Risk Management in Projects

Proactive risk management is an established methodology in project management and is widely used for large projects. The method involves systematically identifying risks with respect to their potential impact on the project and defining measures for avoiding risks and minimizing their effects. KLUSA provides project managers and the project team a comprehensive tool to help them deal with these tasks and meet the information requirements of managers. KLUSA comprises

- the identification and description of risks,
- the assessment of risks according to their probability and their impacts,
- risk monitoring and
- the definition and tracking of measures taken to manage risks.

For the purposes of risk management – in addition to the standard method of project risk management – KLUSA also supports the Failure Modes and Effects Analysis (FMEA) method. Both methods can be used and reported within a project.

Measuring and Assessing Risks

The project manager can measure risks either in the form of standard project risks (e.g. DIN 69901-2) or as technical risks classified according to the FMEA method. The probability of occurrence and the impact can be measured qualitatively in addition to the name, category, responsible or status. The project manager can allocate risks to work packages and milestones.

The risk value of each risk is calculated from the probability percentage and the resulting costs if the risk would occur. In addition to the risk value, the expected delay on the project completion date can be documented.

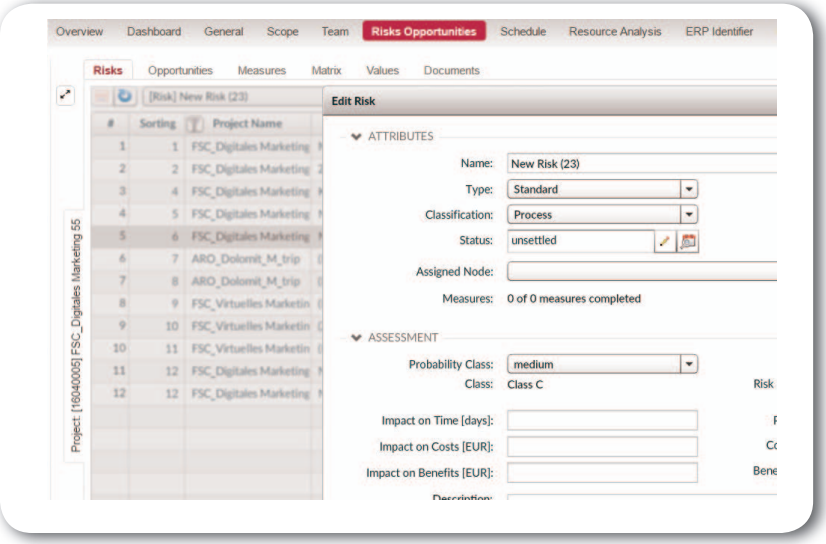
The risk status as well as all other aspects of risk assessment can always be modified so that it is possible to actively manage risks during the project. The modified risk data is saved in the regular project reports, creating a history of how risks have evolved in the course of the project.

Standard Project Risks

Standard project risks are entered with a name, category, probability class, and impact class. In addition, KLUSA makes it possible to track the status of the risk, to specify the effect in terms of days and cost in the system currency, as well as to store the probability of occurrence as a percentage. Based on these parameters, KLUSA calculates the risk priority number and the risk class.

The risk status, probability classes, impact classes and risk classes can be adjusted individually to meet the needs of the customer.

In addition to the standardized parameters for risk assessment and analysis, the risk can also be given a text description.



Input form for risks

Risk Management in Projects

Technical Risks: FMEA Method

In addition to the features already mentioned, severity, occurrence and detection are added to the technical risks that are assessed using the FMEA method. These characteristics can be entered on an integer scale of 1 to 10. The size of the scale can be reduced on a customer-specific basis. The product of the three key figures yields the risk priority number. The risk priority number is the main criterion for assessing risks using the FMEA method.

KLUSA ensures that the criteria used to identify the risks with the FMEA method can be translated into the criteria for identifying standard project risks and vice versa. This allows both types of risks for a project to be shown together in the risk matrix and risk trend analysis (RTA).

Risk Measures

The project manager can also define measures for dealing with each particular risk. These measures are employed to minimize or avoid specific risks. Each risk and each measure can be assigned to a responsible person. The versatile system of rights and roles in KLUSA gives risk managers the power to manage the risks »belonging« to them.

Regardless of the type of risk, any number of measures can be saved in KLUSA for each risk. A measure is defined by its name, an optional description, a responsible, a due date and a prevention strategy.

In addition, a start and end date can be defined for the measure. The software can be configured so that the responsible person and, if desired, the project manager, receives an e-mail notification if the measure has not been started or ended on time.

Risk Analysis and Risk Monitoring

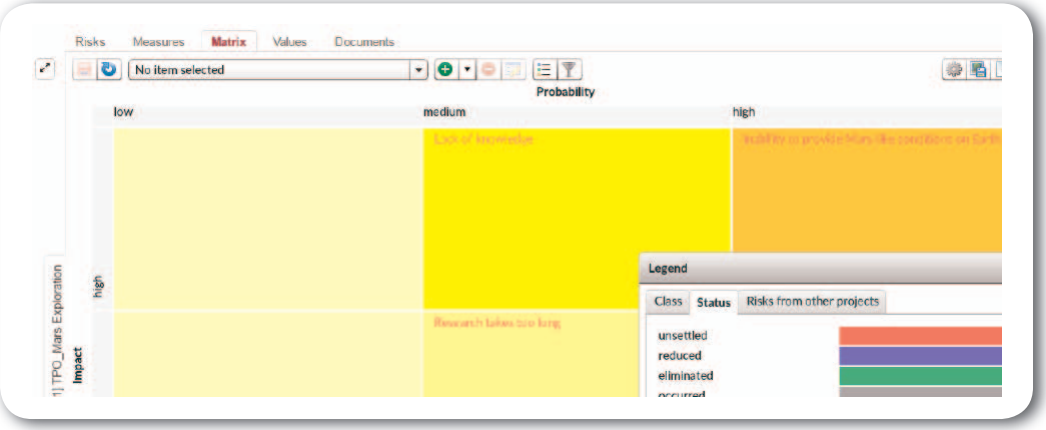
KLUSA generates various diagrams illustrating the risks in a specific project. This allows project managers and management to gain a fast and comprehensive picture of existing risks.

Risks for specific projects and across multiple projects can be shown in the KLUSA module Management similar to a risk register.

The Risk Matrix

KLUSA generates a matrix within a project containing each risk, based on the dimensions of probability and impact. This provides an overview of those risks most likely to occur and that would have a significant impact on a project. The customer can define each class according to his specific needs.

The risks are color-coded according to their status. For example, active risks are shown in red and risks that are no longer relevant are shown in green. The colors of the risk classes, type and number of risk status, as well as their color, also can be defined by the customer

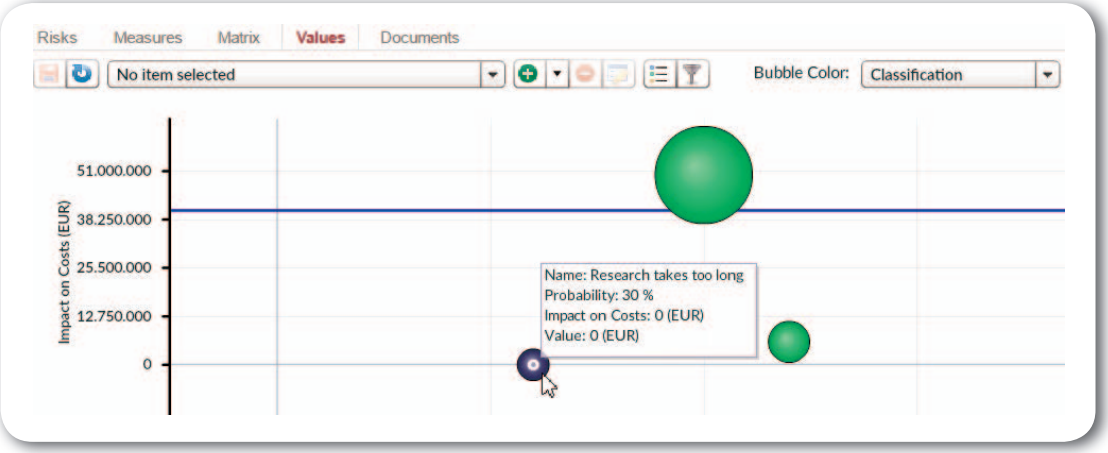


The risk matrix is a well-known way to quickly and easily visualize risks

Risk Management in Projects

Risk Values Diagram

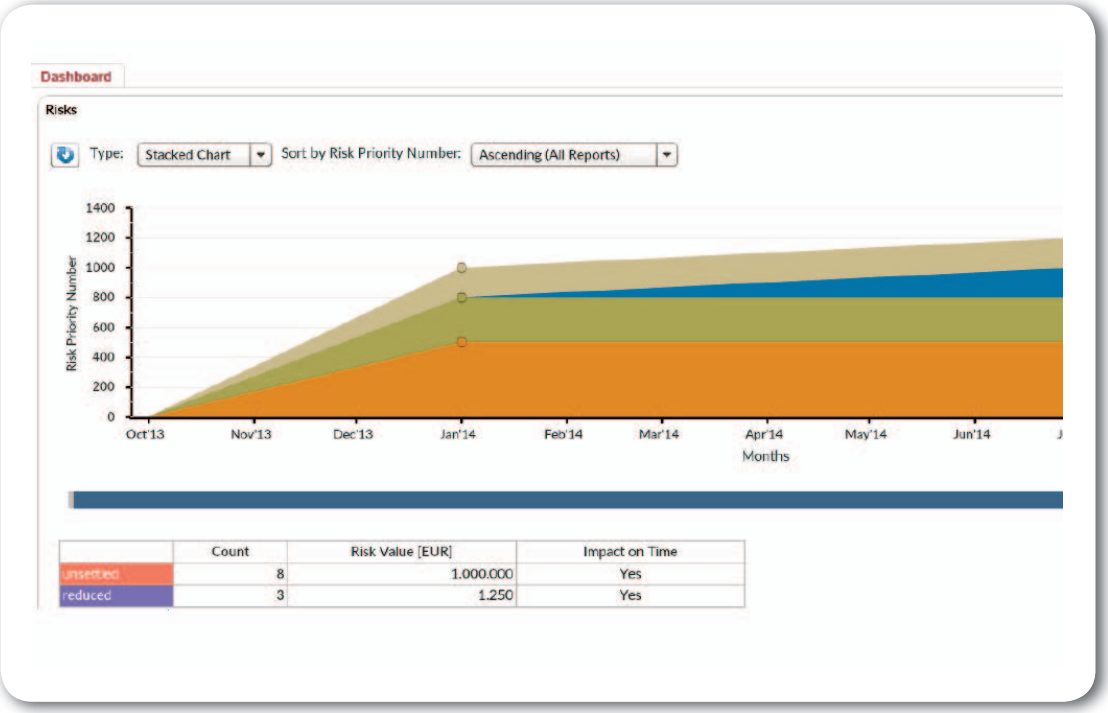
KLUSA shows the risks of a project in a bubble chart that represents the impact on project costs and the likelihood of occurrence. These values are classified by comparing them against the approved and plan costs of the project. The size of the bubbles depends on the risk score (product resulting from impact on costs and likelihood of occurrence). The user-definable color of the bubbles is determined either by risk status, risk class or risk category.



In the bubble chart risk values can be compared to project costs

Risk Trend Analysis

Periodic reports provide a history of risks for a certain project and their changes. The user can then see how the risk priority number (RPN) has changed over time with a glance at the risk trend analysis. Risks can be filtered as well as sorted by the RPN in ascending or descending order. This provides a quick overview of the key risks for the project.



The risk trend analysis shows the changes of the RPN's over time

Risk Management in Projects

Risk Report and Analysis with Multi-Project Management

The KLUSA module Management provides an overview of all risks managed and reported in the organization's projects. For this purpose, a list of all risks is provided, similar to a risk register. KLUSA allows users to sort the list of risks for multiple projects according the risk priority number or other attributes. This ensures that management is always able to keep an eye on the top risks in the project organization and to obtain a comprehensive overview of the measures implemented to minimize and prevent risks with a single click.

Customer Benefits

KLUSA Risk Management covers the needs of project managers and project teams by offering a pragmatic way to identify and monitor risks. KLUSA offers managers the ability to conduct risk analysis and assessment throughout the entire organization. The data can also be prepared for higher-level risk management tools using the standard interfaces (including Microsoft® Excel and web services).

KLUSA Project Management Software & Consulting

OPUS Business Solutions GmbH

Landsberger Str. 290
D-80687 München

Phone: +49 89 45229 100
Fax: +49 89 45229 399

info@klusa.com
www.klusa.com