ProBenefit

”PROcess-oriented development of a model for a fair BENEFIT-sharing for the use of biological resources in the Amazon lowland of Ecuador”

The Work of the Future Technologies Division (VDI-ZTC)

The Tasks of VDI-ZTC

The services of VDI-ZTC for ProBenefit include:

- Internal coordination of the German project team,
- Public relations of the project in Germany,
- Coordination of administrative obligations,
- Project documentation,
- Support of the project’s advisory board,
- Initiation, support and supervision of interdisciplinary cooperation within the project team.

The Management Challenge: Stimulation of Interdisciplinary Cooperation

Intense interdisciplinary cooperation is vital for biodiversity-related projects which convene experts from various social and natural science disciplines and from different research types (e.g., lab research and field research).

Interdisciplinarity is easier to claim than to achieve. Scientists bring vastly different expectations, assumptions, traditions, professional standards and research interests to bear on interdisciplinary projects which are hard to reconcile.

Moreover, interdisciplinary work is usually not encouraged by the structures of science. Scientific reputation, research methods, heuristics, academic teaching and training, career options, peer review and (last but not least) funding are still tied to and developed largely within disciplinary domains.

Therefore, interdisciplinary projects are almost always exposed to ‘centrifugal’ dynamics and have to mobilise considerable efforts to achieve and maintain interdisciplinary exchange.

There is no manual or checklist for the management of successful interdisciplinary projects. However, research on interdisciplinarity points to some features of and prerequisites for successful interdisciplinary cooperation.

Integration
The divide among various disciplines can only be bridged if the participating researchers go through a process of communication and trust-building which leads to a set of joint concepts, terminologies, research heuristics, beliefs, i.e., to a mutual understanding and an integrated perspective on the research problem. The team members have to develop ”group knowledge”.

Coordination
This interdisciplinary accord rarely emerges automatically and should not be left to the self-organisation of project members. It has to be stimulated, nurtured and supervised by a project management function which mediates and structures the communication process. Coordination for interdisciplinary dialogue should envelop the whole duration of the project. In a sense, it should even start before the project. A typical project will require substantial lead time to develop mutual understanding. It is useful to allow for a planning or start-up phase in which the project gets the dialogue going before the actual research work begins.

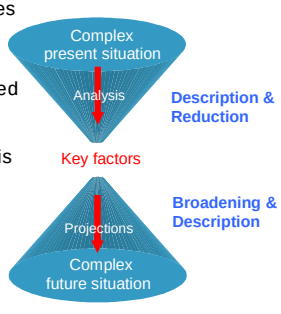
Documentation and Assessment
Interdisciplinary discourse is a volatile achievement, especially in very distributed projects. The communication process advances, the group knowledge changes constantly but important experiences and lessons may also be forgotten after a while. Therefore, the genesis and development of interdisciplinary cooperation should be chronicled and reflected in a project documentation.

The Approach: The ProBenefit Scenario Exercise

To tackle the above-mentioned challenges, ProBenefit will carry out a scenario exercise. Scenario development is an established method of science and technology foresight. Scenarios are descriptions or images of the future which are based on a complex network of influence factors (and their interplay).

Basically, a scenario exercise encompasses two stages:

- an *examination stage*, in which a research field is systematically scanned by the project team for the influence factors that govern its evolution; the interaction of these influence factors is analysed and possible key factors are identified.

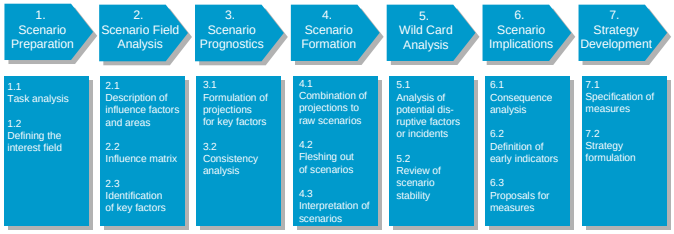


- a *projection stage*: the team projects these key factors into the future, delineates images of the future and plans preventive and counter measures to help secure the success of the project.

The web of influence factors (social, cultural, economic, political, ecological ...) which characterises a research field is usually collected, described and analysed in the course of several moderated workshops but also during desk research sessions.

The result of a scenario process is the detailed description and analysis of two to four alternative, plausible images of the future of a research field. The development and assessment of scenarios allow a team to scan its project environment and to brace itself for strategic choices and surprises by developing problem-solving approaches.

Overview of Scenario Development



However, for interdisciplinary projects a scenario analysis yields an even more important process-related benefit. The exercise provides a *grid* that allows the project

- to make explicit the perspectives, expectations, lingos and interests of all actors in the project;
- to describe, consider, debate and document systematically the assumptions and information the project reckons and works with;
- to widen the scope and refine the goals of the project;
- to provide a ”log book” of the cooperation by keeping track of new insights, learning lessons and changes in the world view of project members;
- to locate precisely the points where research gaps and discourse deficits will have to be closed.

As a result, scenario development will serve as the main instrument for interdisciplinary exchange and integration in ProBenefit.

The Association of Engineers (VDI)

The Association of Engineers is a financially independent and politically unaffiliated, non-profit organisation of about 130,000 engineers and natural scientists. Established in 1856, the VDI is one of the largest engineering associations in Europe. In Germany, it is recognised as the representative of engineers both within the profession and in the public arena. As an official member of the World Federation of Engineering Organisations (WFEO), the VDI promotes training and information exchange among experts on a global scale. Representing the interests of engineers on the European and also international level, the VDI provides discourse platforms for "technical communities" all over the world.

Future Technologies Division (VDI-ZTC)

Future Technologies Division (VDI-ZTC) is a division of the VDI Technology Center. VDI-ZTC is active at the interface of science, politics and industry and acts as a mediator between actors and stake-holders in the German and European innovation system.

ZTC has been serving public administrations and companies in the fields of technology assessment, S&T foresight, technological forecasting, trend monitoring, public understanding of science and knowledge management for more than 15 years.

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