



Business from technology

Summary of the day and Strategic Research Agenda (SRA) for Services

VTT Symposium on **Service Innovation**

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Summary of the day

VTT Symposium on Service Innovation

Goals:

1. Presentations on recently completed and on-going VTT service research
2. Dissemination of information about central topics and results
3. Continuation and extension of the first VTT service symposium organised in 2008

Summary of key notes

Two Key notes:

1. Combining scientific and social goals in VTT's service research, Research Professor *Marja Toivonen*, VTT
 - Service research at the societal level- central topics in a nutshell
 - Service research at the organizational level – central topics
 - Some implications and conclusions; need for multidisciplinary, reconciliation of views / schools and combination of methods
 - Strengths and emerging topics in VTT's service research by sectors
 - Strengths and emerging topics in VTT's service research by issues
 - VTT's service research in comparison with the general situation in Finland (Tekes analysis)
 - Methodological approaches and examples of methods
 - Societal impact: VTT's cooperation with sectors and clusters
 - Societal impact: VTT's working with companies and public organizations
 - Collaboration in service research; national and International
 - Promoting service research via Intra-organizational networks
 - Summary in three pillars

Summary of key notes

Two Key notes:

2. Service innovations – sources and trajectories, Professor *Stephen Evans*, Cambridge University
 - Thinking outside the box – challenging old ways / breaking rules
 - Root causes; technology, organization ('labor'), impacts (externalities) – future causes of innovation giving opportunities for services
 - Where **should** we go for our service innovations
 - Messages – collect stories from customers, seek to use knowhow to achieve 300% improvement
 - Lessons learned – do not assume you know your customer
 - Whole system innovations – new approaches, players
 - Industrial sustainability – examples of energy reduction; no production, no energy

Summary of the three sessions

Session 1: **Servitization and deepening the service-dominant logic**

Four presentations:

1. Developing integrated solutions within B-to-B service networks, Taru Hakanen
 - Identified the value of an integrated solution in b-to-b service networks for the customers as well as the challenges companies face in delivering and developing integrated solutions
 - Developed a framework of a network service concept for companies to manage and systemize service development
2. Service possibilities in the value chain of printed magazines, Anu Seisto
 - Presented possibilities for renewal in the forest sector through innovative services in the value chain of printed magazines; Future magazine - how to servitize the paper product
3. "Kibsification" of private security services: Towards more knowledge-intensive security offerings, Mervi Murtonen
 - Discussed the transformation process the private security companies are facing when moving towards more knowledge-intensive business services (i.e. "kibsification") – a novel research area due to renewal
4. Framing the challenges of the transformation in three industries towards service business, Tiina Valjakka
 - Presented a new emerging framework for supporting transformation towards customer value based way of doing business targeted to the evaluation and guiding the progress of the transformation in three different industries, manufacturing, technical trade and pulp and paper – multidisciplinary framework to support the transformation

Summary of the three sessions

Session 2: **Customer needs and user-driven service innovation**

Three presentations:

1. Involving users in service co-creation, Eija Kaasinen
 - described three different co-creation approaches that facilitate involving users in service innovations: **Owela** (Open Web Lab) online co-creation platform, **Ihme** innovation showroom and **Living Labs**.
2. Social media supported indicators for user-driven service innovation, Kaisa Korhonen-Huotari and Kaisa Still
 - develop and validate indicators for measuring the process and impact of user driven service innovation
 - new analytical tools, such as social network analysis, and the powerful visualizations give us possibilities for seeing innovation
3. Understanding corporate customers' service needs, Heidi Korhonen
 - summarized some basic understanding around corporate customers' service needs gathered in research projects
 - discussed service needs from several viewpoints; systems view, context specificity, customer experience and risk

Summary of the three sessions

Session 3: **New approaches in service research**

Three presentations:

1. Building capacities for systemic change: diversified roadmap in the context of VTT's service research network, Toni Ahlqvist
 - proposed two principles of technology road mapping to be applied in building strategic capacities in an RTO
 - exemplified by analysing VTT's Service Science and Business Network as a case study
2. The role of client and user involvement for servitization and non-technological innovation in Finnish manufacturing establishments, Robert van der Have
 - findings show that despite the increasing importance of servitization, a minority (31%) of manufacturing establishments have developed and introduced new product -related services
 - observed that modernization through non-technological renewal of both organizational structures and processes (i.e. organizational renewal) appears to be salient among manufacturers who do compete on service
3. Simulation of Effects of Alternative Strategies in Health Care Services – The Dynamics of Lung Cancer, Jukka Ranta
 - presented a lung cancer model for the approach of modelling and simulating diseases and health care services using system dynamics approach

Summary of the day

Key notes:

- **2 speakers**
- Professor Toivonen from VTT about VTT's service research
- Professor Evans from Cambridge University about Service innovations

VTT presentations:

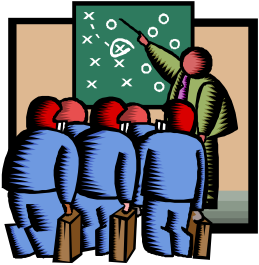
- **10 papers** selected to represent a cross section of VTT activities to be put in the web pages

VTT papers:

- **totally 23** to be published in October in VTT publication series

Participants:

- **107 totally registered**, mostly external representing companies, universities, ministries, Tekes...



Strategic Research Agenda (SRA) for Services

- Strategic Research Agenda and Implementation Action Plan for Services (Services SRA) in association with the Associated European Research and Technology Organisations (AERTO), since:
 - Around 70% of total employment and GDP is from services
 - Transition from a manufacturing economy to a service economy is going on
 - Productivity is not particularly high European services sector

- Key objectives:
 - to identify and justify the most important research themes and development needs in services,
 - To issue recommendations for the volume and organization of services-related research in Europe.



Research methods and data collection

- VTT with key AERTO member organizations especially:
 - TNO, Fraunhofer ISI and IAO, TECNALIA, SINTEF and SP
- Methods:
 - On-site interviews of workshop participants
 - Review of relevant research and policy papers and relevant technology platforms
 - Information from the EPISIS (European Policies and Instruments to Support Innovation in Services)
 - Relevant EU-level and national policy papers.
 - Comments from selected industry associations in each partner country



Trends affecting services

- To understand the present drivers, challenges and development needs
- To be able to anticipate what is going to happen in the foreseeable future
- Trends have been divided into four topics:
 1. Megatrends in the global economy and production
To describe the changing nature of the geography of economic growth and production
 2. Megatrends in private consumption
To deal with consumption as it spreads over the world as a way of living
 3. Megatrends in ICT and its service-enabling features
ICT and its possibility to enable new services
 4. Generic service-related trends
A shift from “operand resources” (value in property) to “operant resources” (value in use)



Proposed research themes

- Interest in services has focused on marketing or management as well as on service sector economics
- Innovation activity is one central direction to go

Proposed research themes:

1. Value-in-use
2. Verification and validation
3. Data management
4. Efficiency and productivity
5. Utilization of new technologies
6. Sustainability-in-practice

Additional points considered

7. Policies and regulation
8. Research methodology



Proposed research themes

- **Value-in-use**
 - focuses on customers who want to pay for the solution or outcome.
- **Verification and validation**
 - focuses on concepts and technologies to support the verification and validation of services (incl. functionality, robustness, data security, vendor background, etc., whether the vendor / service provider can be trusted)
- **Data management**
 - concentrates on acquisition and analysis of customer data to support diagnostics, maintenance, operations etc.



Proposed research themes

- **Efficiency and productivity**
 - is concerned about relatively expensive labour in Western Europe
- **Utilization of new technologies**
 - focuses on more applicative themes, such as the application of cloud computing / web service technologies
- **Sustainability-in-practice**
 - focuses on growing awareness of the environment, scarcity of (critical) materials and energy, market and regulatory demands and how to proceed from marketing talk to real business, and from margin to the main street



Additional points considered

- **Policies and regulation**

- required to cope with many de facto barriers to free services trade within the EU, incl. official monopolies but also hidden protectionism contributing to the “productivity gap” and discouraging entrepreneurship.

- **Research methodology**

- needed to develop new service specific methods from a scientific perspective for tackling issues like e.g.:
 - shift from products as unit of analysis to collaborative value creation and determination
 - refocus on operant resources as source of value
 - diminishing the antagonism between producer and consumer
 - methods for improving innovation culture
 - shaping interactions and emotions
 - modelling and simulation of services
 - governance, organisation and processes



Conclusion

- Identified trends will provide the starting-point and justification for the proposed research themes.
- The Services SRA provides guidance to the preparation of future research programmes and calls for proposals in EU
- Research can utilize the coming deliverable as part of their planning activities
- For companies:
 - An overview of the focus areas of services research in mid to long-term future,
 - new ideas on how to utilize research to solve demanding business development challenges in an effective manner

FINALLY

HOPE THAT YOUR EXPERIENCE ON THIS
“*SERVICE*“ FULFILS YOUR EXPECTATIONS

Thanks!





**VTT creates business from
technology**