

**CONSULTING  
RISK ENGINEERING  
RISK MANAGEMENT  
TRAINING**

Inspired Solutions LLC is the preferred network partner for Risk Engineering Associates and the reference for outsourced Risk Engineering Services for the international insurance market.

Inspired Solutions is your trusted network partner delivering highly flexible, effective and efficient Risk Engineering services.

Inspired Solutions offers a wide range of services geared towards the insurance market. The associates provide a broad spectrum of network management support, field services and training.

The team comprises a network of self-employed Risk Engineering Associates with a minimum of 20 years of working experience in the insurance industry, with proven competences and skills.



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**Hazard Analysis  
Risk Management**

Consulting  
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# Hazard Analysis

## A SYSTEMATIC APPROACH TO RISK ASSESSMENT

Risk assessment often applies statistics but where reliable data is not available a comparative assessment could bring the outcome. Hazard analysis is an inductive methodology where potential failures can be identified upfront. It therefore allows for risk elimination, reduction and mitigation prior to an incident.

The Hazard analysis is a powerful start of the risk engineering process, resulting in strong risk management engagement within an organization.

By assessing each hazard as to its comparative probability of occurrence and its comparative severity, a hazard catalog can be defined for each imaginable application.

The scope of the analysis as well as the pathways for the analysis should be clearly defined upfront for the correct focus.

A good hazard analysis is conducted by a multidisciplinary team from different disciplines like production, value chain, finance, quality, legal and HR.

## WHAT TO CONSIDER

- the methodology
- scope of the analysis
- the team
- hazards and hazard identification
- lines of defense
- severity categories
- probability categories
- risk profile
- \* tolerance boundary
- risk mitigation

## ‘The perception of risk is driven by experience’

### FROM HAZARD TO RISK

Risk Assessment starts with hazard identification. Hazard is defined as a potential threat without knowing the probability of occurrence or what the severity of such occurrence might be. The assessment step in the process provides a probability and severity to the hazard from multiple viewpoints. The existing lines of defense are taken into consideration. The assessed hazard is known as risk and its acceptability can be addressed. Defined severity categories and probability categories support the assessment process.

### RISK PROFILE

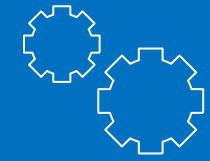
The assessed hazards are plotted in a risk profile with probability and severity scales. A tolerance boundary is defined based on the risk appetite of the team or the organization. Risks within the tolerance boundary are considered acceptable while those outside the tolerance boundary require risk mitigating actions.

### RISK MITIGATING STRATEGY

Risks that are considered unacceptable could be mitigated by either reducing the likelihood of occurrence or by eliminating or reducing the severity. Risk mitigating measures follow the risk reduction hierarchy.

- **Eliminate** implies that the hazard is simply removed wherever possible.
- **Reduce** means that the likelihood and / or the potential consequences of the hazard are treated.
- **Transfer** of risk includes insurance, but also e.g. outsourcing of activities to a third-party.
- **Tolerate or Retain** a risk means to accept the potential impact because the cost of mitigation outweigh the benefits.

All risk reduction actions are assigned and scheduled to assure follow up. Inspired Solutions LLC can support with Hazard Analysis or train your organization in effectively conducting this analysis in-house.



**RISK ENGINEERING**  
Inspired Solutions offers hands-on risk engineering services comprising field-oriented services, distant interactive assessment (DIA), plan and project review, risk improvement follow-up and account engineering.



**RISK MANAGEMENT**  
The risk management services of Inspired Solutions include Business Continuity related services such as defining the Strategic Risk Management approach, Business Impact Analysis, Hazard Analysis and Total Risk Profiling.



**TRAINING**  
The training package of Inspired Solutions can be tailored to the needs of an organization and ranges from basic risk engineering activities to detailed risk management support for top management.