



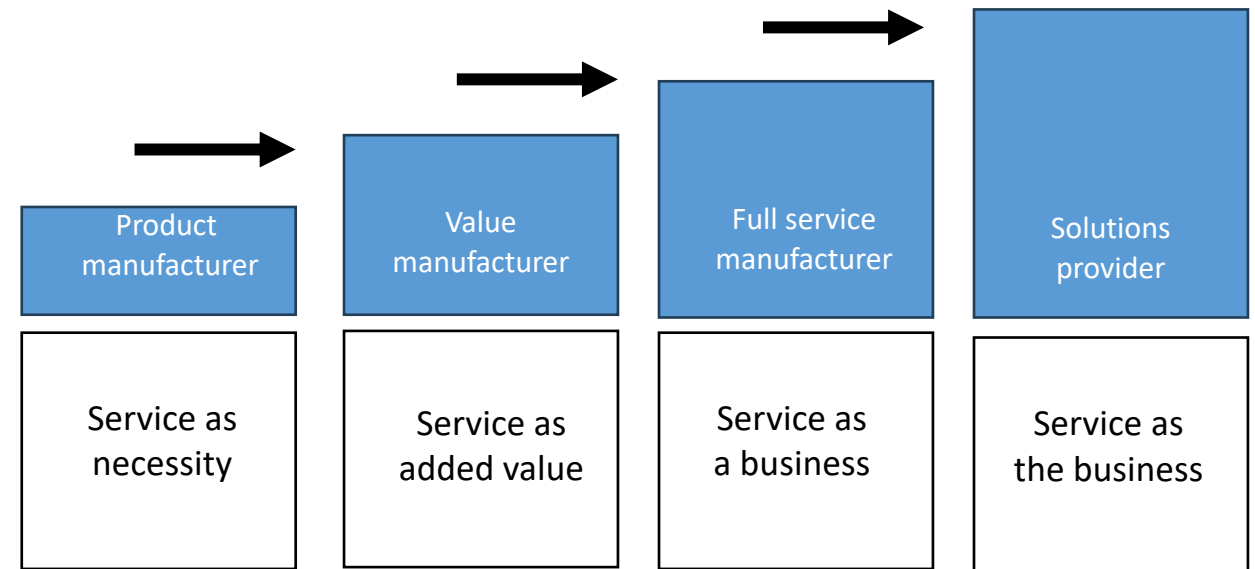
# Servitization: lessons for SMEs and business schools

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# (Digital) servitization

1970s: power by the hour (Rolls Royce)

- Growth of service economy
- Margin pressure
- Rise of new technologies
- Availability of data



# Barriers for business model innovation

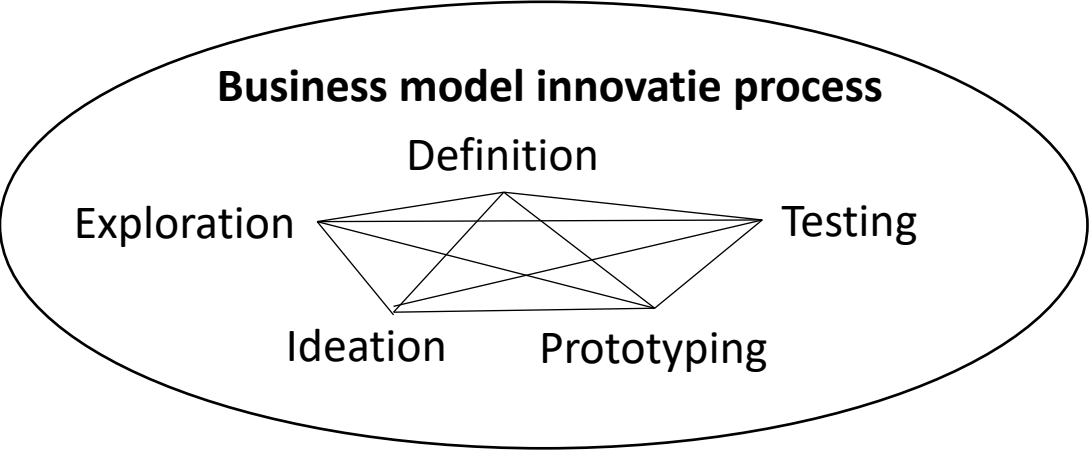
- Technology
- Financials
- Management
- Human resources
- Culture
- Client attitude

Research question:  
how do SMEs in manufacturing  
develop (digital) servitization?

**Internal barriers**  
Cognition, expertise, organization, culture



**Motives**  
Positive & negative



New business model

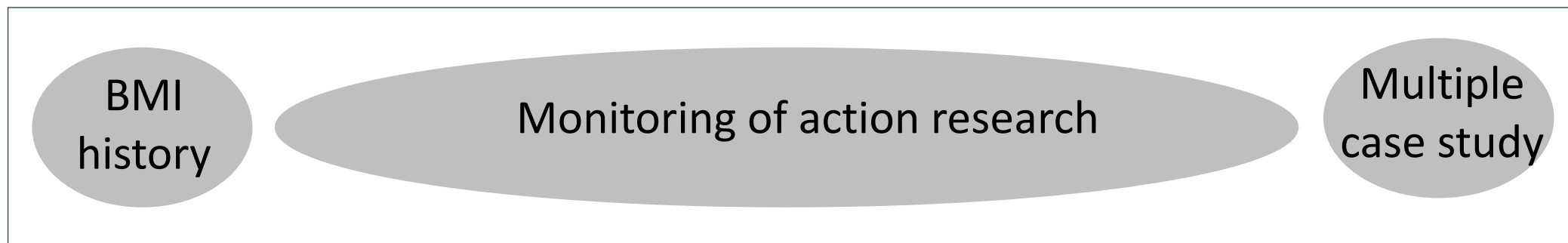
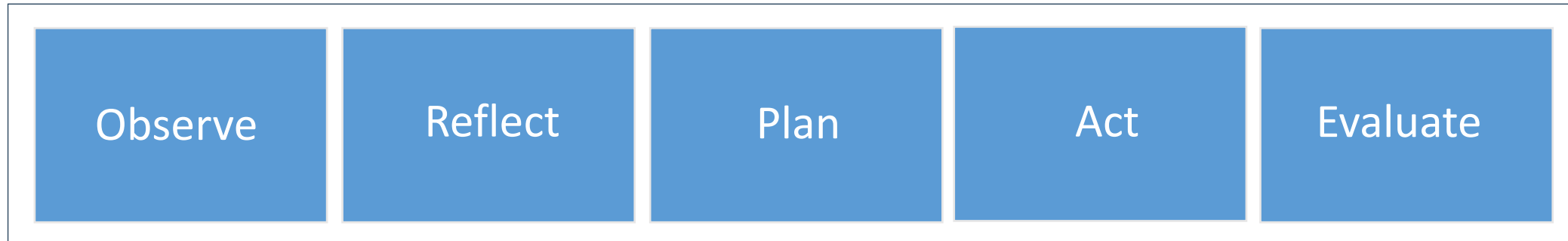
**External barriers**  
Technology, customer attitude, competition





# Research approach

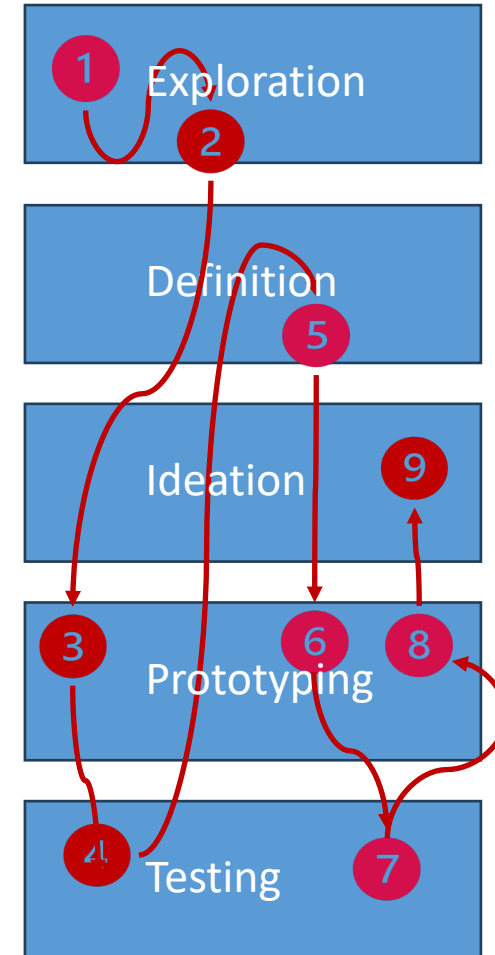
## Action research



## Process research

# Observe

1. External developments stimulate ideas for services based on data from the products
2. Market research. Some clients confirm the potential value of digital services
3. Technological options for digital services are explored internally
4. One option is tested with a client, but results are disappointing
5. Further elaboration on what data are relevant, establishment of a plan
6. One of the products is equipped with sensors once again
7. The product is tested once again with a client for technical feasibility
8. A dashboard is developed to present and monitor data
9. The company studies the value of the dashboard for clients and internal organization



# Reflect, plan and act – role for students

## Students, supported by researchers & expert team

- Analysis of current business model
- External analysis (incl customer value)
- Generating servitization business model ideas
- Testing ideas with expert team/customers
- Developing a servitization business model
- Drawing up implementation plan
- Sketching a roadmap

Strategic option: value manufacturer

Challenges:

- 1) Insufficient know-how among clients
- 2) Insufficient service capacity

Service opportunity: online support and training

First steps:

- 1) Investigation among clients
- 2) ERP fully implemented
- 3) First version of online training module



# Evaluate

- Companies have various motives for (digital) servitization
- BMI in practice: cursory, iterative, revolving
- Companies realized hardly any progress before the project
- Barriers: cognitive and organizational (no value orientation, resistance, unplanned)
  - Organizational: stimulate structure
  - Cognitive: support leadership
- Impact of action research on companies: stop, redefine, reprogram

# Conclusions

- BMI requires dream, think and act – SMEs neglect to think
- Barriers can be removed by better structure and leadership
- Action research by students is helpful and effective
- Action research asks for supervisors who challenge and connect
- Applied research has impact on education, business and academic insights