



① **Goal setting & constraint analysis**

- Defining goals
- Time restrictions
- Technical restrictions
- Business restrictions
- Restrictions on super- and subsystem level

⇒ „*Solution space*“

② **Function analysis**

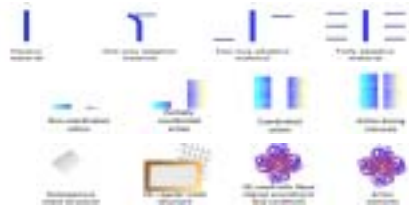
- Analysing of
- effective
 - missing
 - insufficient
 - excessive
 - harmful functions



⇒ „*Function model*“

③ **Trend analysis**

Assessment of 35 trends of evolution for selected areas on subsystem level



⇒ „*Trendmarks*“

④ **Benchmarking**

Drawing evolutionary potential radar plots



⇒ „*Evolutionary potential*“

⑤ **Trendstorming**

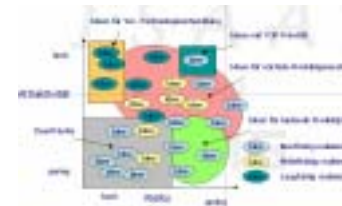
Generating ideas guided by trends of evolution

1. Finger als Mess- → über elektronisches Feld mit Laser auf Tisch
Caption: Capacitive evolution of linear constructions
2. 2-D-Mess
Caption: Axial coordination
3. System mit Spiegel zur Bildschöpfung
Caption: Axial coordination
4. Mechanischer Antrieb durch Motorantrieb in Kombination mit einem Energiegeber
Caption: Axial coordination
5. Speziallinsen → Ultraschallmessung
Caption: Axial coordination
6. Gel-Mess
Caption: Space organization
7. Mini-in-Mini System
Caption: Space organization
8. Alternative Oberflächen
Caption: Surface organization
9. Mit mehreren Hüllflächen integrierte Sensoren
Caption: Surface organization
10. Schichtenkonstruktion Oberflächen
Caption: Surface organization
11. EGKante Oberflächen
Caption: Surface organization
12. Schichtenkonstruktion Oberflächen → Aufgesplitzt
Caption: Surface organization
13. Flachen-Toren, grobe Oberflächen
Caption: Surface organization
14. Texturierte Oberflächen aus mechanischer Fertigung
Caption: Object organization
15. Flachen Struktur Mess
Caption: Object organization
16. Fingerlat-Mess
Caption: None to new scale

⇒ „*Ideas*“

⑥ **Idea evaluation**

Idea evaluation of risk and attractiveness



⇒ „*Portfolio of ideas*“

⑦ **Concept finding**

Melting single ideas to promising product concepts



⇒ „*Product concepts*“

⑧ **Strategy finding**

Strategic evaluation and decision making



⇒ „*development strategies*“

⑨ **Product development**

Doing the development work



⇒ „*Successful products*“