June 22, 2011 (Wednesday) 55th EOQ Congress

CONCURRENT SESSIONS — **Wednesday 8:30 – 12:30**
KEMPINSKI HOTEL CORVINUS — **Erzsébet tér 7-8, Budapest V.**

REGINA BALLROOM III. — **Wednesday 8:30 – 10:30**

21.1. FUTURE OF QUALITY AND RISK MANAGEMENT

Session Chair: ***Gregory H. Watson,*** *Acting Chairman and President of the International Academy for Quality, Finland*

9.00 **The Future of Risk Management**
Olav F. Finsnes, Norwegian Society for Quality and Risk Management, Norway

Finsnes, Olav F. (Norway)

He earned Bachelor degree in Naval Architecture as well as Master of Business and Economics. President of Norwegian Society for Quality and Risk Management (NFKR), CEO of Quality Management Scandinavia who supplies training and accredited certification of Quality Managers, Quality Auditors, ISM (Norwegian School of Information Technology) auditors and Risk Managers. He worked as consultant for numerous companies within oil & gas, shipping and industry. Trained the ISM auditors of Norwegian Maritime Directorate for 16 years. He is Quality Manager for Aker Engineering and Quality Manager for Ula oilfield development. He worked as quality consultant for Det Norske Veritas.

The future of Risk Management

Presentation to EOQ World Quality Congress in Budapest, 2011

By Olav F. Finsnes
President of Norwegian Society for Quality and Risk Management (NFKR)
CEO of Quality Management Scandinavia AS

Impact of Risk Management

The ISO 9000 standards have significantly influenced management systems throughout the world. But we are now at the dawn of seeing a new development in management systems.

Managers have always tried to navigate their organizations through uncertainties, to avoid threats and have benefit from opportunities. But in most cases, this navigation has been intuitive, based on the mangers' perception of what might be threats and opportunities, and their magnitude. With risk management, we now have to identify them in a structured way, and rate their magnitude in numbers or qualitative units. These magnitudes will never be "correct", too much estimates are involved, but it is a lot better than intuition. It will be a great help for managers in making more precise decisions to obtain their goals.

The nature of risk

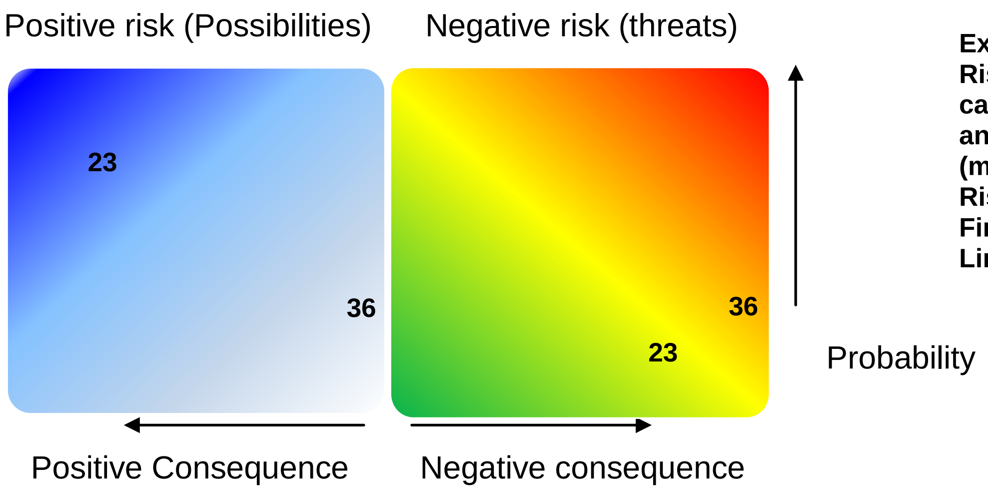
Understanding the nature of uncertainty, or risk, is necessary to understand risk management. Acceptance of risk is subjective. One person may say that travelling in airplanes is not safe, another person have a different view. It is the same for organizations, one have risk aversion or risk appetite that is different from another organization. Therefore it is important to define risk objectives and limits for acceptable negative risk.

Peoples' perception of risk is not rational. I asked my wife if she would make a bet of € 100.000 with 60% probability to win. She said no, she could not afford to lose. We buy tickets in lotteries and know that in the long run we will lose. But the possibility to win the great prize is enough motivation to overcome this. The reason is that the loss will be small. This is an essential aspect of risk: We have to protect ourselves from losses that will be exceptionally harmful. So there is a significant element of emotion in risk, risk cannot only be dealt with in a rational manner and in numbers, the subjective element is always present and may overrule a logical decision. But then, at least we know what we do.

Positive and negative aspects of risk

Risk, as we traditionally have seen it, is negative, a threat, something to avoid. But risk is also something positive, the risk for something happening that we desire, often called an opportunity. The first standard the pointed this out clearly was NZS/AS 4630 "Risk Management" and it has been carried forward in ISO 31000.

The greatest benefit will probably come from the emerging attitude to consider positive risk (possibilities) as part of risk management. Many possibilities for gain have been lost because we have a habit of focusing on negative risk. We will gradually learn to use risk management to find new opportunities. Some organizations have already an internal requirement that a negative risk shall always be investigated for positive effects, and vice versa. Some operate with positive and negative risk matrix combined, requiring an analyzed risk to be marked in both matrixes.

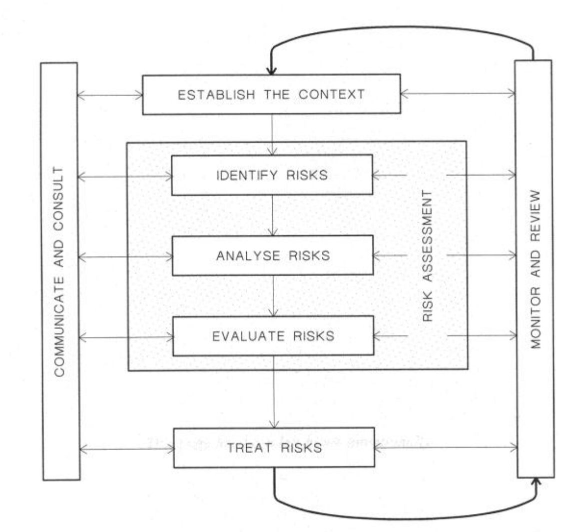


Example:
Risk register item 23, risk capital investment. Linked and adjustable consequence (magnitude of investment).
Risk register item 36, Fire/explosion in factory. Linked probability.

An example where both the negative aspects and the positive risk have to be considered at the same time, is in risk investments. A share may lose and gain value, so we must consider both.

Identifying risk

So, where do we look when we are searching for risks, negative and positive? My first experience with risk was a group of people doing risk analysis of the possibility for a ship getting engine failure when passing a dangerous strait. When they analyzed, it happened. A plastic bag was sucked into the cooling system, and the engine shut down. I asked them if this possibility was in their model, but they said no, they only looked at internal matters. It gave me a profound distrust in risk analysis, and showed its shortcomings: We don't analyze the right things. But ISO 31000 have an activity in the operational model called "Establish the context". This is the key to real risk management, a system for risk identification. Find where the threats and opportunities really are.



Understanding this subject in the operational model is important to successful risk management. First, we have to define all conditions, stakeholders and their stakes, externally and internally. The stakeholders are all parties that are, or may be, influenced by the activities of the organization, in a positive or negative way. There should be no limit in identifying these stakeholders and other conditions, we need a picture as complete as possible.

External stakeholders/conditions may be the competitors, market situation, the bank, the insurance company, the tax office, the local community, etc. The most significant internal stakeholders/conditions may be the employees, their family, business goals, etc.

When the stakeholders are identified, we can leave out the stakeholders with little potential for risk, and concentrate risk identification on the more probable stakeholders. The idea of this exercise is to avoid leaving out significant risks because we just didn’t think of them. This system leads us to the most significant risks, and then we can choose which ones to analyze in more detail.

The role of risk in future management models

Future management models will probably be heavily based on risk management. Factual approach to decision making is one of the 8 principles of ISO 9000:2005. All decisions involve consideration of risk, but factual data have not always been available. We are moving from making decisions mainly based on assumptions and intuition to base decisions on data achieved by a consistent system.

Risk management is heavily reliant on Quality Management. Without reliable document control, incident reporting, etc. implementation of risk management will not be successful. When the quality systems are working satisfactorily, it is a natural development for Quality Managers to expand into risk management, just look to the new ISO 9004.

Obviously the Quality Management System and the Risk Management system will merge. We have already seen it in Norway. The title “Quality and Risk Manager (QRM) has become common in the Norwegian oil and gas industry, and the large oil companies require their main contractors to implement risk management systems according to the guidelines of ISO 31000.

Certification of Risk Managers

To satisfy the need for qualified Risk Managers, we have for 5 years been running a certification scheme, first based on NZS/AS 4630 and later on ISO 31000. The certification is accredited by our national accreditation body. So far 170 Risk Manager certificates have been issued, and the demand from persons and organizations is steadily increasing. We can already see the demand for a scheme for Risk Management certification of organizations.

Closing remark

In a survey of large to medium size companies in Norway, 70% of the CEO’s said risk management is very important for their companies’ future, but only 30% of the same CEO’s had done anything active about it. This will change.