

# Technology marketing and user involvement

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## Personal background

### Present

- **Professor strategy and marketing** HTWG Konstanz, lake Constance university of applied science
- **Working focus:** Marketing for high-tech goods, dynamic management systems, CoP eArchitectures
- **Research focus:** ICT-supported platforms, processes and concepts for strategic management of dynamic inter- and intra-organisational networks



### Professional experience and academic background

- Project manager Engineering Support System Eurofighter
- Project manager strategy consulting, Supplier-Relationship-Management-Systems
- Director, Siemens AG Corporate Strategy
- Head Strategy & Marketing, Siemens Business Services Germany
- Aeronautical Engineering (Dipl.-Ing.)
- Master of Business (Dipl.-Kaufm.)
- PhD Aeronautical Engineering (Dr.-Ing.)

Source: Guido Baltes

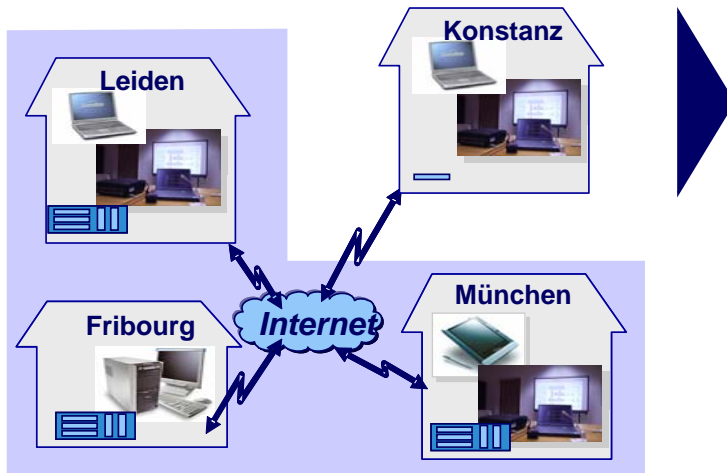
## eArchitecture Lab Constance

### Activities eArchitecture Lab

- Implementing, testing and evaluation applications/ systems that serve management system purposes
- Developing new approaches to management systems based on system integration and user involvement

Examples:

Arel (videoconferencing), Openscape (federated communication services), Solyp3 (strategic management)

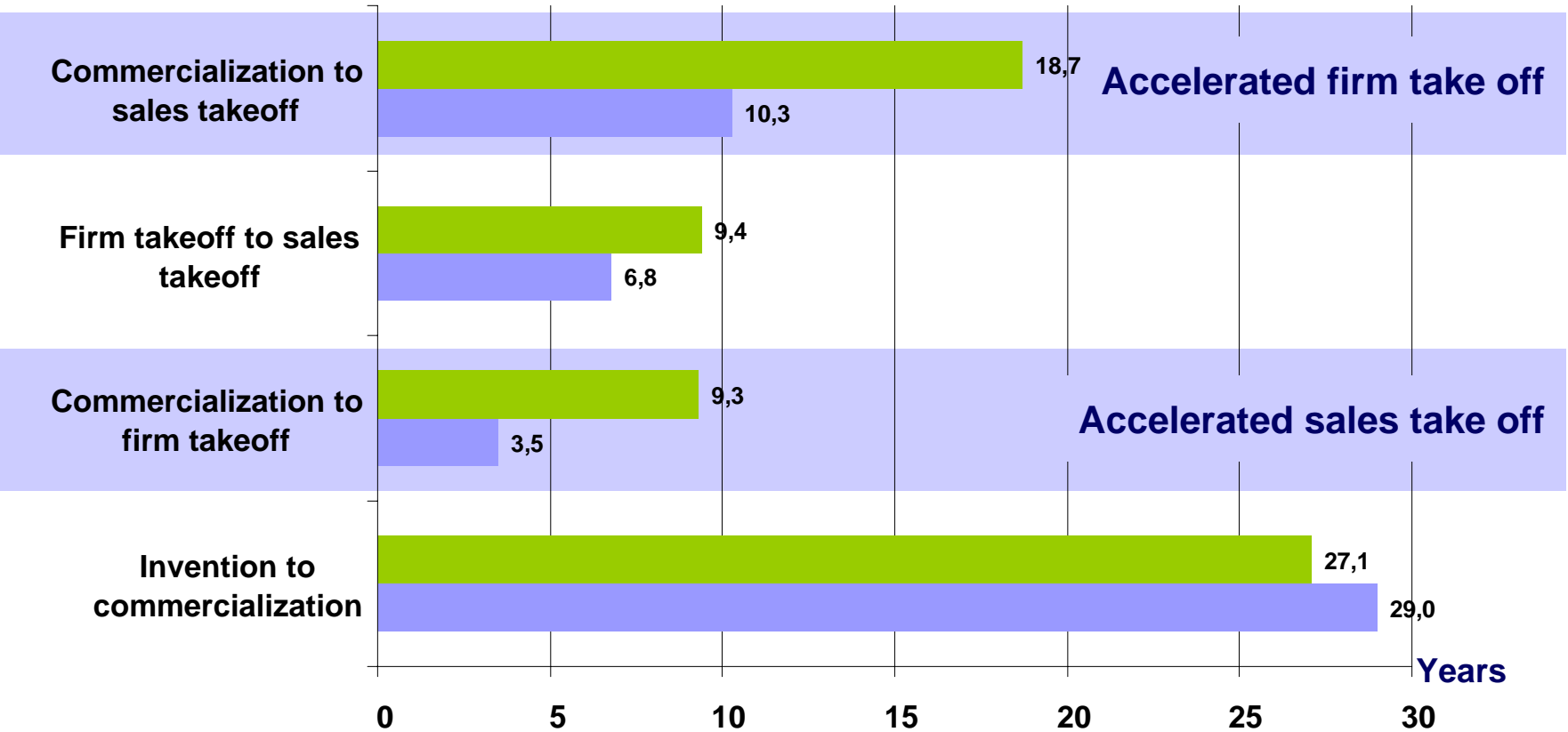


Source: CeTIM



# Accelerated innovation cycles seem to be more related with accelerated commercialization than accelerated R&D

## Importance of accelerated commercialization

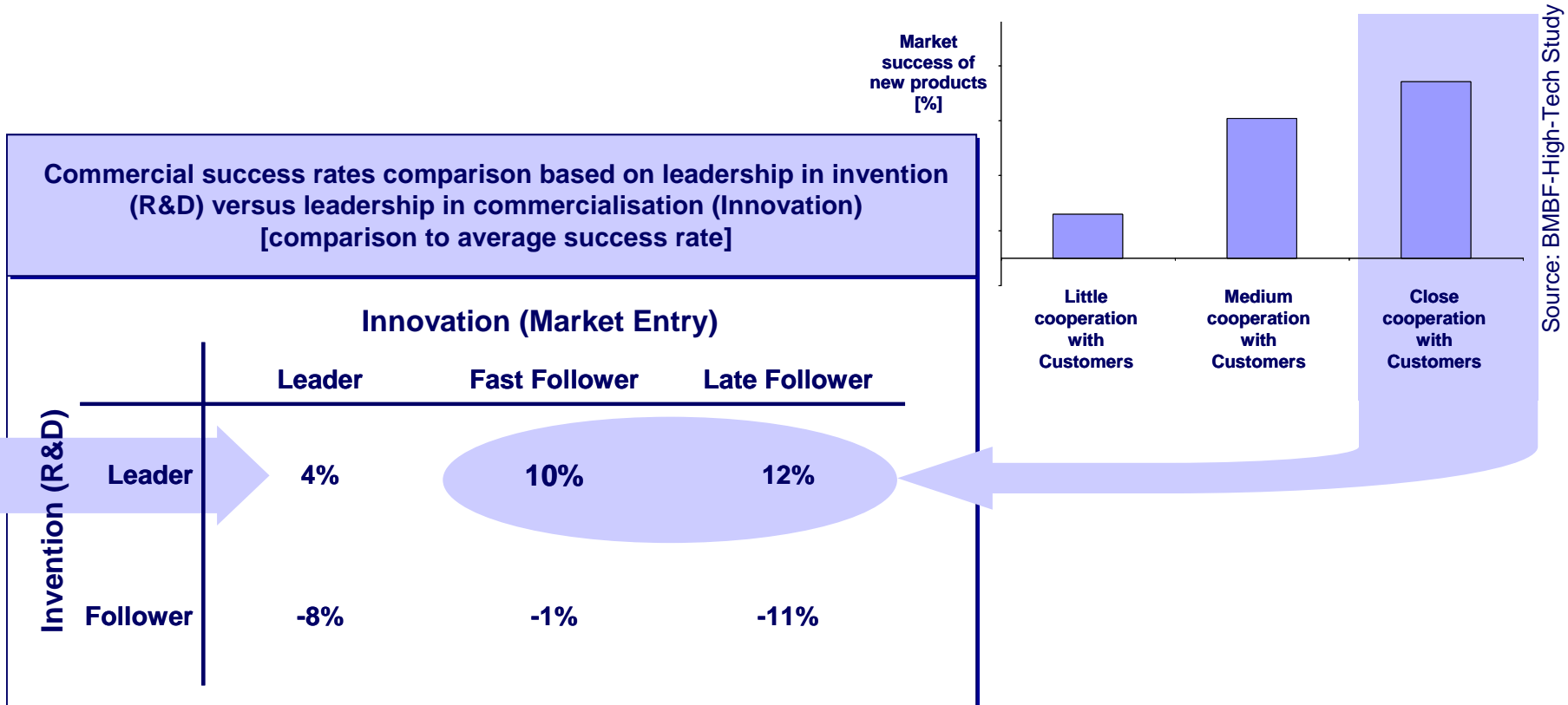


Source: Agarwal/Bayus (2002): The Market Evolution and Sales Takeoff of Product Innovations. Management Sciences, Vol. 48, pp. 1024-1041.



# R&D-leadership is a prerequisite – however commercialisation seems to be key and user involvement strongly influences

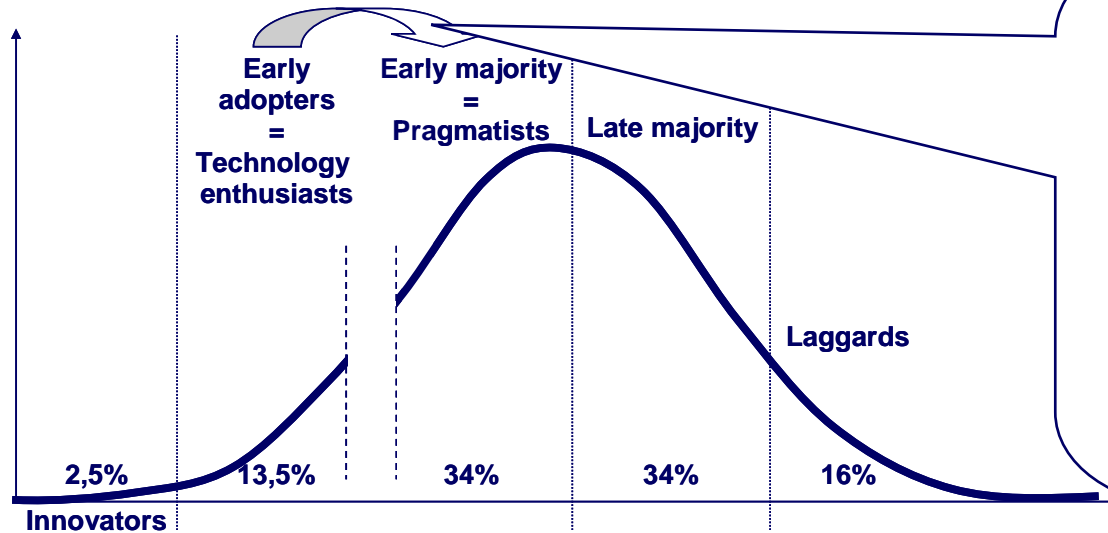
## Commercialisation strategies and user involvement



Source: Moore; Perillieux, R. (1987), Schnaars, 1986: When Entering Growth Markets, Are Pioneers Better Than Poachers?

# User influence on successful commercialization is based on observing/copying behaviour, i.e. use of innovative products

## Winning early adopters



Only if chasm can be crossed, i.e. early majority can be convinced based on experiences made by early adopters (not innovators) marketing of innovation is successful



Apple Newton (1993)

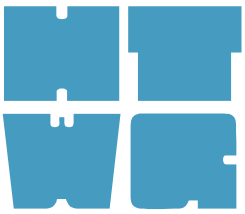


PalmPilot (1996)

- Marketing of innovative products is strongly influenced by adoption cycle
- Adoption cycle is driven by communication and/or by observing/copying use of innovative products
- Observing/copying of behaviour has a 10-times stronger impact !

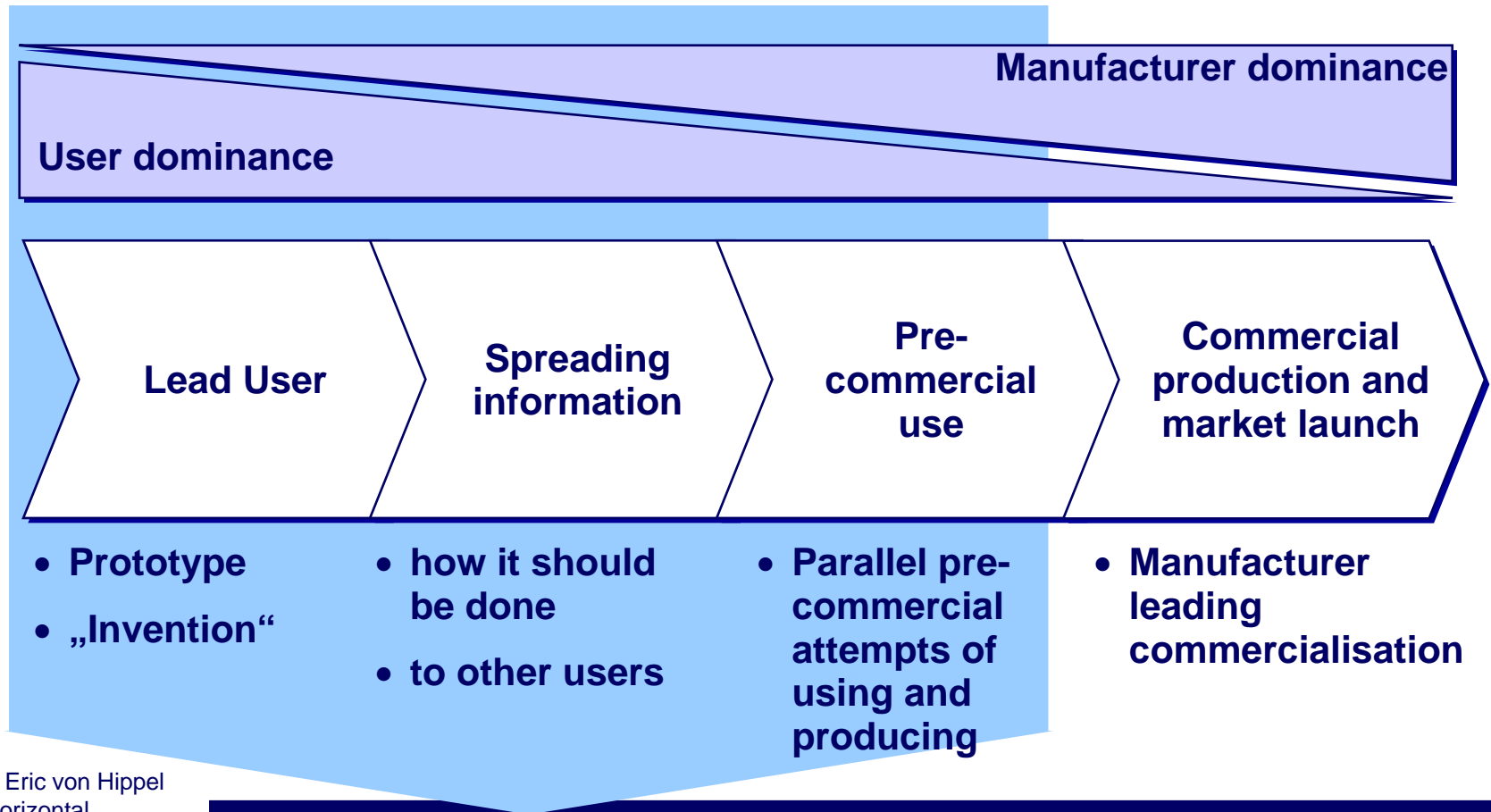
→ However, only opinion leaders, i.e. early adopters strongly influence the early majority in copying behaviour

Source: Moore 1991; Crossing the chasm; Golder / Tellis, Pioneer Advantage: Marketing Logic or Marketing Legend?; Bass, F.M 1969, A New Product Growth Model for Consumer Durables, 1969, Management Science, 15 , 215ff; Robertson / Gatignon, 1986: Competitive Effects on Technology Diffusion



# Early user involvement enables a lead user driven approach – living lab infrastructures may facilitate this

## Lead user sequence



Source: Eric von Hippel 2002, Horizontal innovation networks - by and for users



**Support focus of living lab infrastructures**



# Derived assumptions and hypotheses concerning living lab infrastructures

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## Summary – assumption and hypotheses

### Living lab infrastructures should ...

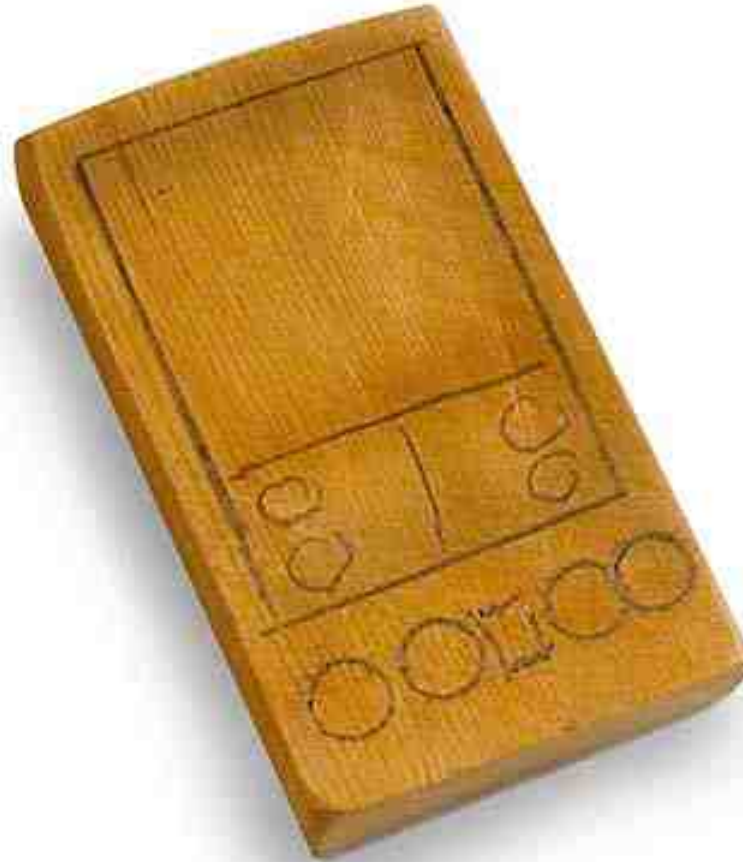
- should be more concerned with innovation, i.e. commercialization than R&D
- should focus on lead user sequences to enable innovation processes driven by user involvement
- provide a link between R&D, i.e. companies and potential lead users
- In providing that link be more concerned with early adopters than about innovators
- lower the risk of application perceived by critical early adopters by e.g. providing protected testing environments
- Moderate the process of prototype development, information spreading and pre-commercial use between first customers, i.e. early adopters and companies





... which might help to find innovative and superior prototype designs

PalmPilot prototype – Museum of Modern Art





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