

# The Testing of Industrial Services

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Rekola Design Oy

# Rekola Design Oy

- Consulting:
  - Innovation management
  - Product development
  - Development of service business in industrial companies
  
- Established 1997
  
- Research in service business:
  - 2002-03 Development of service centric products in industrial companies
  - 2004 Testing of industrial services
  - 2005-> Maturity model & measurement for service business

# Why?

- Industrial companies are familiar with testing
  - So why not test services too?
- Service business introduces many new uncertainties compared to equipment business
  - Can testing reduce them?
- Industrial companies focus too much on service infrastructure systems and enabling technology
  - Services fail because of work performance and soft factors
  - Services fail because customer need is misunderstood.
  - Could testing reduce these risks?

# Survey

- What is actually tested in service businesses, why it is tested, and how
- 50 Finnish service business companies approached
  - Interviews
  - Qualitative survey
  - Conducted 2H2004
- 3 Case studies: Vaisala, Kone and Metso
  - Are testing methods applicable in industrial companies?
  - Trial of 3 testing methods with real services
  - Conducted 1Q2005
- Funding by: ABB, Kone, L&T, Metso, M-real, Tamglass, Vaisala and Teknologiateollisuus ry

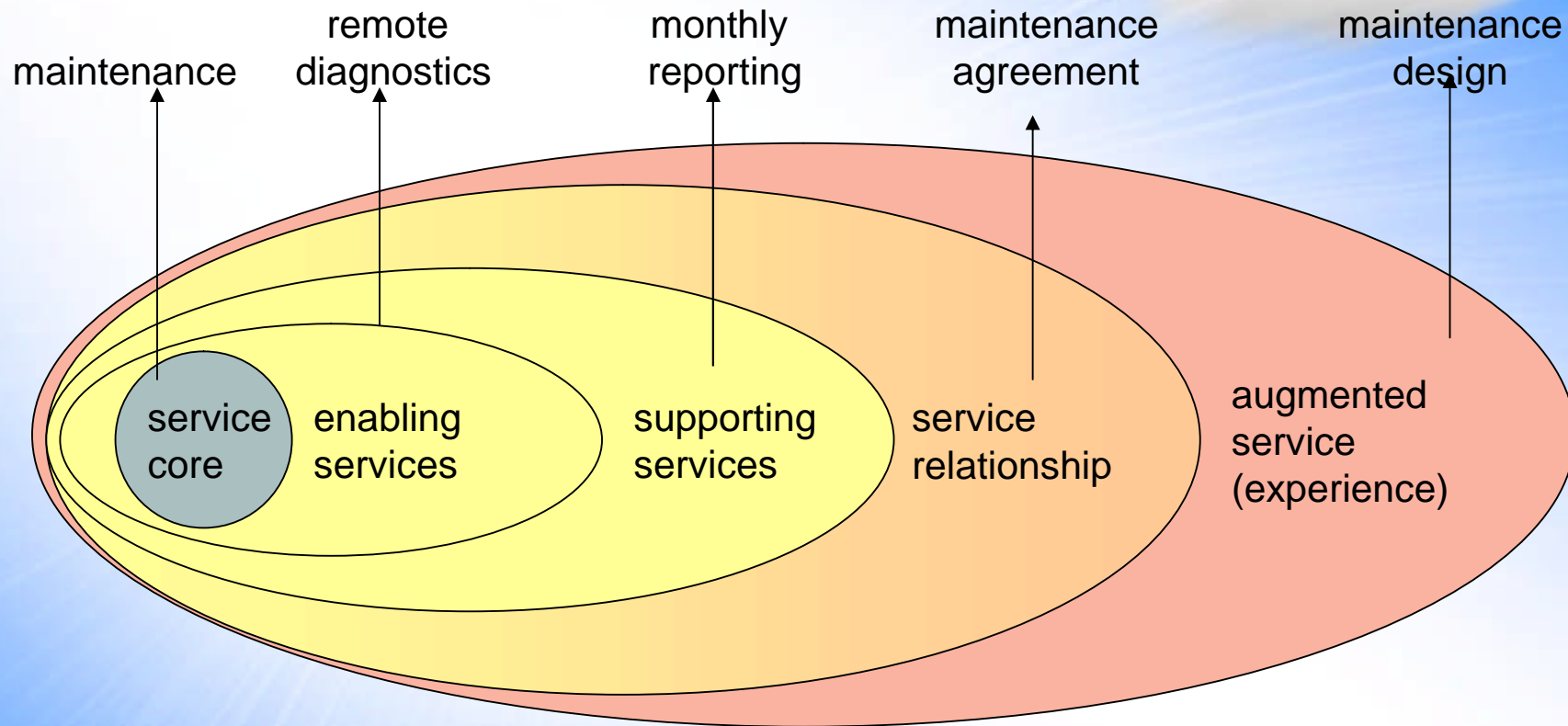
# Findings

- Many service businesses have blended testing and service development with service production
  - works only when services are very simple
- Testing methods are not always systematic, not well recognized even in pure service companies

## 3 Areas of Service Design Testing

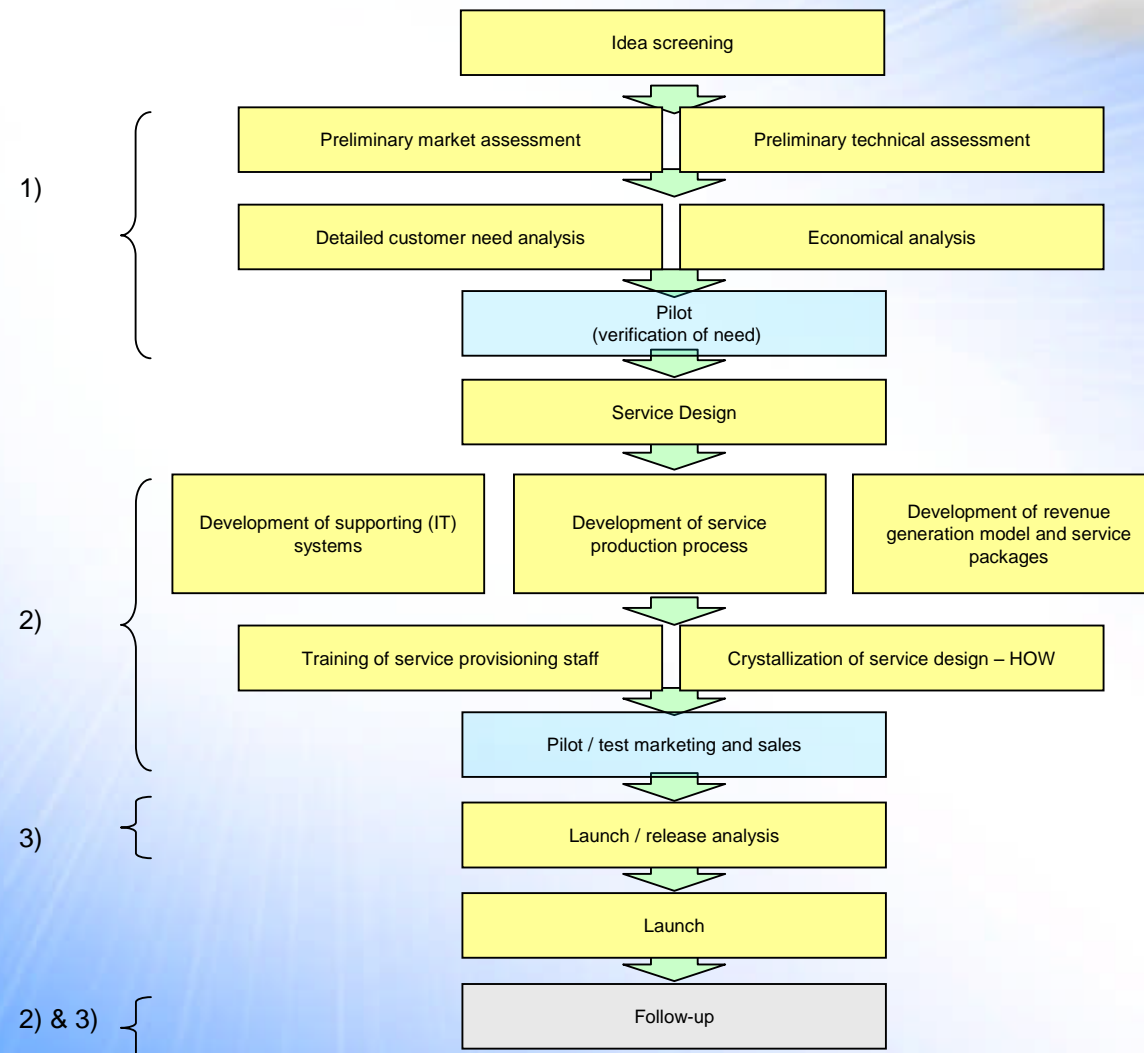
1. The service concept
  - Service value innovation i.e. customer need
  
2. The service production process
  - People's skills
  - Workflow
  - Systems
  
3. The augmented service experience
  - Service method
  - Service relationship

# Testing and Service Structure



- Concept testing
- Production process testing
- Experience testing

# Testing and Service Development Process



# Survey Summary: Concept Testing

- Focus on customer need: Accuracy, completeness, frequency, value
- Pilot focuses on customer need verification
- Everybody does pilots – focus still on customer need verification
- 10 different testing methods found

*“Is the customer need so real that we can make money with the service?”*

# Survey Summary: Production Process Testing

- Focus on people's work
- Supporting and enabling systems: technology and software testing is done by suppliers
- Many tests related to service design (=method)
- Customer feedback has the strongest impact on the process
- 19 different testing methods found

*“Does the process work the way it was planned?”*

# Survey Summary: Experience Testing

- Focus on service attitude and relationship
- Customer satisfaction surveys dominate but seldom reveal anything concrete about service experience
- Mystery shopping the most powerful method (difficult with industrial services)
- 6 different testing methods found

*“Is the customer experience what we want it to be?”*

## Further Observations

- Service productization drives service testing
- Service automation moves the focus of testing towards the service method and IT-systems
- Testing focus is different on different service business maturity levels
- Customer need is never tested too much
- Correct timing should be tested in service concepts
- Acquire service testing from outside
  - Market research firms
  - Know what you're buying -> half price
  - Know what you (can) do with test results

# Case Studies

- Kone:
  - “Conjoint analysis” to test which elements in a new service truly carry its price, i.e. the value innovation in the service concept
- Vaisala:
  - “Start period” to test if all customer prerequisites are in place for successful service delivery, i.e. service production process
- Metso:
  - “Cross auditing” to test compatibility of the consumption and production processes over an internal service interface, i.e. service production process
- Duration 12/04 – 03/05

# Book

- Survey results collected in a book (100+ pages)
  - Explains all methods
    - Principles
    - Applicability to industrial services
    - Test preparation, execution and result analysis
  - Detailed case studies
  - English summary (30 pages)
- Published by Teknologiatieto Teknova Oy

## Further information

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