

It's all about service

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KIVI vakafdeling Commercieel Ingenieur
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3 days/week

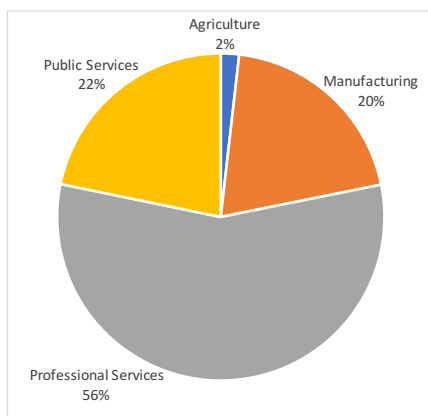
2 days/week

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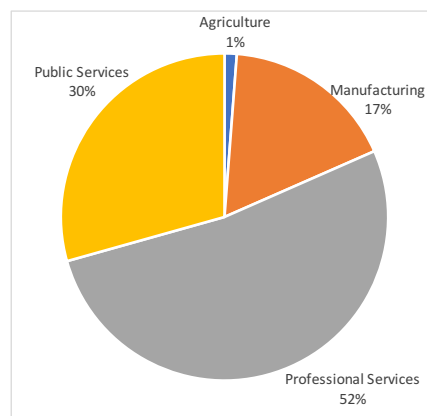
- Our economies and manufacturing companies change
- We need a framework to understand the logic of service
- Manufacturing firms are servitizing to create competitiveness
- Servitization is a profound business model innovation
- Research Group Business Service Innovation

NL is a service economy...

GDP (78%)

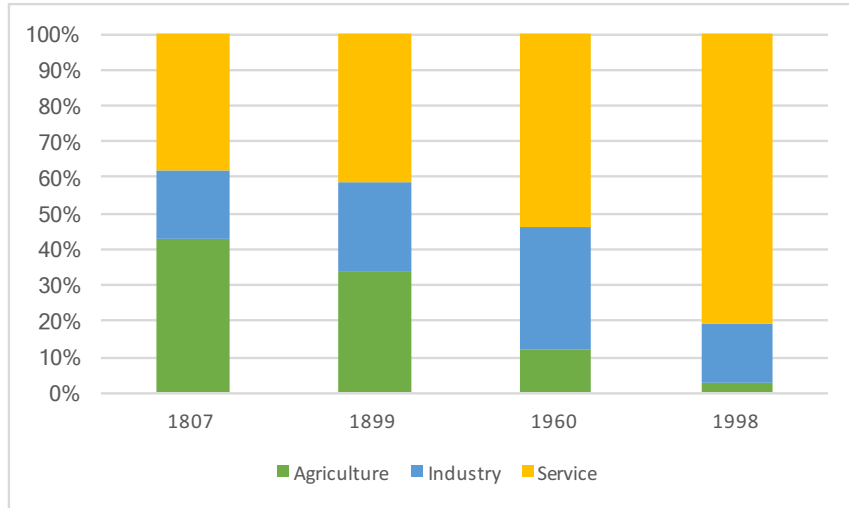


Employment (82%)



2015

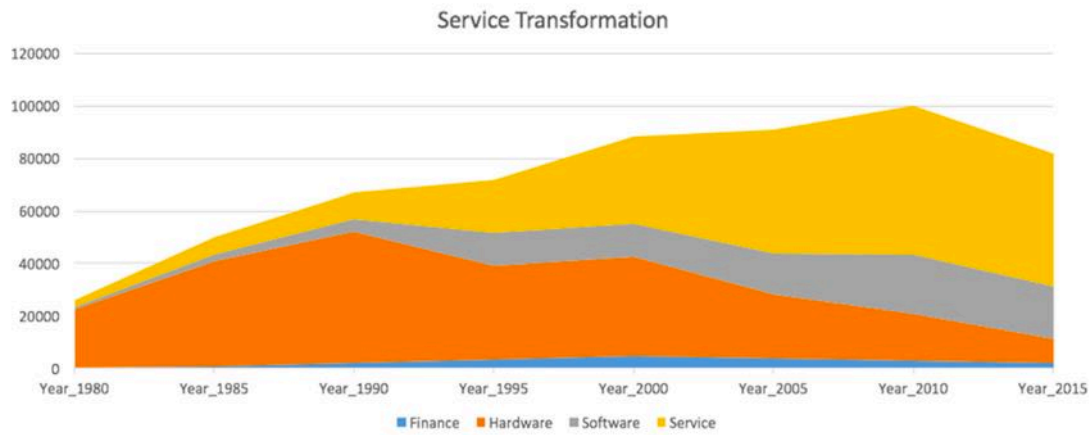
Labour force distribution by sector in NL



IBM 360/30



IBM revenue by segment (1980-2015)



Rolls Royce: power by the hour...



- TotalCare
 - an agreed rate per engine flying hour
 - enables customers to engage in accurate financial forecasting



Philips sells light as a service



Schiphol Airport



National Union of Students

Revenue model: Pay per Lux

Customers: *they manage lightning against predictable costs*



9

WP Haton: dough make up systems

- BreadLab service
 - Customers learn how to extend their portfolio and optimize their processes.
- Blue Value support packages
 - Reduces downtime in bakeries



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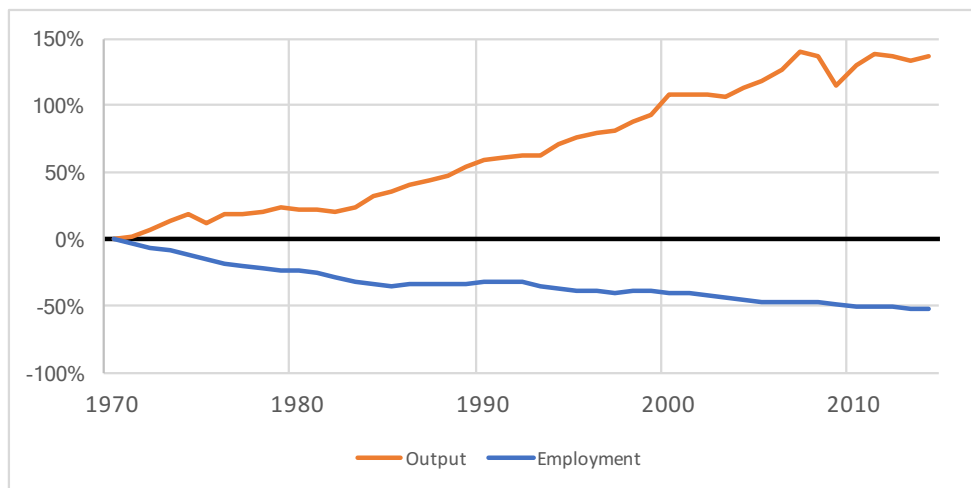
Many other examples

- Alstom
 - Train-life services
- MAN
 - Leasing: pay-as-you-go
- General Electric
 - Zero downtime on locomotives, wind turbines and jet engines
- Michelin
 - From from selling tires to selling kilometers

ALSTOM



Manufacturing in NL: more output, less jobs



Own calculations, Source: CBS



And manufacturing will keep on changing

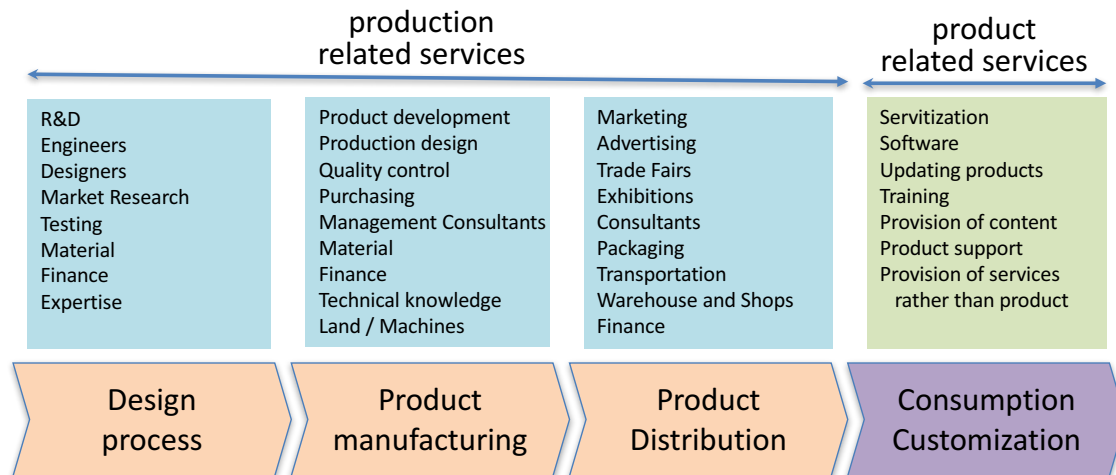


How did manufacturing and our economies change?

- Firms needed more and more specialized knowledge
- Increased demand for services (B2B and B2C)
- Transformation and globalization of markets
- Productivity improvement in services is relatively low



Hybrid production systems and products



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there is one sort of labour which adds to the value of the subject upon which it is bestowed: there is another which has no such effect. The former, as it produced a value, may be called productive; the latter, unproductive labour

Adam Smith

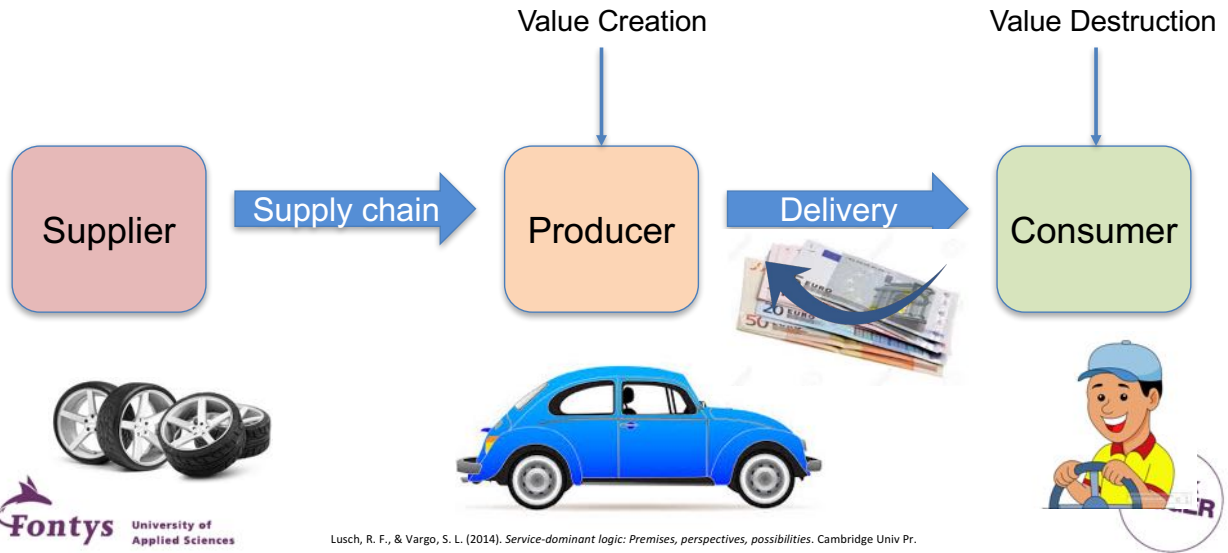
Scottish economist, philosopher, and author



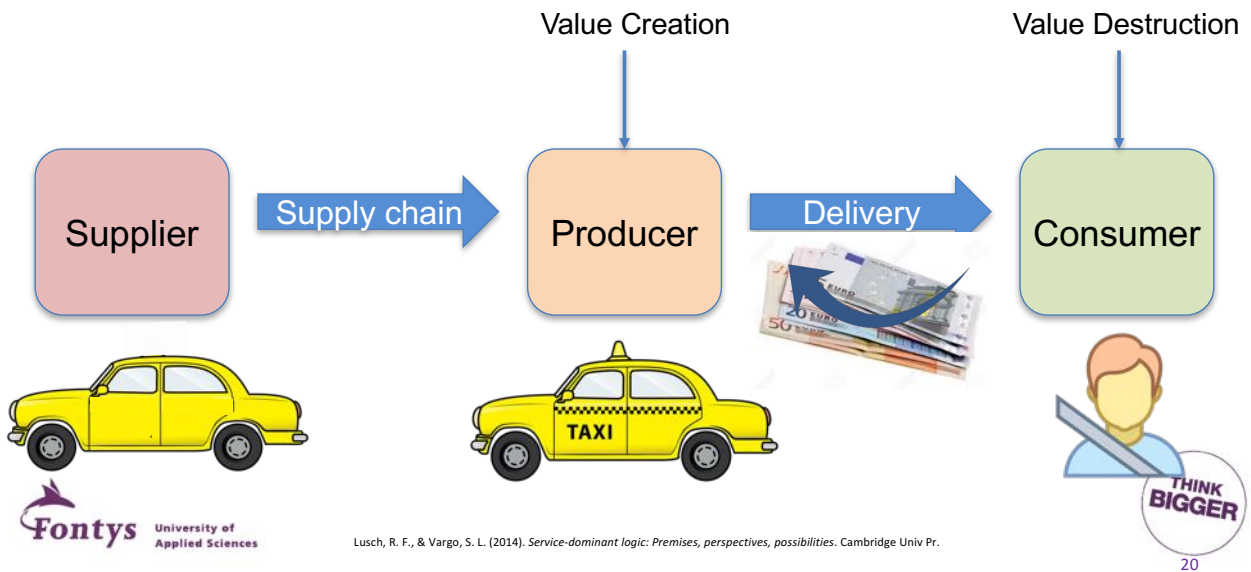
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Adam Smith

Goods-Dominant Logic



Goods-Dominant Logic applied for services



How do services differ from goods?

- Intangibility or non-material
 - idea and concept
 - ownership
- Heterogeneity
 - high variability of service delivery
 - no standards
- Inseparability
 - production and consumption
- Perishability
 - services cannot be stored
 - provider issue



Service-Dominant Logic

- Customer value is that what the customer experiences
- Value is contextual, experiential and idiosyncratic
- Value-in-use
- ~~Value-in-exchange~~



Service-Dominant Logic

- Operand resources
 - Require some action to be performed on them before they can provide value
 - Static (often tangible)
- Operant resources
 - Capable of acting on other resources to create value (given appropriate circumstances)
 - Dynamic (human competence: knowledge, skills)



Service-Dominant Logic

- Value-in-use
 - phenomenological experience of the customer
 - customer is an active participant in value creation
 - it is dynamic and context dependent
- Value co-creation
 - Value is co-created by integrating resources from multiple actors, always including the customer.
 - A producer cannot deliver value but can participate in the creation and offering of a value proposition.



Value co-creation and co-production

- Value co-creation
 - the customer's realization of the value proposition to obtain value-in-use
- Value co-production
 - the customer's involvement in the realization of the producer's value proposition



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Why are manufacturing firms servitizing?

- Economic rationale
 - Companies cannot compete on the basis of costs
 - Installed base is larger than amount of sales
 - Stability of revenues – services vs products



Why are manufacturing firms servitizing?

- Strategic rationale
 - Lock-in customers (Nespresso...)
 - Lock-out competitors (not always successful)
 - Increase the level of differentiation (risks, high-tech)
 - Customers demand it (contracting for capability)



Why are manufacturing firms servitizing?

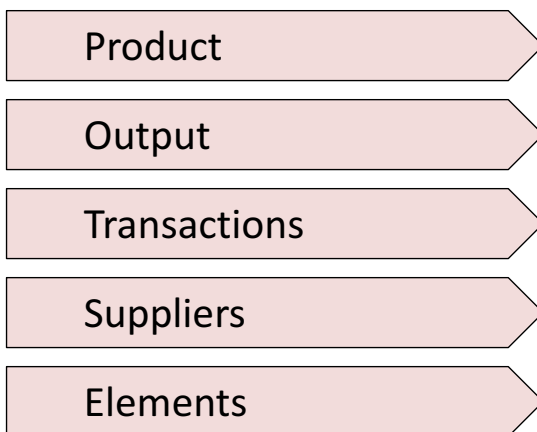
- Environmental rationale
 - Firms change business models
 - Customers change notions of ownership

- Pay-per-wash rather than buying washing machines
 - Customers reduce number of washes
 - Producer maximizes the product-lifecycle

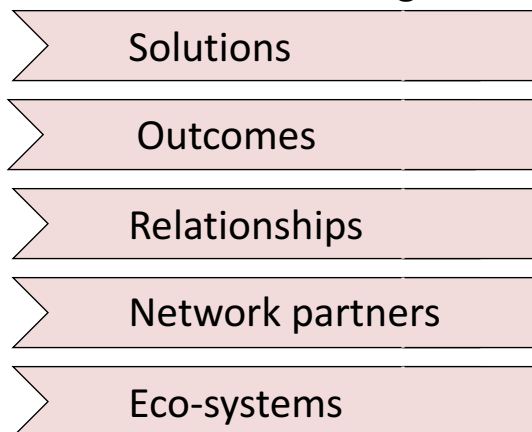


Shift to services

From a world of...

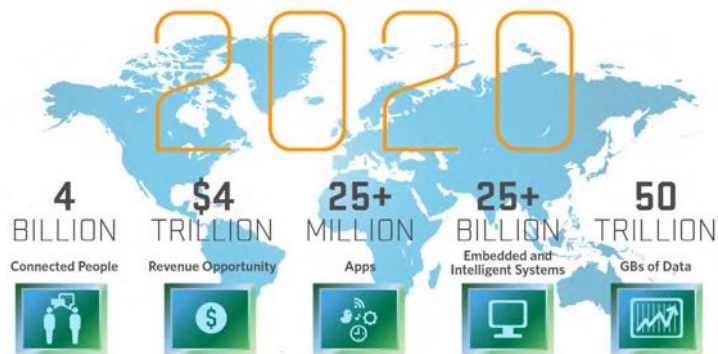


To a world including...

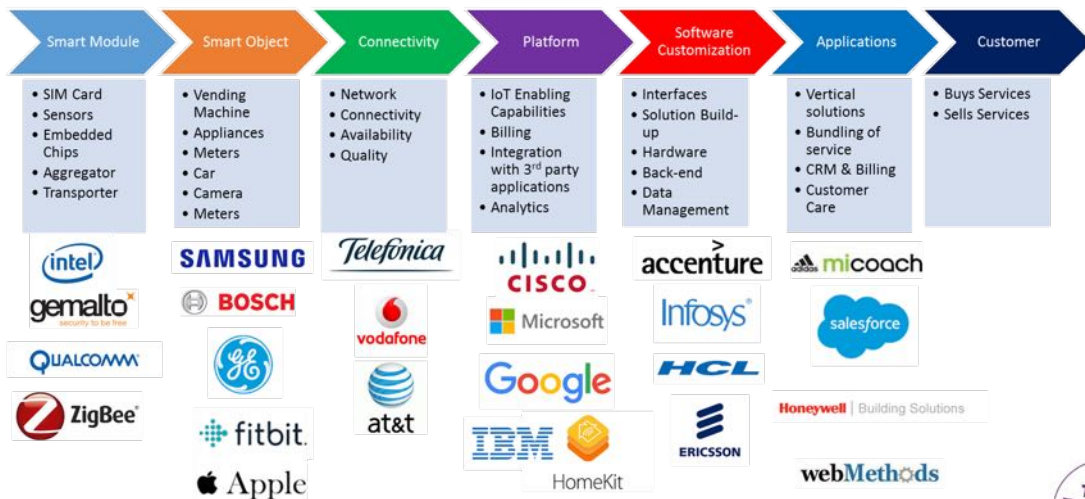


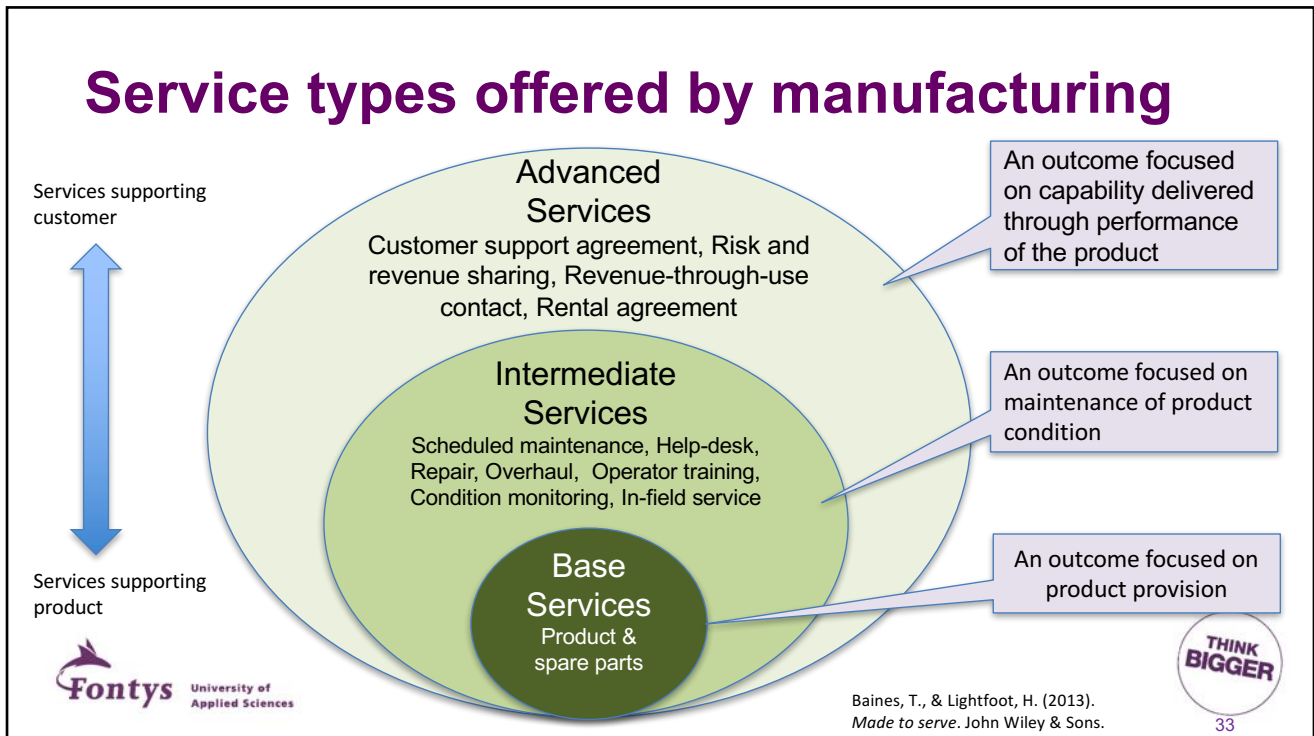
IDC - September 2016 – Internet of Things

- 31.4% of organizations surveyed have launched IoT solutions
- 43% looking to deploy in the next 12 months.
- 55% of respondents see IoT as strategic to their business



Internet of Things value chain

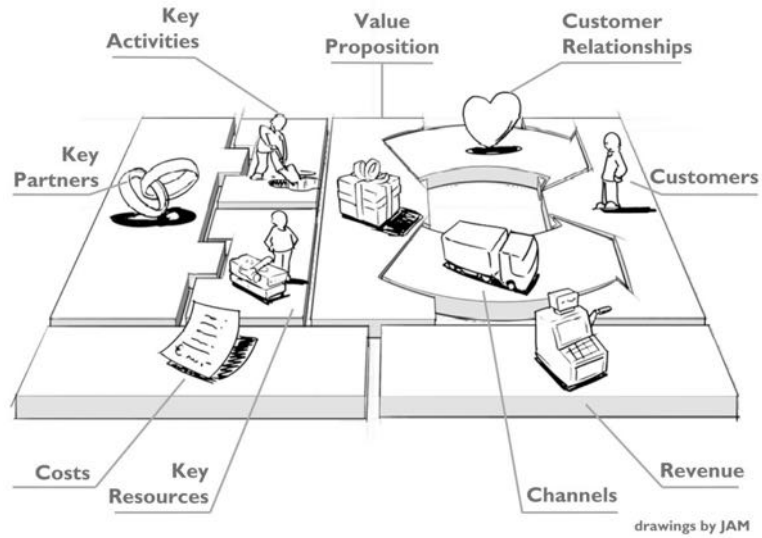




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Servitization = Business Model Innovation



The Business Model Canvas

Designed for: _____ Designed by: _____ Date: _____ Version: _____

Key Partners Who are our key partners? Why are they key partners? Which key resources are we acquiring from partners? Which key activities do partners perform? Partnerships and relationships: Distribution and distribution Acquisition and integration Association of particular interests and activities	Key Activities What key activities do our value propositions require? Our distribution channels? Customer relationships? Revenue streams? Activities: Production Distribution Logistics Delivery "to the door" Billing Support Cost Reduction Risk Reduction Community Building	Value Propositions What value do we deliver to the customer? Which part of our customer's problems are we helping to solve? Which customer needs are we satisfying? Value Propositions: Performance Customization Convenience Cost Reduction Risk Reduction Community Building	Customer Relationships What type of relationship does each of our customer segments expect us to establish? Which type of relationship do we establish? Which are they engaged with the best of our business models? How do they act? Relationships: Personalized Self-Service Automated Community Co-creation	Customer Segments For whom are we creating value? Who are our most important customers? Customer Segments: Mass Niche Customized Co-creation
Key Resources What key resources do our value propositions require? Our distribution channels? Customer relationships? Revenue streams? Key Resources: Human Financial Intellectual Physical Social	Channels Through which channels do our customer segments want to be reached? How are they reached best? How are our channels integrated? Which ones work best? Which ones are most cost-effective? How are we integrating them with customer routines? Channels: Direct Indirect Selective Exclusive Multi-channel Co-creation	Cost Structure What are the most important costs inherent in our business model? Which key resources are most expensive? Which key activities are most expensive? Cost Structure: Fixed Variable Variable (costs that vary with sales) Variable (costs that vary with volume) Variable (costs that vary with other factors)	Revenue Streams For what value do our customers really willing to pay? For what do they currently pay? How are they currently paying? How would they prefer to pay? How much does each customer segment contribute to overall revenue? Revenue Streams: Fixed Variable Variable (costs that vary with sales) Variable (costs that vary with volume) Variable (costs that vary with other factors)	

Service paradox

- Investments in servitization do not always pay off
 - Airbus only 4% service revenue increase between 2003 – 2014
 - Boeing creates 15%, Rolls Royce creates about 50%



- Traps
 - Growth in services while protecting a core product position
 - Undermining product business while promoting servitization
 - Pursuing scale in skill-based business
 - Offering specialized skills in economies of scale markets



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Lectoraat Business Service Innovation



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It's all about service

- Also small and medium enterprises need servitization and advanced business services as levers for competitiveness
- We need to develop and validate a theoretical framework to better understand the role of value creation
- We need to create experimental environments for our students and companies to learn about entrepreneurship and innovations with services



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