TRELLEBORG

Part of the Trelleborg Offshore & Construction business area of Trelleborg Group, Trelleborg's engineered products operation is a leading global developer, manufacturer and provider of engineered polymer solutions to the energy, infrastructure and mining industries. Performing in some of the harshest environments on earth, its principal products are sealing systems for tunnels, a wide range of bearings, polymer solutions for floatover technology and wear resistant products for the mining industry. With local support, a track record of over 100 years and its everyday ingenuity, customers can rely on Trelleborg's engineered products to deliver innovative polymer solutions that significantly improve the quality, safety and efficiency of its customers' operations worldwide.

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The Risk Census Report

Introduction

Risk comes in many forms and affects many industries. This report from Trelleborg Engineered Products examines with robust research, how risk is perceived and managed by people across engineering industries. It will help you understand how to successfully manage a project and minimize risk.

The research

A selection of OEMs, design engineers, contractors and clients were questioned to establish what they believe to be the main areas of risk in their industry (civil engineering, oil and gas and mining). In addition, we gathered their thoughts on how their industries are changing and what they believe to be the most valuable supplier attributes for reduced risk.

The sample of respondents is split by the job roles specified above, so that the data can be used for benchmarking purposes.

The results are segmented into three subject areas:

1. **A changing industry**
2. **The right supplier**
3. **Expertise and competency**

Preface

The demands placed upon supply chains are constantly spiraling as projects are forced to go faster, deeper and longer. Against the backdrop of these everyday stresses and strains, clients are looking for ways to reduce their potential risk exposure, many through third party suppliers.

However, with questions such as “who is the right supplier for me?”, “at what stage within the supply chain should I introduce a supplier?” and “what are the best practices for reducing risk?” looming over the industry, it can be difficult to know how to approach a partnership.

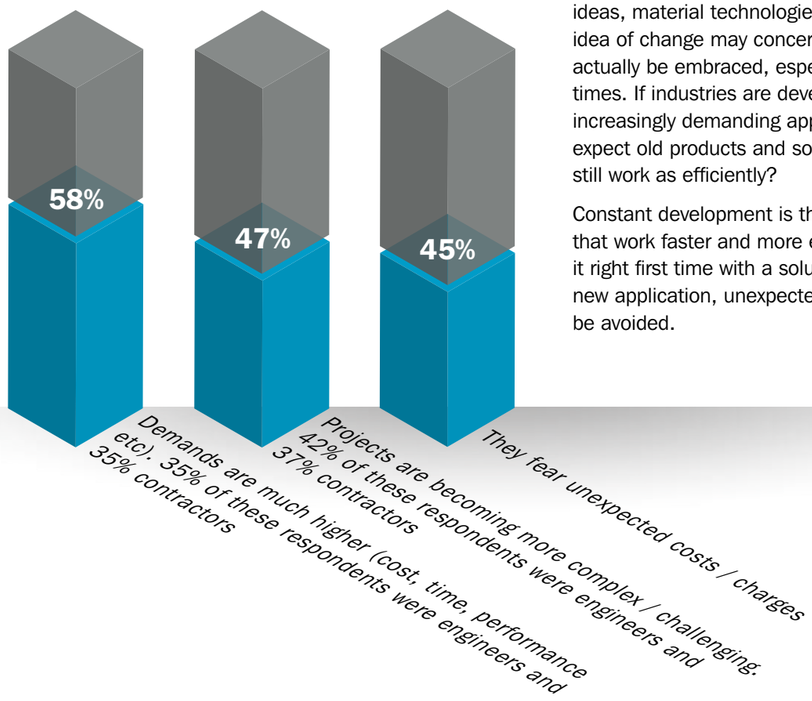
It’s the supply chain made up of expert and knowledgeable suppliers, who communicate clearly and offer meaningful input at the initial design stages that will help to keep challenging projects on track and reduce risks.

A changing industry

Key statistics

55% **said they had experienced a increased level of concern within their industry and that people are seemingly taking fewer risks – 52% of those were engineers**

Top three reasons why people think supply chains are becoming more risk averse:



Trelleborg says

In developing industries, corporations operating in increasingly demanding environments need to proactively keep up or risk falling behind. Managing large scale projects in these times of change will bring risk, but how much is dependent on the way each part of the supply chain responds. Similarly, by understanding the role of a supplier, as well as how and where they can best have an involvement in the project, risks can be dramatically reduced.

It’s clear from the survey that a large majority of respondents are concerned about more complex projects, rising costs and tighter timelines, so they are playing it safe to protect themselves from risk. But is there a worry that this could be at the expense of performance or innovation?

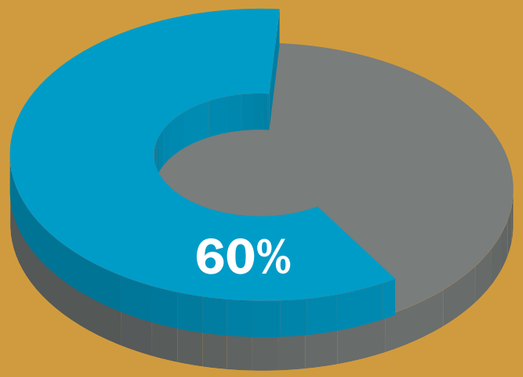
To innovate is to make changes in something established, especially by introducing new methods, ideas, material technologies or products. While the idea of change may concern many, we believe it should actually be embraced, especially in more challenging times. If industries are developing and adapting to increasingly demanding applications, how then can we expect old products and solutions to stay the same and still work as efficiently?

Constant development is the only way to find solutions that work faster and more efficiently and by getting it right first time with a solution that is meant for its new application, unexpected costs and delays can be avoided.

The right supplier

Key statistics

72% **of people surveyed said they have outsourced work to suppliers specifically with the aim of reducing risk – 46% of those were engineers**



60% said that most or all of the time, they would improve the specification of a product in order to reduce risk in the long term

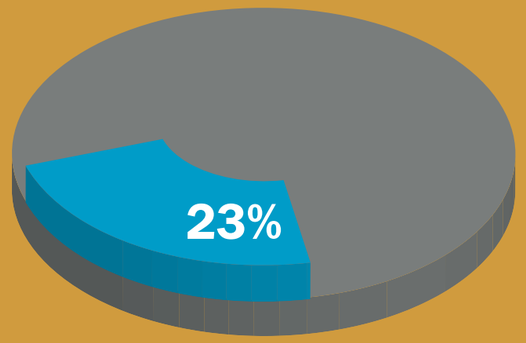
Trelleborg says

Much of the industry, especially engineers, are now becoming accustomed to using third parties to benefit their projects. However, if not managed properly, this relationship can actually bring more risk. As mentioned, by working closely with the right supplier – one that can offer experience and expertise and provides the most suitable product for the application, the likelihood of having to change the product specification further down the line should be reduced. This will significantly decrease the risk of unexpected costs and setbacks.

However, proof through stringent testing is also vital here. A supplier that can produce new sophisticated designs and concepts should also be able to guarantee the performance of the product in its application through full scale testing. This is ensured through rigorous and thorough analysis such as full-scale tests instead of models wherever possible.

Key statistics

50% **of people said supplier reliability and trust, and increased supplier cooperation and communication (58%) would reduce their risk exposure**



Only 23% said they believe formal written guarantees and references would best reduce their risk exposure

Trelleborg says

While written documents play an important role in project management and choosing the right suppliers for the job, it is clear that the industry increasingly values the cooperation and experience of, and the relationship they have with the supplier. One supplier might be right for one job, and one for another. Recommendations are valuable, but a good rapport with your supplier is important.

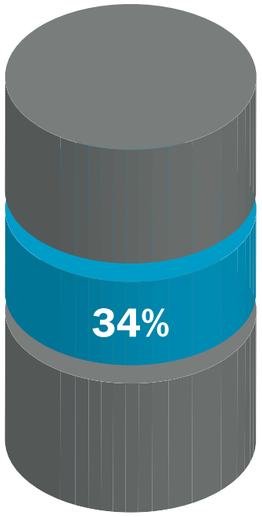
They should be able to offer dedicated account management, design engineering assistance, technical support and more. One technique which is becoming increasingly popular is the use of online tools. A forward-thinking supplier with a suite of technical or service-oriented apps can add additional value to the human contact and input that they provide.

All of these techniques can help to uncover any potential risks early on and ensure that the project continues to run to plan, without risks.

Expertise and competency

Key statistics

58% **said they would introduce supplier involvement at the early design stage to reduce their risk exposure**



34% said that they believed engineering to be the most risk averse part of their organization

Trelleborg says

It is clear that the earlier the involvement from the supplier, the better. By enabling the correct people with their specific expertise to be involved at the beginning, decisions can be made (or influenced) by the right people: an iterative process makes specification more precise and tailors design to the application, early. It is especially vital if it is a global project, as this opens more opportunity for error across countries and potential language barriers. A high level of integration and transparency will bring the least risks.

Specifically, the majority of those surveyed perceived engineering to be the most risk averse part of their organization. So, naturally if any potential risks aren't ironed out in the early design stages, it's likely that these will surface during engineering. If this occurs, the project would become very vulnerable to unexpected costs, time delays and additional complexities.

Key statistics

63% **believe that product innovation can still offer security in its testing procedures and results – 45% of those were engineers**

Trelleborg says

By following the right testing processes and procedures, the right supplier with the right expertise and experience can also provide solutions which, in each application, will remove risk and cost concerns from the project. So while much of the industry might rather stick with a product they've used before, this may not be the best solution for the job, or for reducing risk overall.

An industry open to innovation – founded under the correct procedures and backed by stringent testing – could result in better projects and risk minimization.

Conclusion – the ideal supplier

There are many possible risks, such suitable internal expertise, choosing the right supplier and facing challenging industry demands. These require a process for determining and managing them, on a project by project basis, to control them.

One element that is clear from the survey is that a supply chain which promotes the right attributes and expertise is vital to protecting the project. The top voted attributes are:

- Track record
- Good previous relationship / references
- Depth of expertise in your field
- Project delivery on time

It may seem simple, but without the latter points, good project management and coordination with the rest of the supply chain, speed to market and a bespoke or defined process, could mean processes still come up against issues. The supplier that can provide a service in addition to the product it is hired to deliver, will be most likely to help keep the project on track and risk levels low.