PETER PRIBILLA FOUNDATION

artop
INSTITUT AN DER HUMBOLDT-UNIVERSITÄT BERLIN

Managing Innovational Processes

Prof. Dr. Sebastian Kunert

artop GmbH - Institut an der Humboldt-Universität zu Berlin

How does one best pursue an idea and implement innovations within organizations? Considering this question I focused on the underlying processes and their organizational conditions. 44 interviews in 5 showed that a typical, ideal process cannot be derived. However, the results reveal significant characteristics and conditions which can be influenced by project management: The main factor is the time management of innovation projects. The longer the duration of unplanned delays as a proportion of the total time of a project the lower the probability of a success. Furthermore, a high number of participants within a project and a lack of evaluation at the end is not beneficial for the implementation of innovations. In addition, these findings were quantitatively proofed in a survey.

Introduction: Process models are based on the common assumption that processes - such as the implementation of innovations - could be described or standardized in fixed sequences of events. Between 1982 and 2000 Van de Veen and colleagues made great efforts to identify an ideal process of innovation. However, their conclusion is sobering: "No overarching process theory of innovation has yet emerged from the research program, nor are prospects bright in the near future." (van de Veen, Angle & Poole, 2000, S. 4). What are relevant factors of success or failure? What consequences can be drawn for such processes in the future? Is it possible to standardize innovational processes? The objective of this study was to identify crucial points during the implementation of innovations in order to make consulting companies aware of them. Additionally, I examined if the findings reveal typical processes in an broader view.

Method: 44 semi-structured interviews were conducted in 5 firms spread over all hierarchical levels and parts of company. Among others, questions referred to the steps of a given process, their content, result, duration and the number of participants, the interviewees' satisfaction and their rating of project success within the single steps. Subsequently, they were asked about the interfaces within the process and general actions on different levels of abstraction. Data about innovational processes were analyzed on various levels: On a microlevel I focused on each project. The analysis on an intermediate level refers to characteristic conditions of such projects in general within an organization. On a macrolevel a comparison of outcomes of several organizations was carried out. Afterwards, the most noticeable characteristics of innovation processes were integrated into a questionnaire (355 participants from 28 enterprises) in order to quantitatively investigate the outcomes.

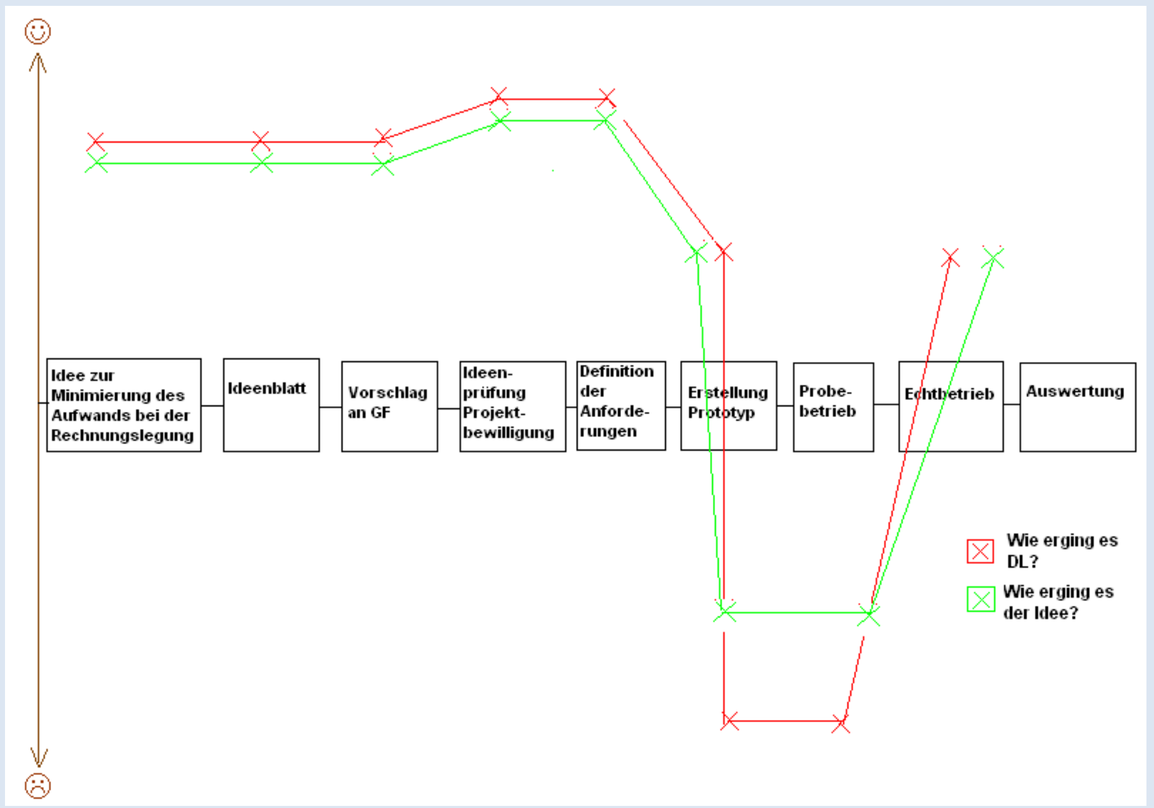

Figure 1. Example of a subjective perception of the probability to success the project (green line) and of the individual wellbeing.

Results:

Microlevel: The actual process frequently differs from the process as it was planned, often accompanied by conflicts and delays. Across all participants the subjective perception about their satisfaction and success forecast features a U-shaped curve: After an euphoric start the mood plummets and does mostly not lift until project completion. An example from a software project is shown in figure 1.

Intermediate level: it turned out that there are typical conditions at the start of a project, during the implementation and at its end. Figure 2 shows an example from a trading company: The initial point of an idea mostly comes from management or the parent company acting on current market activity. During the project participants feel dedicated and there is a high level of autonomous teamwork but there is also little monitoring by management as well as disturbances in daily business. At the end of a project it lacks a thorough post-processing, even though 30 % of projects remain below expectations.

Metalevel: there is neither a typical, ideal process to pick up nor an emerging overarching process theory. Still, there are significant differences between the characteristics of successful and failed projects. The results of the survey reveal 6 factors as being crucial (Tab.1).

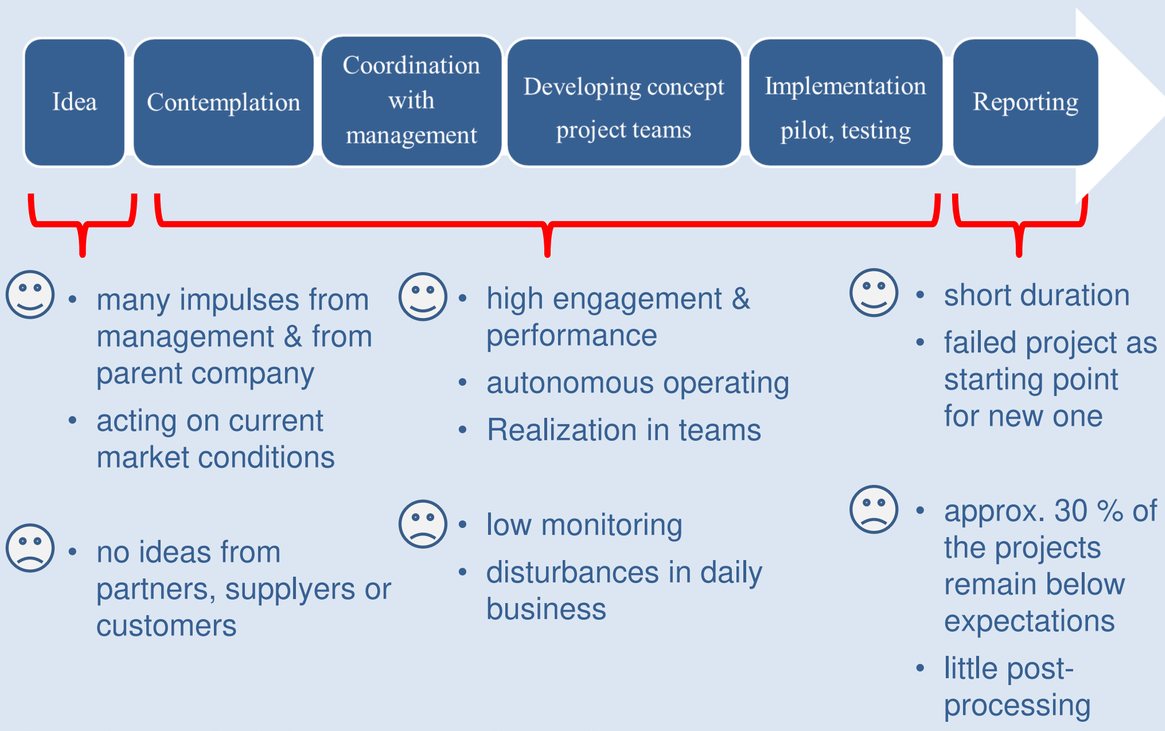

Figure 2. Example of characteristic conditions of an innovation project.

Conclusion: The results do not allow for the extrapolation of an overarching process theory. Instead, they provide suggestions of practical relevance. The most important factor seems to be time: the longer the unplanned delays as a proportion of total project time the lower the probability of success. A professional project management also needs to be aware of the negative effects of a long duration of projects by itself. Furthermore, a broad variety of sources for starting an innovation project could maximize the chances of promising ideas. Particularly, a stronger involvement of employees might be fruitful. However, the number of participants should not be too big. During their implementation, innovation projects need support in terms of overcoming periods of low motivation, conflict-ridden interfaces and resistance. At the end of a project a systematic evaluation of the success and the experiences should take place.

Table 1. Correlation of characteristics of innovation process with success of innovation project.

Characteritics	Correlation with success
Duration from idea first mentioned until project completion	-.284**
Duration of unplanned delays as a proportion of total project time	-.561**
Number of participants within the project	-.281**
Employee as idea generator	.209*
Supervisor as idea generator	-.181*
Idea generator is part of the project	.132
Coordination with management	.031
Performing the idea in teams	.023
An evaluation at the end of the project	.359**

* p < .05; ** p < .01; N=355; k = 28

Kunert, S. (2013). Innovationsprojektgestaltung. In: Scholl, W., Schmelzer, F., Kunert, S., Bedenk, S., Hüttner, J., Pullen, J. & Tirre, S. *Mut zu Innovationen.* Berlin: Springer.

van de Veen, A. H., Angle, H. & Poole, M. D. (2000). *Research on the Management of Innovation: The Minnesota Studies*. New York: Oxford University Press .