



Risk management



Risk management aims at to reach and/or exceed the objectives of an organization through conscious handling of opportunities and risks. Events, actions and developments are judged for their potential to prevent an enterprise from reaching its objectives and successfully implementing its strategy.

Swiss Association for Quality and Management Systems (SQS)

Bernstrasse 103, Postfach 686

CH-3052 Zollikofen

Tel. +41 31 910 35 35

Fax +41 31 910 35 45

headoffice@sqs.ch

www.sqs.ch

1. How is it done and who is concerned?

Risk management is a task of management of the enterprise and contributes to an increase in output and improvement in efficiency of an organization. Thus safety requirements can be implemented and the achievement of the goals of organizations and systems ensured. Risk

contains opportunity as well as the potential for harm. Scenarios are imagined according to probability and effect. Risk does not only cover suddenly occurring harmful events but also unexpected, slowly changing erroneous trends.

2. The use of a risk management

- Improving the scope of action of the business
- Identification and management of enterprise-wide risks and opportunities
- Early recognition (early warning system), minimization and overcoming of dangers and risks
- Prevention of business surprises and minimization of losses
- Long-term future security
- Survival of the organization
- Optimization of the employment of capital and securing long-term productive capacity
- Recognition and conversion of opportunities for the enterprise
- Risk control → perceive opportunities better
- The improvement of communication as well as handling risks and opportunities

3. Methods of the risk evaluation

There are different methods which have worked in practice. The **FMEA** method (Failure Mode Effects Analysis) has been implemented particularly in the automobile industry, with medical instrumentation and other technical systems. The **HAZOP** method (Hazard and Operability Study) is used in the chemical industry. The **HACCP** (Hazard Analysis and Critical Control Points) is implemented particularly in the foodstuffs industry. Other methods of the risk evaluation include the **Fault Tree and Effect Analysis** as well as the **Value at Risk** method.

A common method of risk evaluation is the **risk matrix**. It is suitable both for risk management in organizations (enterprises, non-profit organizations etc.) and for systems

(products, services, processes, projects). The method of the risk matrix has the goal of finding the most important risk scenarios for a given system and to represent the effects in a risk portfolio according to categories of probability.

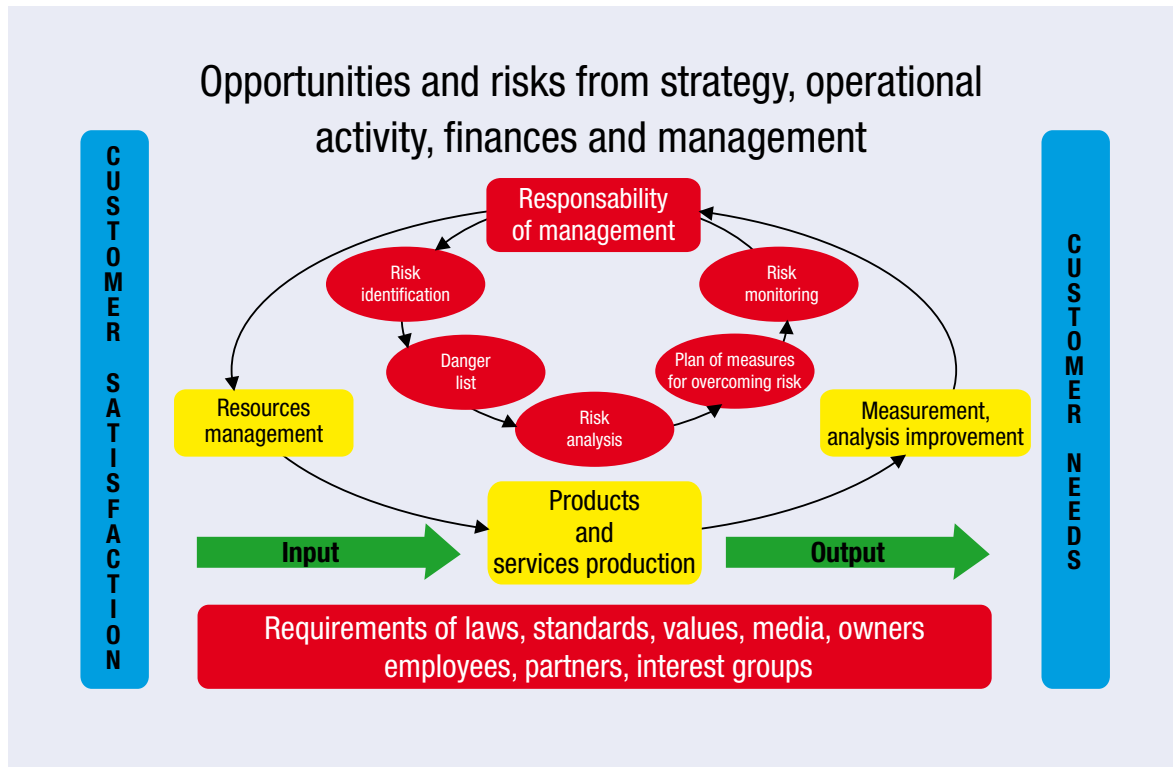
Risk evaluation is concerned with the question of when a given risk can be supported and thus can be accepted by the risk owners. For this purpose, a risk tolerance limit is often applied in the risk landscape. So one can say that risks lying above this limit are, in principle, not to be tolerated while risks below this border are acceptable.

4. The risk management system

The risk policy is derived from the policy of an organization and is planned, implemented, monitored and constantly improved by top management. Risk management is the task of management.

The management systems developed in accordance with the ISO 9000 model are very suitable. Worldwide implementation of management systems in accordance with the ISO 9000 family has reached a peak with some

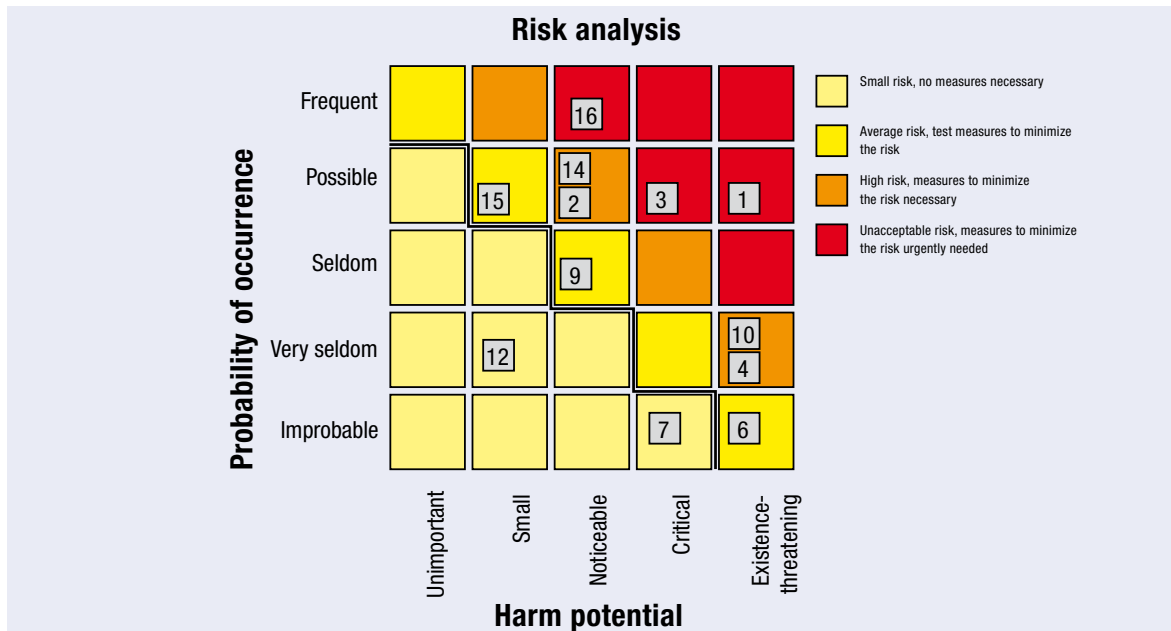
800,000 implementations. It is therefore of importance that the risk management can be implemented as smoothly as possible and thus economically in the management system. The starting point is the enterprise model which moves in the area of potential conflict of customer needs and customer satisfaction as well as the requirements of stakeholders. The management process also embraces risk management.



5. How does one proceed?

The process of the risk management includes the following steps:

- The **system definition** serves for the preparation, in order to carry out risk evaluation. Clear company targets must be specified in the context of the organization by the management. The risk evaluation is the basis for the recognition of potential risks and opportunities on the way to achieving company targets. The goals should not only be embodied in the heads of the management but also written down on paper.
- As part of the **risk identification**, all possible risks are listed in the form of a scenario. The checklist is also often called the **danger list**.
- The **risk analysis** covers the evaluation of the scenarios according to the criteria of probability of occurrence and potential harm. It also contains the analysis of the causes or the malfunctioning. The evaluated risks are transferred into the matrix. On these bases, the management decides which risks are tolerable and which must be given priority.
- In the course of **overcoming risk**, measures are introduced based on the information obtained in order to avoid or reduce the risk.
- The task of the **risk monitoring** is it to ensure that the measures for overcoming risk are correctly implemented. The monitoring can be one of two kinds: as a sequential activity or as periodic examinations. The sequential monitoring takes place in real time and can therefore be situational and react more rapidly to changed conditions. It is therefore more effective than the periodic examination.



Example of a danger list at a trust company

No.	Danger area ⁰	Risk description	Occurrence probability ¹	Harm potential ²	Responsible	Measures	Date
1	Strategic threat Current business activity	Dependent on few customers, loss of customers leads to dismissals	possible	existence threatening	XY	Enlargement of the customer base by focusing on another industry, preparation marketing plan	December 20xx
4	Management and employees Employees Behaviour	Fraud by an employee/ Image loss	very seldom	existence threatening	ZY	Check authorization to sign, check approval process, check monitoring process	June 20xx
6	Management and employees Unfair, unallowed business practices	Inaccuracy (lax, cursory, not serious) Implementation of business standards	improbable	existence threatening	ZY	Function audit by superiors customer surveys, instruction and further training	Two times per year until June 20xx every 2 months
10	Operational threat Dangers for production facilities	Inundation of office premises	very seldom	existence threatening	XX	New computer room on the 1 st floor of the building, examine location transfer	July 20xx January 20xx
16	Financial threat Liquidity and payment failure	Exceed the credit limit. High interest charges by the bank	frequent	noticeable	ZZ	Improve reminder process, improve liquidity planning	October 20xx

⁰ Danger areas: Strategic threat; operational threat; financial threat; management and employees

¹ Frequent = weekly; possible = monthly; rarely = annually; very rarely = every 5 years; improbably = < 5 years

² Insignificant = < 5 000.-; small = < 10 000.-; noticeable = < 50 000.-; critical = < 100 000.-; existence-threatening > 100 000.-

6. Services of the SQS

The SQS offers you the following services:

Preliminary discussion

We shall be pleased to clarify for you in a preliminary discussion the whole topic of risk management and the concrete procedure. We support you with the development and with the integration of your system.

Workshops

With our practical Workshops, we offer you comprehensive instruction and further training for your employees. The instruction also allows certification of the risk manager.

Audits

The SQS integrates the risk management system covered in the Standards ISO 9001, ISO 14001 and OHSAS 18001. Thus it can be checked whether the fundamental elements of the risk management system are present and functionally integrated in the management system.

We help you through our audits in the evaluation and further development of your risk management.