

ENTERPRISE BUSINESS MODELS

CHAP. 9. What is Service Innovation?

1. Examples of Service Innovations
2. Closed vs. Open Innovation
3. Product or Service?

Characteristics of services

- A service is the non-ownership equivalent of a good. Service provision has been defined as an economic activity that does not result in ownership and is claimed to be a process that creates benefits by facilitating either a change in customers, a change in their physical possessions, or a change in their intangible assets.
- Typically characterized by the following (Zeithaml, Parasuraman and Berry, 1985):
 - Intangibility
 - Heterogeneity
 - Inseparability
 - Perishability
 - The IHIP characteristics...
- Intangibility
 - Services are ideas and concepts that are part of a process
 - The client typically relies on the service providers' reputation and the trust they have with them to help predict quality-of-service and make service choices
 - Regulations and governance are means to assuring some acceptable level of quality-of-service
 - Consideration: Do most services processes involve some goods?
- Heterogeneity
 - From the client's perspective, there is typically a wide variation in service offerings
 - Personalization of services increases their heterogeneous nature
 - Perceived quality-of-service varies from one client to the next
 - Consideration: Can a homogeneous perception of quality due to customer preference idiosyncrasies (or due to customization) also benefit the goods manufacturer?
- Inseparability
 - Services are created and consumed at the same time
 - Services cannot be inventoried
 - Demand fluctuations cannot be solved by inventory processes
 - Quality control cannot be achieved before consumption
 - Consideration: Does the ability to tailor and customize goods to the customers' demands and preferences mean that these goods also have an inseparability characteristic?

- Perishability
 - Any service capacity that goes unused is perished
 - Services cannot be stored so that when not used to maximum capacity the service provider is losing opportunities
 - Service capability estimation and planning are key aspects for service management
 - Consideration: Do clients who participate in some service process acquire knowledge which represents part of the stored service's value? What might the impact be?

Service innovation

- Approaches to service innovation and innovation in services/service:
- Transfer – assimilation (Sampson, 2004):
 - Product and service innovation share so many characteristics that theories, models and empirical results may be transferred from product innovation to service innovation.
- Demarcation (Menor et al, 2002):
 - Product and service characteristics differ so much in their characteristics that it is also likely that innovation processes will differ too significantly for knowledge transfer to occur. Thus, specific theories, models and studies of service innovation are required.
- Synthesis (Drejer, 2004; Coombs and Miles, 2000):
 - The blurring of products and services has come so far that even though products and services differ, it will be more fruitful to develop synthesized approaches to product and service innovation that both product and service innovation processes may profit from. Thus, synthesis theories, models and studies of innovation are required.
- Service innovation as innovations in service industries
- Service innovation as innovation in knowledge intensive services
- Service innovation in goods producing industries
- Characteristics and service dominant logic – implications for service innovation

Service innovation as innovations in service industries

- Some results from analysis of data from Statistics Norway (CIS 2006)
- Comparing service industries to manufacturing industries:
 - The service sector as a whole has traditionally been less innovative than the manufacturing sector, but this is no longer consistent in CIS 2006
 - The innovation processes of the service sector have traditionally been different from the manufacturing sector, but this is no longer consistent in CIS 2006
 - The conditions for innovation in the service sector have traditionally been different from those of the manufacturing sector, but this is no longer consistent in CIS 2006

- The effects of innovations in the service sector still differs from those in the manufacturing sector (typically more qualitative and more customer oriented)
- Comparing different services using data from the Norwegian version of the CIS3/CIS2006 indicates:
 - The service sector is a heterogeneous collection of industries when it comes to innovation intensity/ degree of innovation (trade as the second lowest in innovation intensity and KIBS as the second highest)
 - These differences are even greater in CIS2006
 - For indicators of innovation processes, conditions etc., statistics are somewhat incomplete and also, some parts of the service sector are not included in the statistics
 - Over- and underreporting of innovation is a bigger problem in service sectors:
 - Low innovation intensity, e.g. trade: "We don't innovate, we develop and change"
 - High innovation intensity, e.g. programming: "All the time i use on programming/coding is reported as R&D"

Service innovation as innovation in knowledge intensive services (KIS)

- Tends to focus more on the suggested role of these services to innovation in general than on innovation and innovation processes in these industries....
- Role of KIS to innovation:
 - Difficult to prove the role of KIS in innovation in general (what about service innovation, different KIS)
 - Qualitative studies of the importance of KIS in innovation
- Innovation in KIS:
 - Innovation in KIS:
 - KIBS invest in R&D, but not in external R&D sources (Prest, 2006)
 - Deep relationship with customer main source of innovation
 - Generalization a major issue in innovation (Haugstad, 2006)
 - Innovation in KISA, much less studied

Service innovation in goods producing industries

- Servitization involves new incentives for innovation,
- A recent study by Aas and Pedersen, 2009 suggests manufacturing firms focusing service innovations improve their financial performance whereas the same is not supported for service firms
- Explanation.... Heterogeneity? Management control?....

Example, product / service ecologies



- Lower consumption pr. km...
- The product is treated in isolation
- Users and services are unaltered

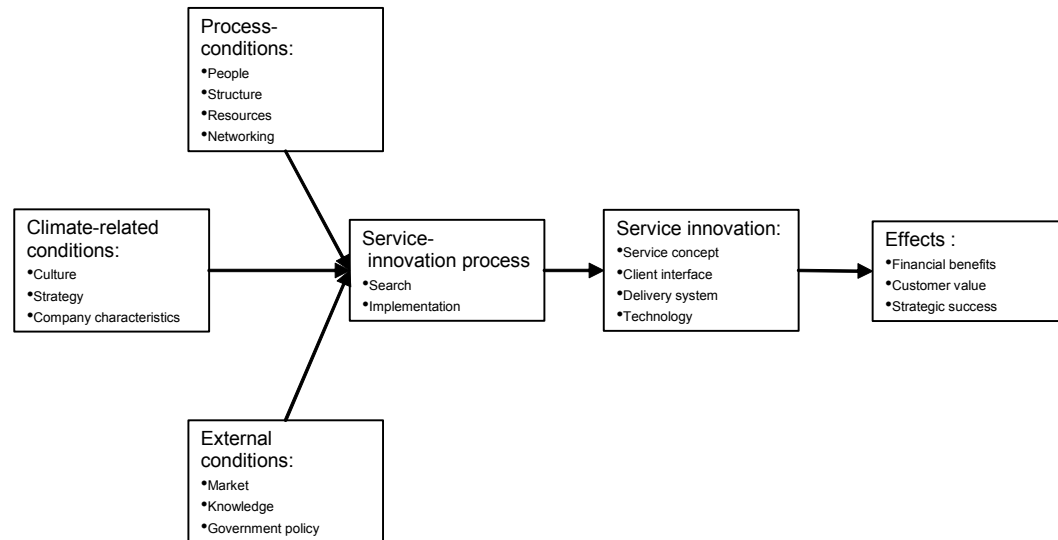


- Products may be treated as parts of prod. / Service ecologies
- Requires simultaneous change in products, services and user behavior
- Great challenge...

Characteristics of services – implications for innovation

Service characteristics	Impact on organization of innovation process
Intangibility	Need for intensive communication between people involved in innovation, because new product cannot be felt or touched. Creating shared understanding is of highest importance
Simultaneous production and consumption	Close involvement of front and back office personnel is needed, largely due to simultaneous development of production process
Heterogeneity	No impact; physical products may also be heterogeneous
Perishability	No impact; new services can be developed in advance

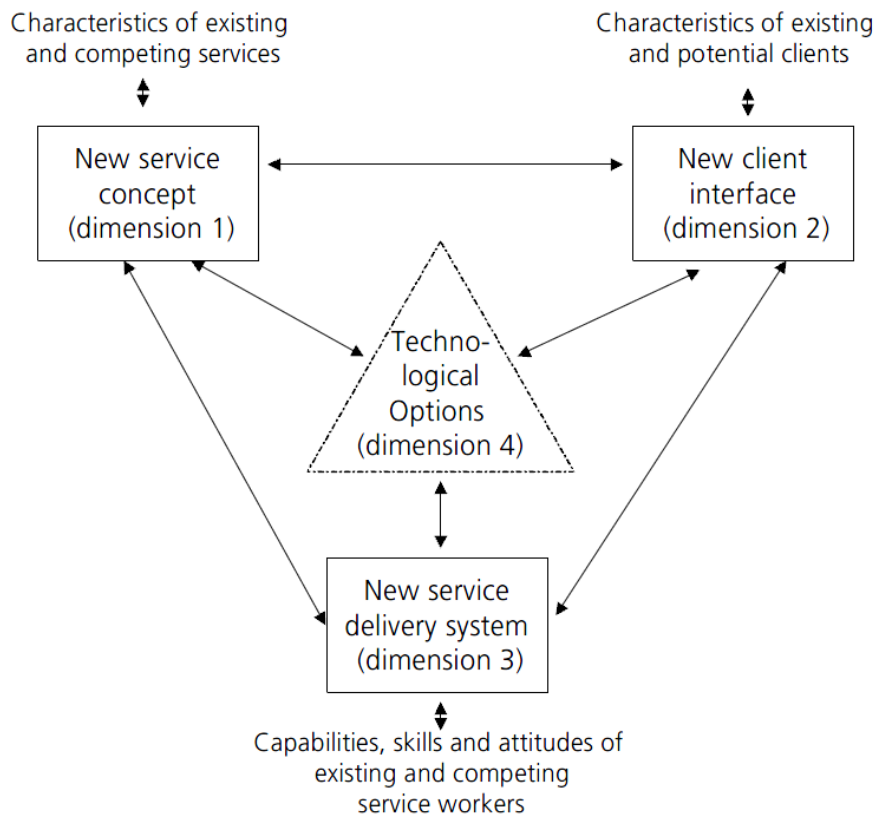
Characteristics of service innovation – a framework



- Research suggests the service innovations conditions differ from other forms of innovation:
 - Less driven by R&D
 - More driven by customers
 - Climate a more important condition
 - People and multiple competences a more important determinant
 - Much service innovation driven by structural/infrastructural regulation?
- Example, explanations of the US/EU productivity differences:
 - Productivity difference explained by US service sector productivity
 - Biggest explanatory factor "multifactor productivity" in market services (e.g. trade, transportation, financial, business services, hotels, restaurants, personal services)
 - "complex interactions between productivity, investment, and regulations." (van Ark et al., 2008)
 - E.g. regulation of retail trade (superstores etc.), liberalization of service trade, cultural differences (cultural heritage) etc.

Innovation type characteristics

- Research suggests the service innovations types differ from other forms of innovation:
 - Does not fit the product/process typology
 - More often simultaneously involves organizational innovations
 - Incremental rather than radical
 - Alternative typologies (e.g. den Hertog, 2000, modified by deJong, 2003):



Example- Immaterial services

- In RC's most important program for service related research only 11 of 205 projects may be characterized as service innovation projects

Results/effects characteristics

- Research suggests the effects of service innovations differ from other forms of innovation:
 - More qualitative
 - Longer term effects
 - More oriented towards the customer
 - Less focused on (short term) financial effects

2. Closed vs. Open Innovation

Chesbrough originally defined open innovation as: "a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology".

Quite the opposite to 'closed innovation', which assumed that the best route to innovation was to have control over the process (ie. hiring the best employees, keeping data internally, etc.)

For us an open innovation definition is much broader. It enables organizations to function in a new way. It's a way that empowers co-workers and communities to tackle challenges and improve their organisations. This is not only limited to companies and "classical organizations".

Open innovation describes worldwide phenomena where people share ideas and work together through open and transparent networks for commercial or social purposes thanks to the ease of online social collaboration tools and social media.

As the access to education, research and additional job markets increased over the decades, the model of closed innovation needed to be innovated itself. With a larger pool of skilled employees it became harder to keep all of the original or best ideas in one place. It also became easier for employees to potentially leave the firm with their knowledge and ideas and either join another firm or create a startup of their own. Lastly it is virtually impossible nowadays as an organization to provide all knowledge within its boundaries. And thus, open innovation was born. The organisations that want to succeed in today's world needed to open up the doors to the wisdom of the crowd. But what does that mean, exactly? And what are organisations really getting out of it?

Just because organisations are opening up the doors to outside influence, it does not mean that all of the tactics from closed innovation should be discarded. I assume that you still have very skilled and bright employees with great ideas to contribute. In open innovation, organisations need to utilize both internal and external resources. If you have a large organisation, including all employees or departments in a brainstorming process could be a big step in opening up the doors to open communication and open innovation. At the core of open innovation is the name itself: Open. Open to new people, new information, and new ideas. Most important open to learn from others. The potential in the crowd is far more than the potential in one organisation, no matter how big and bright that organisation is. Instead of innovation focusing on a few bright minds, open innovation turns to many bright minds to share and collect information and get creative.

3. Product or Service? What's the difference?

End of Chapter 9
