On the Interconnection of Project- and Product-Centered Systemic Modelling

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TRIZ on the Blackboard
TRIZ and Real-World Systems
Organisations

This applies in particular to organisations.

Shchedrovitsky distinguishes in this direction between the phases of creating an organisation and a "living organisation".

Moreover, he distinguishes three dimensions of that notion
• Organisational work as practical activity.
• Organisation as the result and means of organisational work
• Organisation as a form of life of the collective.
Development of Organisations

Organisational work → development of the real-world counterpart of a system.

A "living system" has a structural as well as an operational dimension.

A system can be structurally disassembled, but can only be operated in its assembled state.

Fundamental contradiction of any systemic view – the contradiction between the necessity of decomposing a system for its analysis and its basic indecomposability in operation.

This principal indecomposability does not end at the system's boundary.
Long-term and Short-term Goals

This real-world development can itself be represented in blackboard form through comprehensive planning.

Organisational systemic development is driven by
- long-term goals of developing product portfolios and
- developing the company's short-term capabilities to produce products and services from this portfolio.

Strategic and operational management.

Contradictions between long-term and short-term goals.

This is a kind of a contradiction that is difficult to handle with TRIZ tools.
Project-like Business

Today short-term operational activities have greater variability and are often planned and implemented as projects.

Additional to the representation of planning of projects at the strategic level blackboard, the representation of the implementation of these projects on that blackboard also plays a role.

To do this, however, it must be understood how project plans, initially a "dead body", as noted by Shchedrovitsky, are integrated into the "living system" of organisational work.
Project-like Business

Another challenge for project activities: *Cross-company cooperations Strategic plans* of different partners overlap in such projects.

This type of business activity *is on the increase*.

The transition to customised products is a general trend with the increasing possibilities of digitalisation of planning and manufacturing processes.
A Use Case

Three business partners in Leipzig successfully applied for funding for a project to develop an App for Indoor Navigation for Visually Impaired People.

Product idea: The app is a kind of digital assistant of the user that not only supports navigation in buildings but also organises the direct connection to different kinds of structured information in the web.

Technical challenges:
1. Organisation of bidirectional interaction for a specific target group.
2. Expanding applications for location-based services.
3. GPS is available as outdoor localisation service, but there is currently no comparable indoor equivalent.
A Use Case

Contradictions between short-term and long-term interests of the project partners: Technical experience gained during product development also heavily plays a role, at least for internal motivation.

The project context is embedded in four supersystems – that of the funding agency and each of the three project partners - and is essentially determined by the approved project application.

The conflicting long-term goals of the partners met in a rough consensus of the project proposal, which was approved by the funding agency.
A Use Case

Problem: Long-term and short-term business goals are in contradiction.

Solution: Practical short-term advances towards a long-term goal identified at the blackboard permanently modifying the long-term goal based on the experienced results of the short term projects thus processing the contradiction.

Rough consensus and running code.  
(The Tao of IETF: A Novice's Guide to the Internet Engineering Task Force)

Principle of Unfinished Thought: Thoughts can be thought on when the time comes. Most of them disappear by themselves anyway.

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