

The Position of Research

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Abstract

This article gives a vision of the position of research in today's fast changing world, where knowledge plays a dominant role.

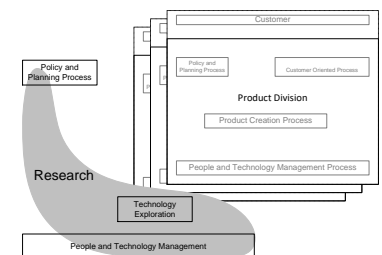
The process view in this article is based on the business decomposition as described in "The Process Decomposition Of a Business".

This article is triggered by a series of sessions initiated by Martin Schuurmans about the "backbone of the NatLab".

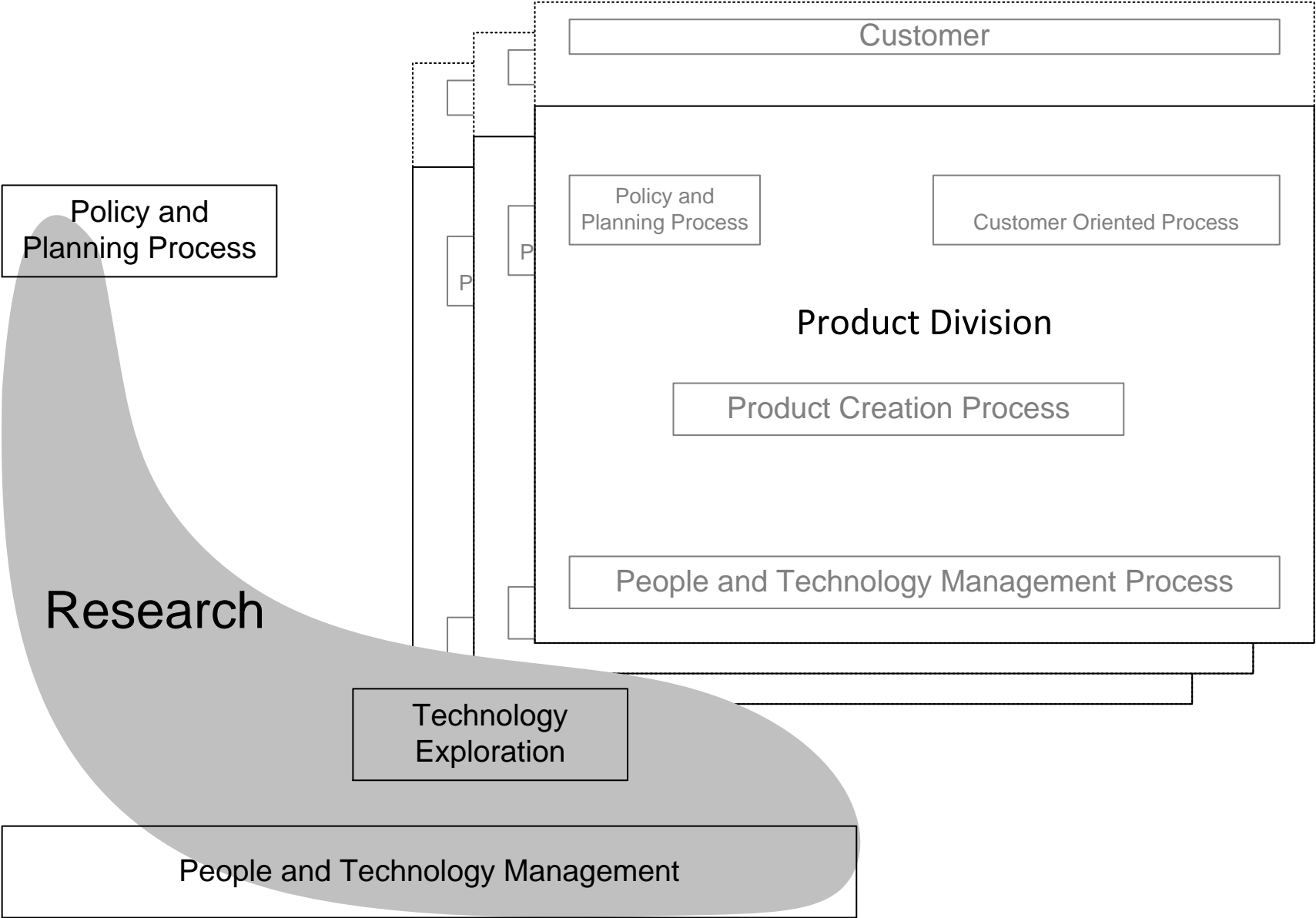
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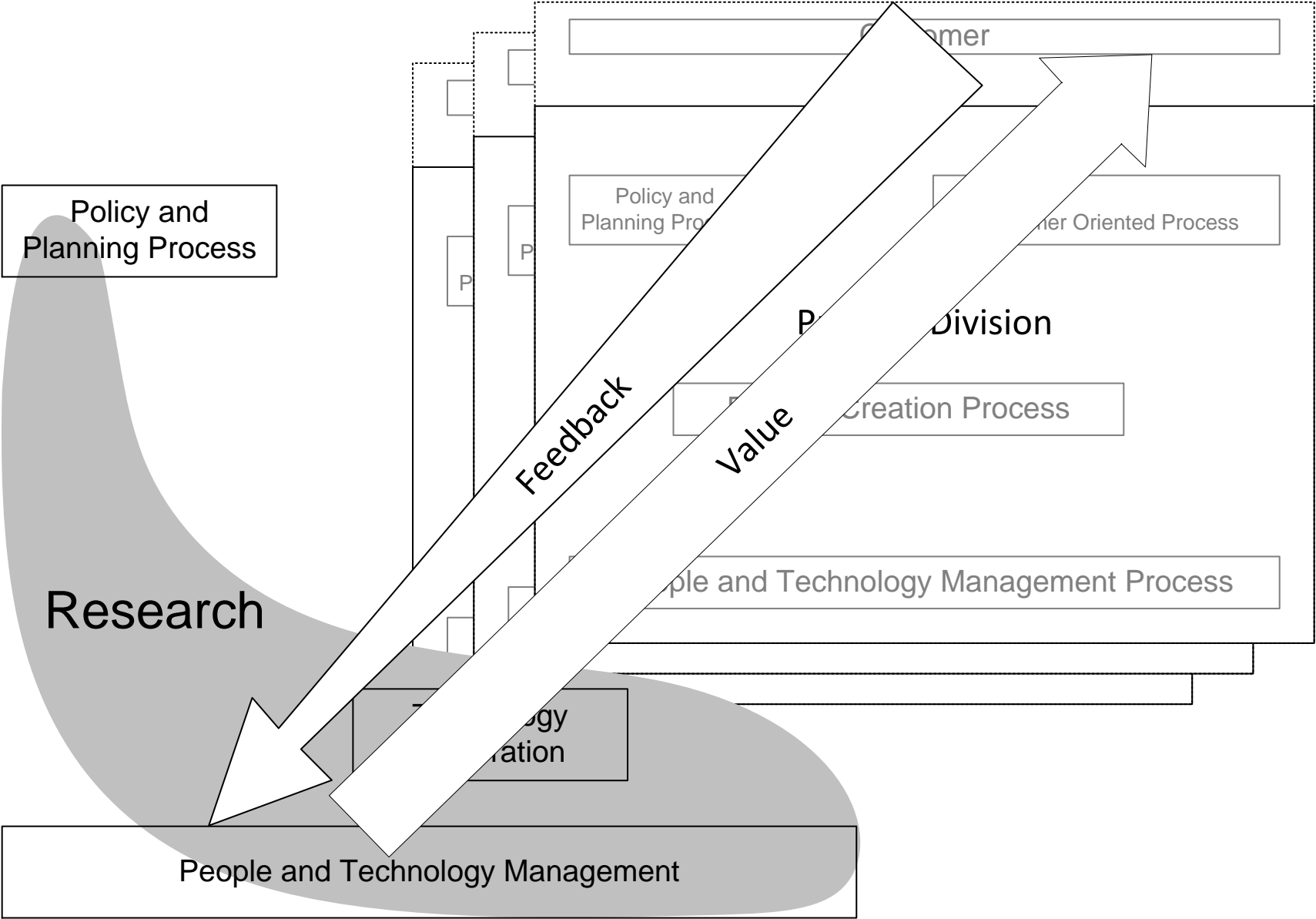
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Research in Business Process Context



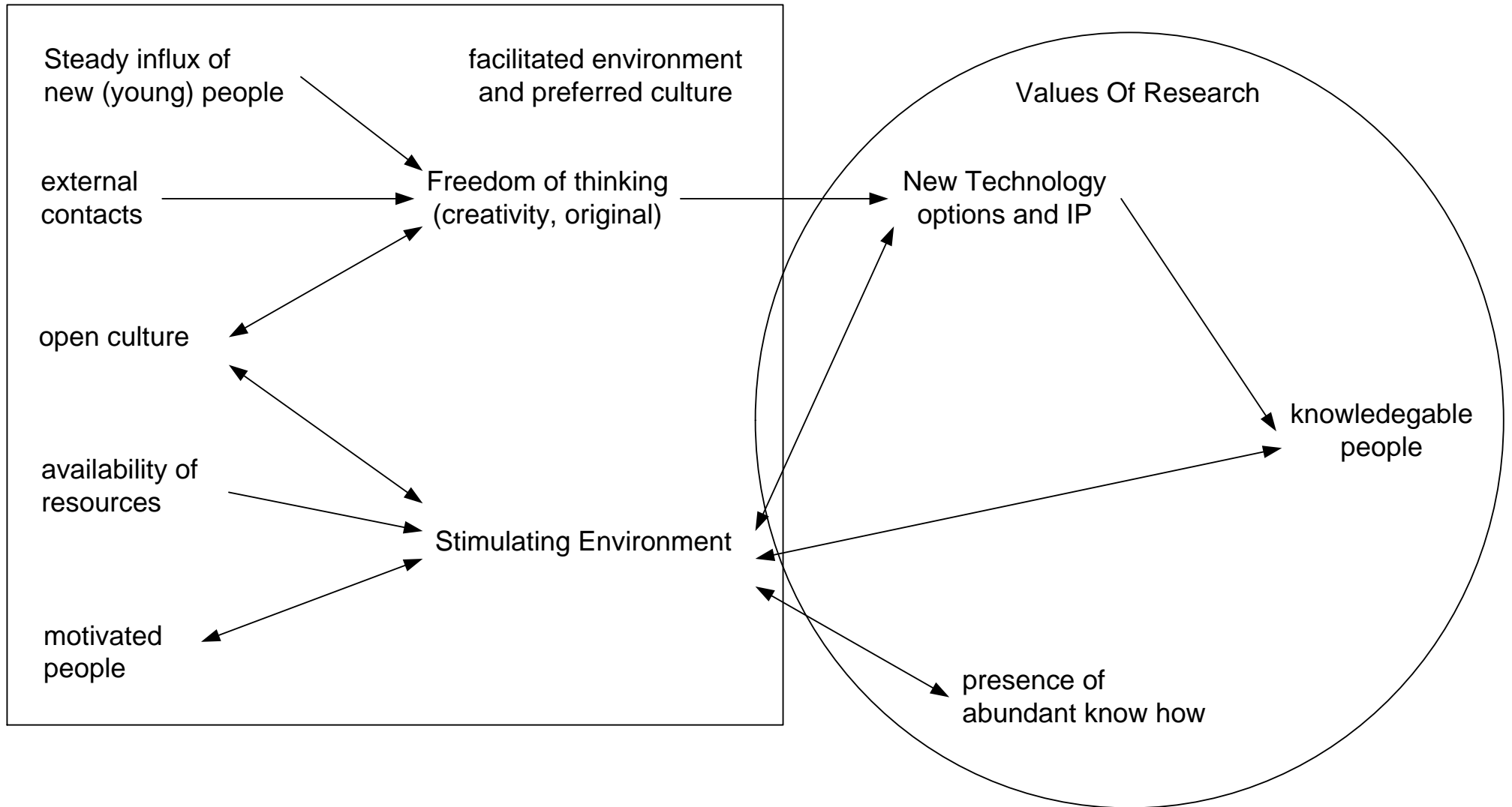
Value and Feedback Chain



Value of Research

1. Creation of Technology Options
2. Creation of Intellectual Property position
3. Corporate wide body of know how
4. Source of knowledgeable People

Relation of Environment and Value



- The strategic direction (**Which** technologies are required, and **Why**)
- The tactical decisions (**How** do we obtain and maintain the required technologies, **Who** is involved)
- The operational implementation (Do Assess, create, acquire, try-out et cetera)

Technology definitions

Core technology brings the added value to the products, in other words it is the right of existence of this product.

Key technology is critical for the performance of the product, however when partners can supply the technology this is welcome. Due to the critical nature of the technology this partnership needs active management.

Base technology is from this business point of view a commodity, which should be acquired from third parties. Active participation should be avoided, however sufficient know how must be present for selection and application.

Active Technology Management

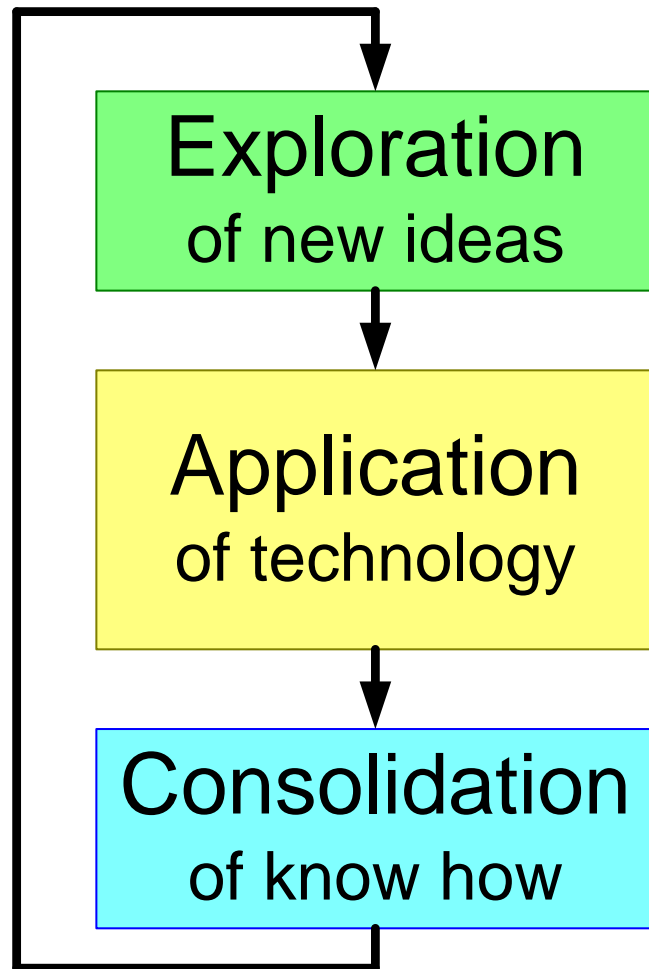
- know how
- skills
- processes
- tools

Passive Technology Management

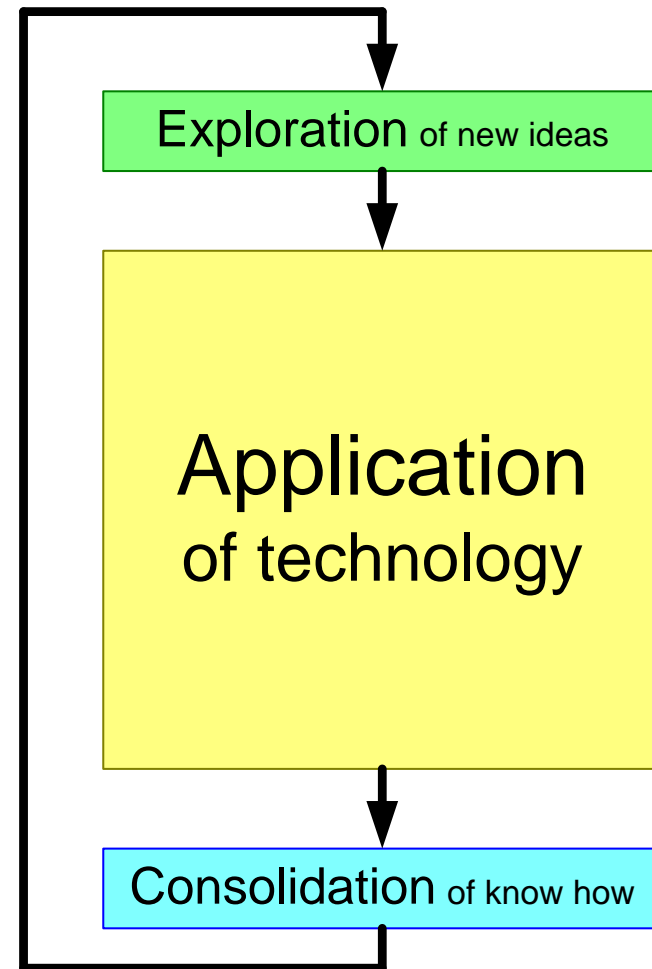
Intellectual Property or standardization without product application

- offensive
- negotiation directed
- defensive

The Technology Management Cycle



Research



Product Division

Threats

- Budget driven decision making
- Annoying formalisms (bureaucracy)
- Conflicting personal incentives and collective interests (open culture versus "prestatie belonging")
- Challenging technology companies
- Lack of reward, due to long value and feedback chain
- Too many managers and bosses, too few leaders
- Too much passive technology management
- Contribution and recognition of individual in large organization

Working Group "NatLab Backbone"

The following people have been participating in the working group "NatLab Backbone": Peter Slikkerveer, Pierre Woerlee, Reinder Coehoorn, Stan Baggen , Derk Reefman, Gerrit Muller, Albert van der Werf, Martin Schuurmans, Aart van Gorkum, Rick Harwig, Ed Huijbregts.