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Project risk management: potential in the field and the NUSAP scheme

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Project risk management (PRM) is a rising topic particularly in the Nordic countries. It is distinct from the risk management in the safety, environment, finances, insurance and other conventional domains. Uncertainty represents one of the main challenges in projects and can significantly impact the overall performance. Therefore, the way we manage uncertainties and how we cope with risks plays an important role. PRM remains an underdeveloped discipline and we argue that it represents a relatively new, important, domain for applying risk analysis methods and techniques. There are a number of issues that arise due to complexity of the projects, a large number of stakeholders, technological innovation and long lifecycles. With the growth of project scales and scopes it became more noticeable that risk analysis in this context should be studied and better understood.

Current best practice tools (such as Primavera) lack some capabilities to analyze important correlations among different types of risk. In addition, these tools do not address uncertainties connected to human behavior, societal impact, public acceptance etc. In the recent years, new approaches have been developed in order to carry out risk assessment on projects and to support the decision making process. Here we introduce the NUSAP scheme. Working in the field of policy-related research, Funtowitcz and Ravetz developed a novel approach for dealing with uncertainty and quality of information available. The acronym NUSAP stands for Number, Unit, Spread, Assessment and Pedigree, the five elements that constitute an information set regarding uncertainty in their method. The trigger for Funtowitcz and Ravetz to construct the NUSAP notation was the misuse of numbers in debates about nuclear safety levels and later the misuse of scientific findings by climate change “sceptics” to delay climate action. The underlying idea is that a single number does not inform sufficiently and therefore, properties of numbers should not be ignored. On top of it, the developers’ view on certain uncertainties associated with problem framings and assumptions can only be described through a qualitative connotation, since those uncertainties cannot be quantified. In the presentation we will first demonstrate current main challenges in project risk management as collected in the broad literature from project management, product development and systems engineering fields. We will emphasize the importance of addressing these challenges more thoroughly in future risk analysis research. Second, we will demonstrate the successful application of the NUSAP scheme in the environmental and policy related research in the Netherlands. This approach has a great potential for application in the Nordic countries.

Lethal school violence: linking conflict, relation and intended victims

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The lethal violence in school are mainly associated with the acts of multiple killings in the educational institutions, so called school shootings. These types of attacks are also challenging to prevent, since the perpetrator often are impossible to profile in advance. Instead of focusing on the perpetrator, the aim in this study is to highlight the relation between school, perpetrator and victim. By developing a typology of lethal school violence in a dominating European context, based on key concepts from previous research. The previous studies of the phenomena are challenged by both definition problems and data collection problems, and previous typologies are often weak in explanation if they are applied in another context. The results indicates that there are three types of lethal violence in the school setting, defined as motivated of interpersonal revenge, institutional revenge and societal revenge. By conducting a study exploring the schools role in the events instead of the offender, the aspects and importance of the school setting in the event becomes stronger and can become the ground for further prevention measurements related to school safety and security.