# Chapter 79 Coping Better With the Project's Unknown Unknowns: New Competences for Overcoming Uncertainty in Projects

**Yvonne-Gabriele Schoper** *HTW Berlin, Germany* 

Fritz Böhle ISF München, Germany

Eckhard Heidling ISF München, Germany

## ABSTRACT

It is the goal of management to overcome and delete uncertainty. Uncertainty is seen as an obstacle and threat for successful management. However projects are full of uncertainty. Successful project management therefore aims to overcome and ideally delete uncertainty as far as possible. In project management, uncertainty and risk are often used synonymously. Current project management methodology contains only technics how to manage risk in projects. The assessment of risks is based on the precondition of stable conditions and the idea that the influencing parameters are known, assessable and calculable. Since more than 2,000 years it is the aim of the Western cultures to master the nature by natural sciences and mathematics. In the last three centuries of Modern Philosophy the perspective developed that analytical scientific know how (episteme) and technical skills (techne) can master any kind of complexity and risk. The third traditional Aristotelian competence, the practical wisdom (phronesis) however was perceived as not acknowledgeable.

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### INTRODUCTION

Management is defined as the organization, co-ordination, planning and control of activities in order to achieve defined objectives. It is the aim of the management of organizations to build and keep continuity and stability. This is done by objectives, and with the standardization of stable processes, with fixed procedures and pre-defined resources. Herewith the management aims to avoid uncertainty, as uncertainty is perceived as a threat for management as it could endanger the planning and steering of stability. This conceptual approach is also valid for the management of projects. Project management practice however shows that projects are full of uncertainty and that overcoming this uncertainty is nearly impossible.

A project is a temporary endeavor undertaken to create a unique product, service or result. However this uniqueness - in contrast to routine processes - leads to the fact that projects are full of uncertainty (e.g. developing a new product that is to be launched far in the future, a new constellation of team members or a lack experience in a new business segment). As a consequence uncertainty is an inevitable, typical characteristic of projects. The management of project aims to overcome and delete this uncertainty as far as possible. With the help of pre-defined project phases, standardized tools and good-practice methods the project processes shall be made predictable, plannable and calculable. This strategy of elimination of uncertainty is also applied when it comes to tasks that are not completely plannable as it is the case in projects.

Since the global increase of volatility, uncertainty, complexity and ambiguity (described with the acronym VUCA in the 1990s) of the general conditions, uncertainties in projects and their impact on the project results get increasingly in the light of the awareness of the senior management. These uncertainties demand for a new type of project manager who not only minimizes the upcoming uncertainties in the project but who also foresees and realizes the opportunities that derive out of the project uncertainties (Lechler, 2013; Dalcher, 2014). This new connotation of uncertainty containing both the chance for opportunity as well as for risk demands for a new attitude towards uncertainty.

The following chapter first examines the concept of uncertainty and of risk. It lays down the current risk management approach in project management and explores the potential for professional uncertainty management in projects. The analysis of Aristotle's classification of knowledge and evolution of his concept in the West in the last 2,000 years shows that one of the three competences, namely phronesis was abolished in the last 300 years. In addition the concept of dealing with uncertainty in the Eastern societies as well as in current business management is analysed concening their management of uncertainty. The comparison shows the need for a new competence of opportunity management in addition to risk management in projects.

It is the aim of this chapter to raise the awareness for a new, so far disregarded competence of project managers, namely the capability to differentiate between uncertainty and risk. This is the basis to develop a further competence, namely to turn uncertainty into a potential opportunity. The significance of these new competences is that they lead to a redefinition of the project managers' role from the one of passive execution of the corporate strategy to the active formation of the future of the organisation. This has consequences in the education, qualification and long-term career development of project managers in organisations as well as of those responsible for the governance of projects.

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