Modularity Perspective on Service Business Research

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ModSeC project 2008-2010 – logistics and professional services
ModuServ Project 2011-2013 – industrial and KiBS
Starting context 2011 – health services
ModSeC Project Objectives 2008-2010

- To understand and clarify the customers' needs and role in B2B logistics and professional service co-creation;

- To clarify the service providers' role in outsourcing relationships;

- To examine the nature and efficiency of the market structures and organizational solutions for modular service implementation;

- To describe applicable future business models in modular service business.
ModSeC – Work Package 1

Managerial implications

- By using modularity in service production, the service provider can increase the value perceived by the customer (Figure 2).
- Service modularity can be seen as a tool for developing services internally in a service company, i.e. a method for improving managers´ thinking when they try to achieve efficiency in service production.
- In modular service organization it is essential to develop means of sharing knowledge between the organizational units and experts.
- The research on modular services will give the companies an understanding of the benefits of standardized and modularized services and the role of customer interface herein.
Figure 2 from Rahikka, E., Ulkuniemi, P. and Pekkarinen, S. (2011) Developing the value perception of the business customer through service modularity in Journal of Business & Industrial Marketing, 26/5, 357-367.
“Modularity in designing offerings and processes will make services tradable” (Spring and Araujo, 2008) - to allow for buyers to employ their part of the co-created value.

- From the managerial perspective important to understand how service modularity is connected to the buyer-perceived value.

Making internal processes of service firms more effective, another underlying goal of service modularity is to support mass customization.

- However, the customers’ perspective and experience have not yet been thoroughly explored.
Managerial implications of WP3

- Dividing an organization’s processes into a number of distinct modular activities and sub-processes makes the total operation easier to conceptualize and handle.

- Modularity enhances opportunities to combine processes and activities and identify new boundaries for business opportunities within business networks.

- The customer has an active role in specification of service needs and co-developing the solution that enables the efficient and effective combination of service modules, processes and actors for co-creation of value (Exhibit 3.1 in ModSeC www-pages).
ModSeC project, WP 3
Exhibit 3.1 Development of Modular Service Offering

Research implicates that the customer has an active role in specification service needs and co-developing a service offering.

A service provider for developing own service offerings must understand customers’ needs, evaluate current and develop new own services and competencies.

Modularity enables flexibility to combine auxiliary and support services with the core service and processes provided by different actors composing a modular service offering.


20.10.2010, Saara Pekkarinen
Modular-based approach advantages
– Mason, Juga, Pekkarinen & Eyers, 2010, LRN Conference paper

• **Simplicity** – Splitting an organization’s processes into a number of distinct modular based activities helps to make the total operation easier to conceptualize and handle.

• **Support Standard Enhancement** - Business processes within a defined module can be focused upon and standardized for seeking cost, flexibility and effectiveness benefits. The modular based approach can also fit well within a continuous improvement culture where efforts are focused upon reducing variability and uncertainty.

• **Support Service Enhancement** – Modularity enables the splitting of the process into standardized sub-processes and combining them with customized processes which can fulfill heterogeneous customer needs.

• **Easier Outsourcing** - Modular processes allow easier outsourcing of process capabilities.

• **Enhance Opportunities to Combine Processes/Activities** – Modularization of a (service) production system creates new module boundaries for new exchange opportunities between the different actors within business network.
Modularity (modularization) is interesting research avenue both from academic and business practice perspectives.

- Campangolo and Camuffo (2009) - a gap in the research concerning modularity in organizational design as both definitions and measures of modularity are ambiguous and the findings controversial.
- Miraglia (2010) – modularity and integratedness as coexisting properties of the complex systems
- Interesting topics for future research include e.g.
  - Modularity in business model and ecosystem contexts
  - Relationship between modularity and outsourcing
  - A concept ‘modular production network’ in different types of services
What ModuServ is about?
http://moduserv.drupal.oulu.fi/

The purpose of this research project is to describe, analyze and evaluate how value is co-created in business services through modularity in collaborative business networks.

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Themes and Work Packages

We aim to enhance our company partners in developing their service business from three perspectives:

- **Customer as a co-creator of** value in service design, development and production (Value Co-Creation)
- **Managing network for** providing service solutions (Collaborative Networks)
- **Modularity as strategic and operational issue in** service business (Service Modularity)
Modularity Issues within ModuServ project

Aims in WP 2

• The general purpose to explore the characteristics and processes of the business services within networks.
• A special attention on capabilities required for developing horizontal collaborative relationships
• Especially modularity enhancing collaboration within the organizations and in the boundaries between the organizations streamlined to the whole process of value co-creation.

Aims in WP3

• Exploring the processes through which modular services could enhance value co-creation for service providers and customers.
• Conceptual development into the ongoing discussion concerning value co-creation eg related to importance of knowledge sharing and utilization capabilities.
Thank you!

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