

Socio-technical maps

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Aim of a Socio Technical map

To provide the relevant information for strategic decision making on technology development

Steps

Bounding of the technical system (will it be a map of the car, the engine or materials used in the engine)

time frame: short term, next generation, long term

1. The state of development,
2. The dynamics in development of this technology,
3. The different stakeholders involved in this technology,
4. The views and interests that stakeholders have regarding this technology
5. Successful Strategies?

1 The state of development of a technology

Analyze

- the current technology,
 - various performance standards (costs, pollution, resource efficiency)
- technical alternatives that are available on the market or under development
- show hierarchy of technical alternatives
 - mechanisms, which determine the selection
 - the propelling forces behind the alternatives

2 The dynamics in development of this technology

Identify:

mechanisms which might determine technological change, for example:

- technological progress (speed of development)
- Trajectories by:
 - Positive feedback loops
 - entrenchment
- Regulation (Existing, likely)
- Costs
- Appropriation (possible?)
- Supporting technologies (like progress in ICT)

3 The different stakeholders involved in this technology

- Who are the stakeholders in each technology?
- What are their stakes?
- Who do they relate to? Allies?
- What are their capabilities? (capital, know how, power)
- Could they change their stakes?

4 The views and interests that stakeholders have regarding this technology.

- How do they perceive technologies and their alternatives?
 - Paradigms
 - Expectations
 - visions
- Are these perceptions contradictory or is consensus possible?

5 Successful Strategies?

- Given the strategic objectives of a core player (corporation, government agency) what could be interesting options?
- At which time frame? Identify potential Critical episodes.

Voorbeeld

- Socio Technical Map
- **Search Engines**
- B.P. Dingjan
- Delft, October 2007

- [Introduction](#)
- [State of development](#)
- [Different stakeholders involved](#)
 - [Consumers \(searchers\)](#)
 - [Search engines](#)
 - [Website-owners](#)
 - [Advertisers](#)
 - [On-line alternatives](#)
 - [Other alternatives](#)
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