents still offset price risks via sourcing strategies or supplier contracts. 22 per cent leave hedging to their suppliers who are to transfer the benefits. The fact that supplier contracts are no longer adequate against a background of sustained raw material and energy price increases and / or price volatility is indicated by the revelation that one in five suppliers is now no longer able to stick to his contractually-agreed prices – a development that can lead to both very poor supplier performance and supply risks.

<table>
<thead>
<tr>
<th>Which tools do you use to counteract price change risks?</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedging by fixed pricing in supplier contracts</td>
<td>74.47%</td>
</tr>
<tr>
<td>Hedging via forwards or futures</td>
<td>18.44%</td>
</tr>
<tr>
<td>Financial and commodity hedging: safeguarding against price change risks through countertrades or derivatives</td>
<td>20.57%</td>
</tr>
<tr>
<td>Others</td>
<td>20.57%</td>
</tr>
</tbody>
</table>
The influence of price increases in energy and raw materials on industry is dramatic: Rising prices have increased average overall procurement costs by 11.67 per cent, in some cases by up to 100 per cent.

A rise in procurement costs of 10 per cent can cancel out all the efforts by purchasing to introduce cost-cutting programs or create savings through process optimizations in the space of just a year. We would like to give you an example: With a raw material share between 10 per cent and 30 per cent of the total purchasing volume, a price change of 5 per cent, 10 per cent or 15 per cent for raw materials has a severe impact on profit. Depending on the share of raw materials, scenarios for profit effects ranging from changes of 5 per cent up to 45 per cent open up. This has a dramatic impact on companies’ profits and operating margin.
This model calculation once again highlights the critical importance of energy and raw materials risks. Although the discussed risks are acute and their occurrence is regarded by the majority of study respondents as highly likely, the tremendous damage potential and the correlation of these risks with other risks are not adequately perceived and companies do not have sufficient mechanisms to neutralize these risks. Accordingly, and in the production industry in particular, there is an urgent need for action.
In an interview with financial analysts, the famous business guru from Omaha, Warren Buffet, once said “Risk comes from not knowing what you’re doing”. While this statement is certainly true for investors acting in the volatile financial markets, it is also valid for purchasing managers who – up until now - seem to have been unaware of the strategic and operational risks related to the procurement function.

Evidence showing the status of risk management in procurement has now been provided in a comprehensive survey conducted by BrainNet. The results of the survey are indeed alarming: most of the purchasing departments are exposed to substantial risks because they have only a limited knowledge of what is going on in the markets, not to mention what is going on within their own organizations. They are focused on optimizing their spending and on extracting innovations from their supply base while they let the risks of their supply strategies fade out of the picture.

I know from my own experience that risk management in conjunction with sophisticated tools – though nowadays standard in the financial community - has not yet appeared on the agenda of the majority of purchasing managers. Considering the increasing impact of purchasing on the return on capital employed and cash flow and also on the fulfillment of compliance rules, it is definitely a high risk not to have a comprehensive risk management system.

The BrainNet study shows that it is absolutely insufficient to focus only on individual factors such as the price changes of commodities in an isolated manner. Purchasing managers must become aware of the diversity of risks in addition to raw material price risks and must develop intelligent risk management systems with standard processes and new tools that would help them identify and handle the risks on the supply side. Medium-sized companies, in particular, are falling behind – in spite of being subject to bank rating: there is still a long and bumpy way to go. The BrainNet study could serve as a compass.

A common saying is “No risk, no fun”. I prefer to say “No risk management, no fun”. The bottom line: purchasing managers – what are you waiting for?

Dealing with supply risks systematically is exciting, rewarding and fun. Just do it!

Dr. Robert Fieten,
Member of the Board of Association Materials Management, Purchasing and Logistics (AMMPL), Frankfurt/Main
8. Global sourcing and risks

It is well understood that the globalization of the economy will bring with it greater complexity, less predictability and an exponential growth in risk, when looking at the sourcing activities in the future.

Global sourcing developments

Sourcing is however increasingly moving to Eastern Europe, China and India – factors such as legal uncertainty, the protection of intellectual property and process safety are criteria that are clearly of growing importance here, and ones which influence decisions to grant outsourcing contracts as much as the price of the finished product does.
This study shows that often only one criterion is decisive in the choice of regions for procurement – the price – which normally is very heavily dependent on the wage level of the country in question. This limited approach might be partly responsible for dashed hopes when, in many cases, the expected competitive advantage could not be achieved, or even worse, lead to the opposite: in the worst cases, possible damage to image or reputation or a loss of top-level competitive know-how. To avoid and anticipate these risks, a systematic analysis, within the scope of a total cost analysis, of all the pros and cons involved in the selection of a particular procurement region is of vital importance. The target of this analysis is the identification of “total cost optimal” regions – and these can be quite different from the traditional low-wage countries.

Only few companies are prepared for anticipating, conceptualizing and managing risks which arise from cultural, social and geopolitical uncertainties – an inevitable part of the global economy.

The growing importance assumed by strategic sourcing from and the development of suppliers in China and India meanwhile places tremendous challenges on future procurement organizations.

At stake here are complexity management in a global procurement organization, higher requirements for innovation management and the implementation of new configuration strategies for added value products and activities that perceive the risks and opportunities inherent to them. Organization and thus also the processes will need to adapt more to the future activities of global sourcing in order to be able to manage both strategic and operational risks.
The increased inclusion of sourcing locations’ social, cultural and geopolitical aspects will necessarily become a key factor. Furthermore, dealing with global regulations and compliance rules as well as with ethical differences will be a great challenge for globally acting organizations. Global sourcing also increases the danger of damaging a company’s reputation and self-conception as a good corporate citizen by choosing a supplier who doesn’t comply with ethical, legal or environmental standards. All these trends considered, there are seven major topics a company should focus on when dealing with risks arising from the globalization of procurement:

Imperatives for dealing with risks arising from the globalization of procurement

- **Build efficient, transparent and flexible procurement processes and structures!**
- **Broden the focus and extend the toolbox of innovation management!**
- **Implement new configuration strategies for major value adding products and activities!**
- **Think in a networked and interdisciplinary way!**
- **Avoid reputation and image damage!**
- **Gain deep knowledge of cultural, ethical and social aspects!**
- **Anticipate, absorb and by-pass geopolitical risks!**
- **Handle global and national compliance requirements!**
- **Protect your know-how!**
Many companies are to a different degree used to common risks evaluated in this survey, even if they are challenged by managing them successfully. But only few companies are prepared for anticipating, conceptualizing and managing risks which arise from cultural, social and geopolitical uncertainties – an inevitable part of the global economy.
9. Conclusion and outlook

The prevailing focus of procurement risk management nowadays is on the traditional themes of supplier management, supply and compliance. In some cases, one might get the impression that risk management = risk transfer to suppliers = supplier management. The dangerous thing about this is that relationships with suppliers are rarely designed on an even and equal basis. In other words, suppliers are affected parties, but not partners.

In order to manage future challenges, procurement needs to fundamentally rethink and extend its self-definition. Procurement’s self-understanding as solely a supplier manager is no longer adequate. In future, it will become a risk manager and a relationship and interface manager in places where not only suppliers, but also other stakeholders are to be integrated. This also implies that procurement managers also need to be involved in managing the risks and processes that do not apparently (yet) fall under their sphere of influence. To do this, they need to expand their toolboxes with new tools and skills such as hedging via financial derivatives, cultural auditing, compliance monitoring, socio-cultural expertise and innovation and risk sensitivity.

Against this background, procurement in particular is facing significant risks, especially in its quest for suitable new blood: After all, it has never been confronted with the “war for talents” before.

The results of the study also demonstrate in a somewhat dramatic way how lethal it can be to regard individual factors in an isolated manner in the context of a networked world and to separate strategy development from risk anticipation and management. In order to recognize the correlations and interdependencies between the individual risks, processes and structure, procurement managers need to be able to think in a networked and interdisciplinary way.
About BrainNet

BrainNet is one of the leading international brands in supply chain consulting and qualification. With over 100 consultants worldwide, BrainNet develops customized solutions for blue chips, mid cap companies and public service organizations. BrainNet services the needs of about 220 innovative companies and organizations including Bertelsmann, CLAAS, Deutsche Post World Net, Deutsche Rente, Miele, RWE, SAP and Vattenfall. BrainNet has offices in Bonn, Boston, Budapest, Chicago, Hong Kong, Shanghai, Tampa, Wroclaw and Zurich.

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