



FIMECC's S4Fleet

Service Solutions for Fleet Management research program

Managing dynamic service delivery systems for distributed fleet

Tampere University of Technology

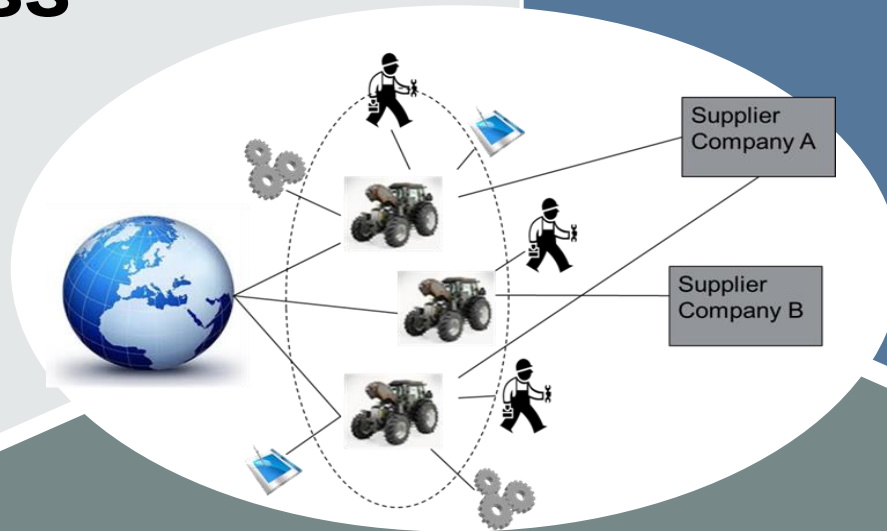
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Industrial service business is a critical component of competitiveness of the Finnish technology-based industry

Industrial service business

Industrial internet



Global installed base of equipment



S4Fleet scope and objectives

Scope

- >20 MEUR
- >20 companies
- 6 universities (>10 teams)
- 2014-2017
 - Current state & state of art
 - In-depth analysis, experimentation, piloting (1)
 - In-depth analysis, experimentation, piloting (2)
 - Diffusion, cross-case learning
- Supplements other programs (technical) with a view to service business

S4Fleet's **mission** is to improve profit creation of service business in technology-based firms by creating enablers for high-volume, dynamic and global service business.

Goal: creating a unique multidisciplinary competence base in industrial service business at the level of fleet to increase the competitiveness of firms and service business research.



Dynamic service delivery systems

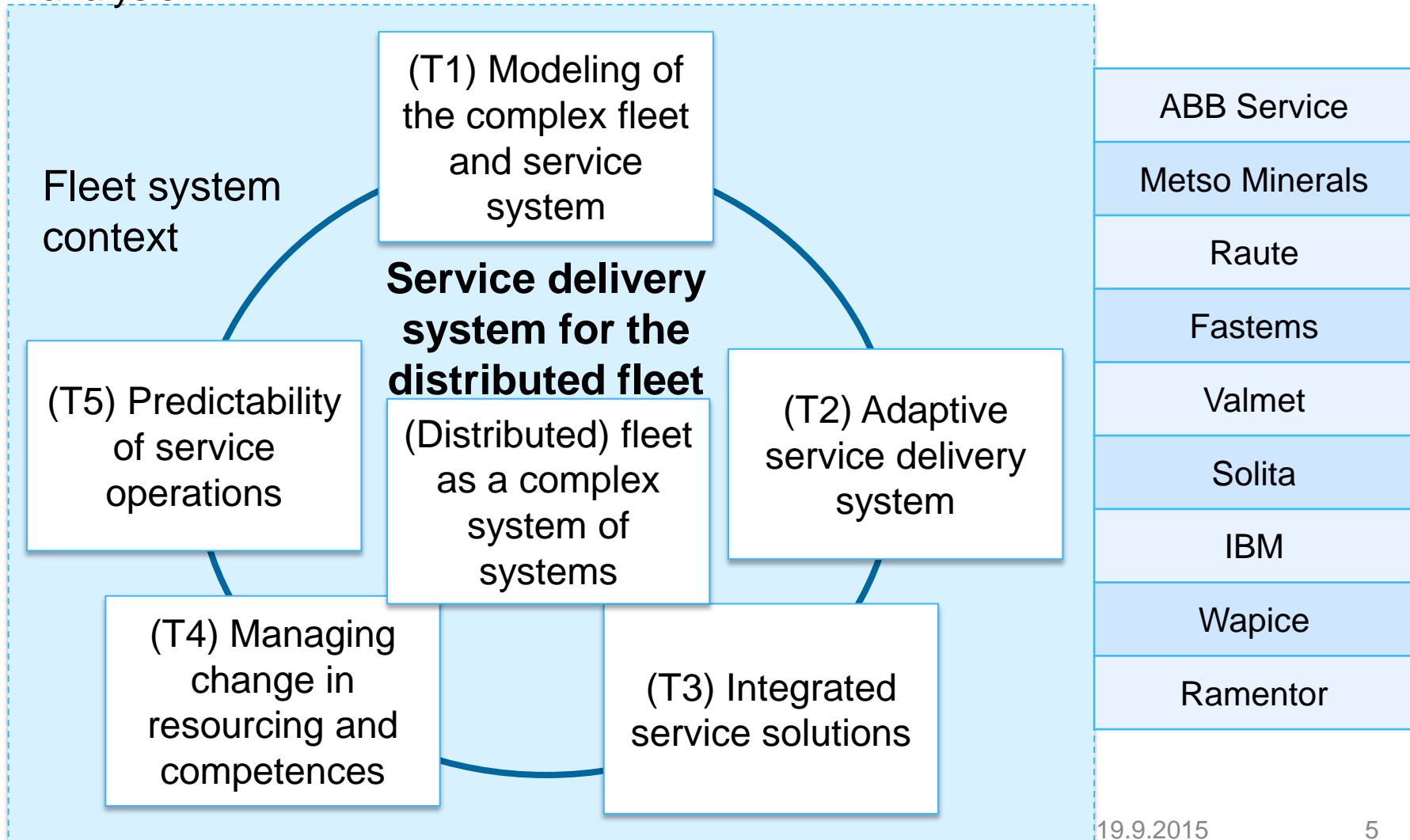
Project purpose and goals

- **Purpose:** to explore, develop frameworks and pilot dynamic service delivery systems for distributed fleet in different contexts
- **Goals**
 - Improved knowledge of the distributed fleet and its service solution as a system
 - Strengthened use of real-time customer knowledge in the service delivery system
 - Better predictability, efficiency and adaptability, both for the supplier and customers
- → Better business value for both customers and suppliers
- **Strategic intent:** significant leap in fleet-related service system predictability for the company and its (selected) customer base through high-volume offerings and intelligent optimization of fleet, through in-depth research



Focus: service system at the level of distributed installed-base of equipment

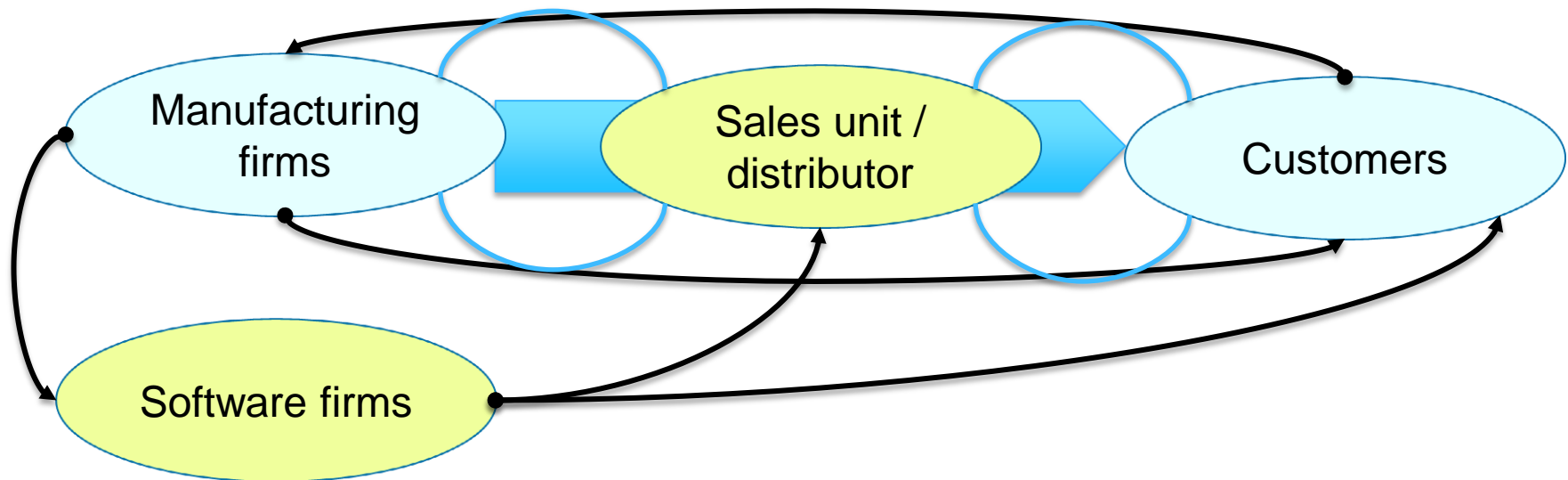
Companies' selected service delivery system cases as targets of in-depth analysis



Example of research contents, T2 / Adaptive service delivery system

When delivering industrial services for the customers using the distributed installed base of equipment,

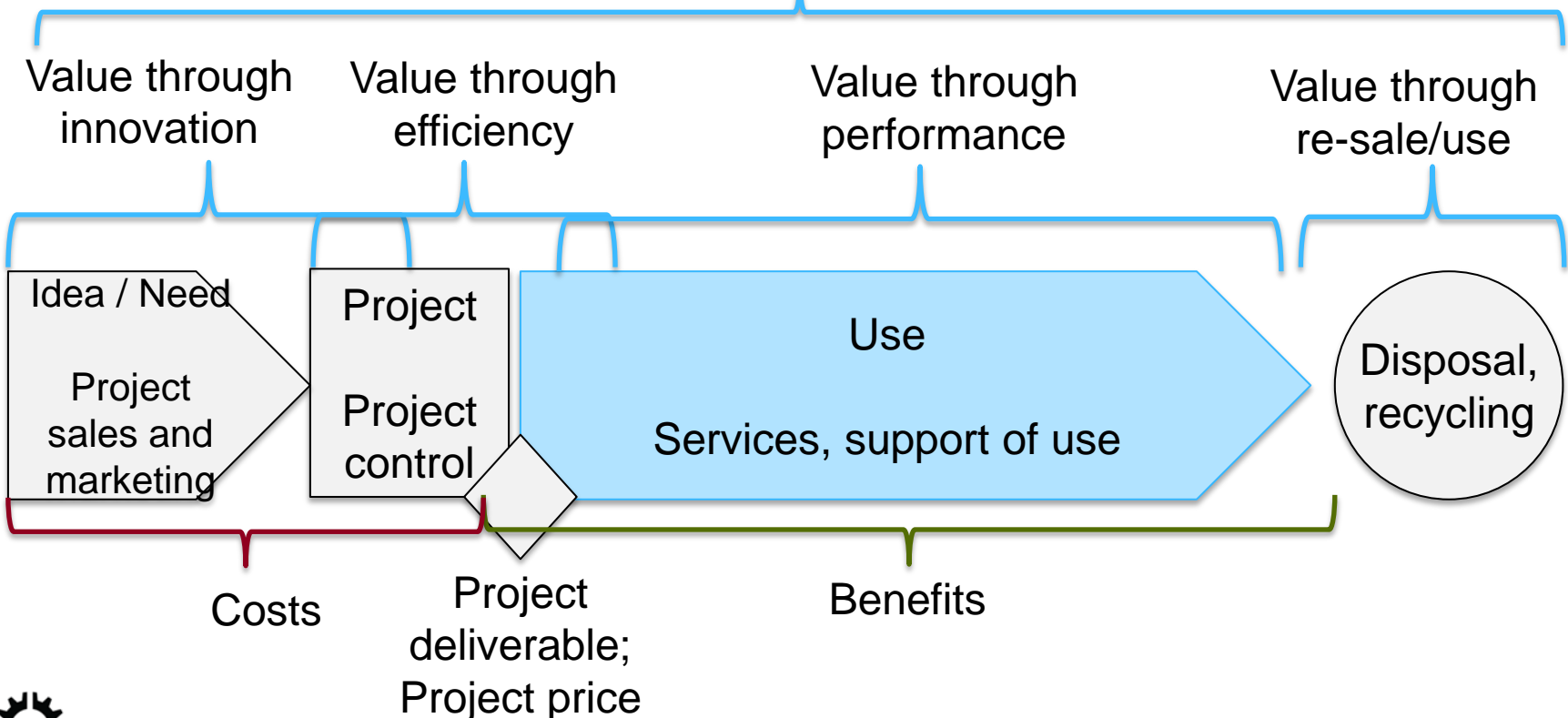
- How can the sales units / wholesales distributors selling the equipment learn to sell also services?
- What is the role of third parties (e.g. software suppliers for equipment analytics) in service design and delivery?



Example of research contents, T3 / Integrated service solutions

How can the lifecycle value of equipment be promoted at the different stages of design and delivery?

Lifecycle value



Publications from the project 2015

- Martinsuo, M. & Momeni, K. (2015) Customized service solutions for project business. Paper presented at NFF Nordic Academy of Management conference, 12-14 Aug, 2015, Copenhagen, Denmark.
- Martinsuo, M. & Vuorinen, L. (2015) Project control toward lifecycle value at the front end of delivery projects. Paper presented at NFF Nordic Academy of Management conference, 12-14 Aug, 2015, Copenhagen, Denmark.
- Momenikouchaksaraei, K. (2015) Sensor-based service enablers in engineering firms. Master of Science thesis, Tampere University of Technology, Degree program in Industrial Engineering and Management.
- Momeni, K. & Martinsuo, M. (2015) Remote monitoring systems as enablers for value adding project-related services. Paper presented at *IRNOP International Research Network on Organizing by Projects conference*, 22-24 June, 2015, London, U.K.
- Ocaña Flores, M. (2015) Business models of software-based services for complex systems. Master of Science thesis, Tampere University of Technology, Degree program in Industrial Engineering and Management.
- Ocaña-Flores, M. & Martinsuo, M. (2015) Use of equipment lifecycle data in industrial services. Paper presented at the *XXV International Conference of RESER*, 10-12 September, 2015, Copenhagen, Denmark.
- Poikonen, E. (Forthcoming, 2015) The development of service delivery systems in industrial companies. Master of Science thesis, Tampere University of Technology, Degree program in Industrial Engineering and Management.
- Poikonen, E., Martinsuo, M. & Nenonen, S. (2015) Standardizing the service delivery system for repetitive industrial services. Paper presented at the *XXV International Conference of RESER*, 10-12 September, 2015, Copenhagen, Denmark.
- Vuorinen, L. & Sariola, R. (2015) Improving project control by combining earned value analysis and automatic data collection technologies. Paper presented at *IRNOP International Research Network on Organizing by Projects conference*, 22-24 June, 2015, London, U.K.

