

Service Science and Innovation

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Return on service innovation

- The economy and services
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Document Services Valley

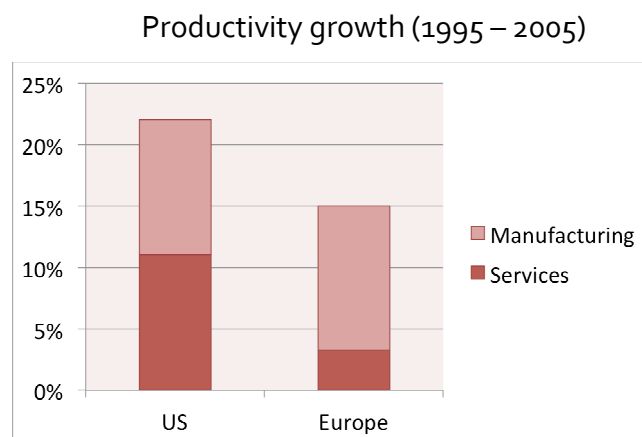


Innovation in decline?

- Netherlands: not industrial but a service-based economy
 - Where are the returns?
-



Underperforming service sector



McKinsey Global Institute (2010). *Beyond Austerity: A Path to Economic Growth and Renewal in Europe*.

Commodity trap

"In global competition manufacturing practices are easy to imitate and move to low cost regions, like China and India. In this competition products turn to *commodities* that are sold on the basis of their costs, not their value."

-- Antti Hautamäki



Chesbrough, H. (2011). *Open Services Innovation*

Innovation in decline?



Photo © Radio Netherlands Worldwide



Customer-company relationship

		Nature of service	
		Routine	Nonroutine
Service delivery	Process		
	Outcome		

Source: Parasuraman A. (2011). *Service Productivity, Quality and Innovation: Implications for Service-Design Practice and Research*.



Customer-company relationship

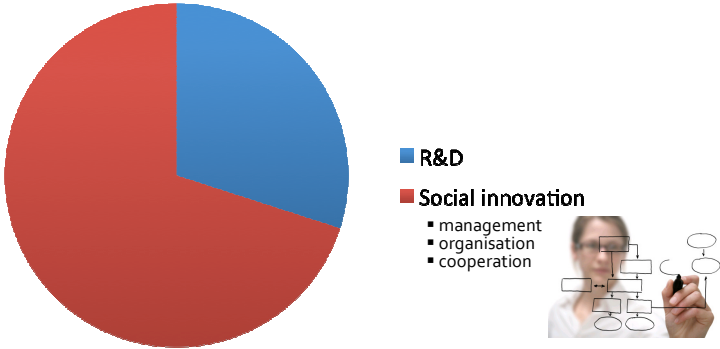
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Service delivery	Process		
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Source: Parasuraman A. (2011). *Service Productivity, Quality and Innovation: Implications for Service-Design Practice and Research*.



R&D vs. social innovation

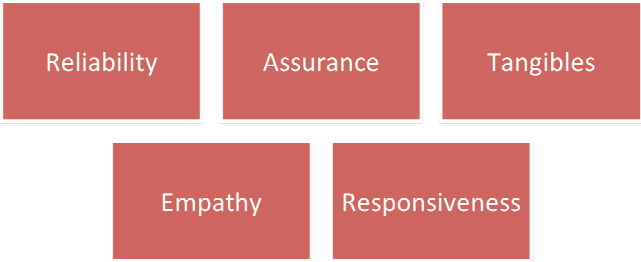
Innovation success comes from...



Source: Volberda, H. W., van de Vrande, V., Jansen, J. J. P. (2008). *Meer Rendement uit R&D. Nederlandse Life Sciences en Medische Technologie*. Rotterdam School of Management, Vakgroep Strategie en Omgeving: Rotterdam.



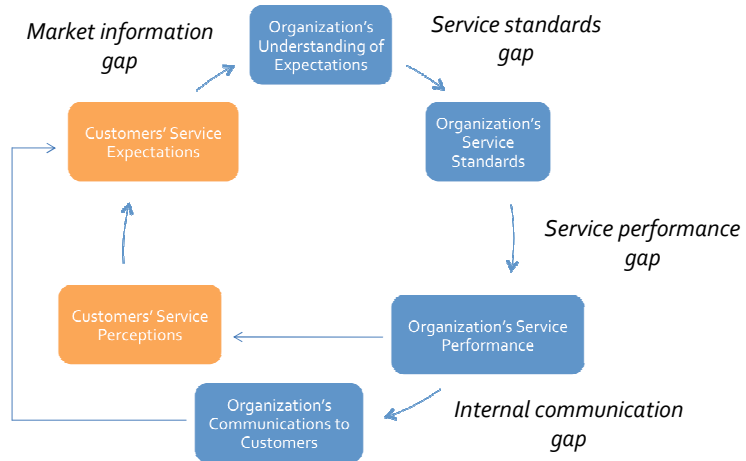
SERVQUAL



Source: Parasuraman A. (2011). *Service Productivity, Quality and Innovation: Implications for Service-Design Practice and Research*.



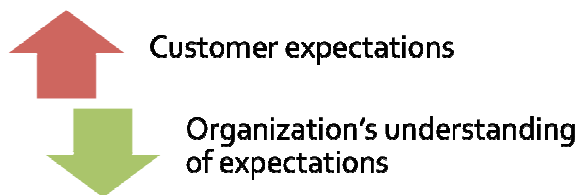
The GAPS model



Source: Parasuraman A. (2011). *Service Productivity, Quality and Innovation: Implications for Service-Design Practice and Research*.



Market information gap



Source: Parasuraman A. (2011). *Service Productivity, Quality and Innovation: Implications for Service-Design Practice and Research*.



Service standards gap



Organization's understanding of expectations



Organization's service standards



2 hours

late?
no problem!

Source: Parasuraman A. (2011). *Service Productivity, Quality and Innovation: Implications for Service-Design Practice and Research*.



Service performance gap



Organization's service standards



Organization's service performance



only
80%
of trains on time

Source: Parasuraman A. (2011). *Service Productivity, Quality and Innovation: Implications for Service-Design Practice and Research*.



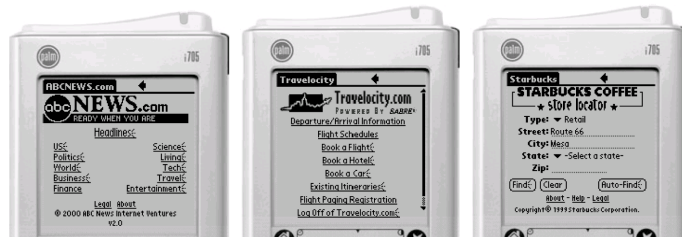
Internal communication gap



Organization's service performance



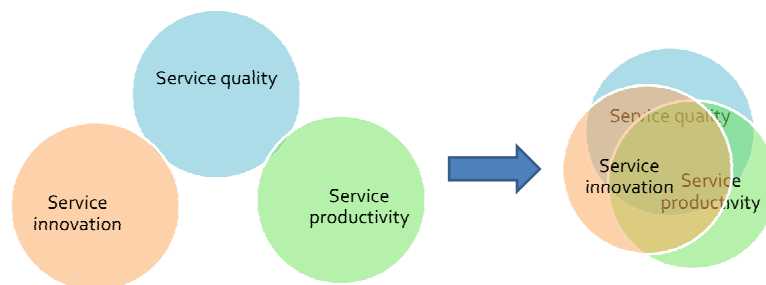
Organization's communication to customers



Source: Parasuraman A. (2011). *Service Productivity, Quality and Innovation: Implications for Service-Design Practice and Research*.



Customer-company relationship



Source: Parasuraman A. (2011). *Service Productivity, Quality and Innovation: Implications for Service-Design Practice and Research*.

Why into services?



stable stream
of income



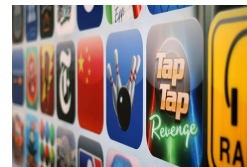
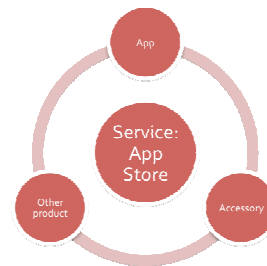
enhanced
customer
relationships

Solution: paradigm shift

Instead of
~~[product] + [free services]~~

[service] + [attached products]

Solution: paradigm shift



Roland Berger

Possibilities

- **Capturing new customer activity/creating new customer activity within core activity chain by services**
 - Ericsson
- **Moving on from core product-based solutions towards extended portfolio of professional services**
 - IBM
 - UPS
- **Rolling out successful service transformation experience to new business units/customer groups**

Source: Roland Berger



Ericsson

“We are now helping our customers in Australia and the Netherlands to manage their entire mobile networks, leaving them free to concentrate on other aspects of their business”



-- Fadi Pharaon, Ericsson



Source: Roland Berger, Ericsson Q4 2010 Report



IBM



- “Unbundling” services from hardware
- Sale of hardware division
- Acquisitions (PwC consulting business)
- 80% revenue from business services, growing margins



UPS



"UPS Supply Chain Solutions performs what are, for UPS, some very different functions-- everything from fixing electronics to answering customer phone calls to issuing corporate credit cards"

-- Frank T. MacInnis

MacInnis F. T. (2010). *Towards a new definition of service: service providers have to do more than ever.*

Product of dienst?



De nieuwste generatie LBC lader bestaande uit de types LBC412 en de LBC424! De LBC 400 van Proosten Electronics is een volledig automatische acculader en druppellader in één.

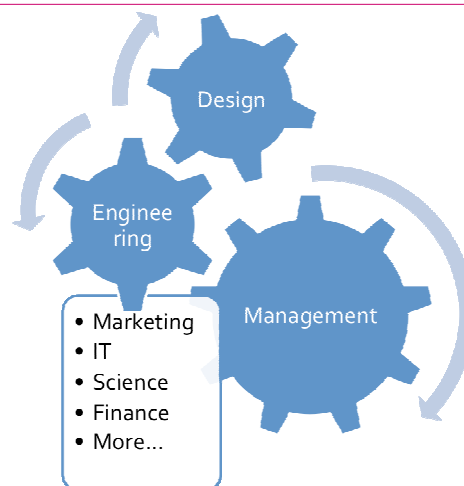


Service science

application of
**scientific, management,
and engineering disciplines**
to
**studying and improving
service systems**



Service science: interdisciplinarity





Service science: interdisciplinarity

“Everyone knows the story of Thomas Edison, the inventor of the **lightbulb**. But people don’t tend to think of **getting lightbulbs into houses and schools, setting prices for the electricity services** to keep them lit.
That’s all service innovation”.

Jim Spohrer, IBM Almaden Research Center



Service science: interdisciplinarity

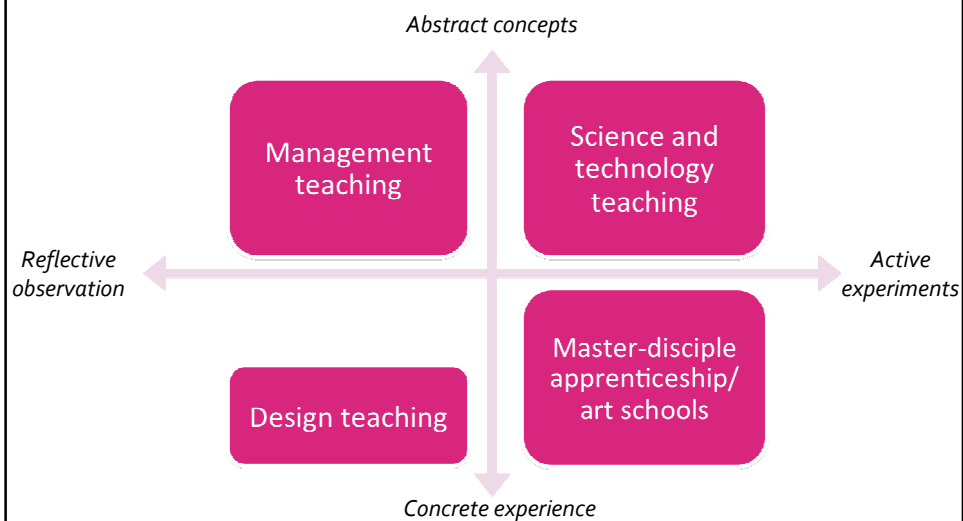


Succeeding through service innovation

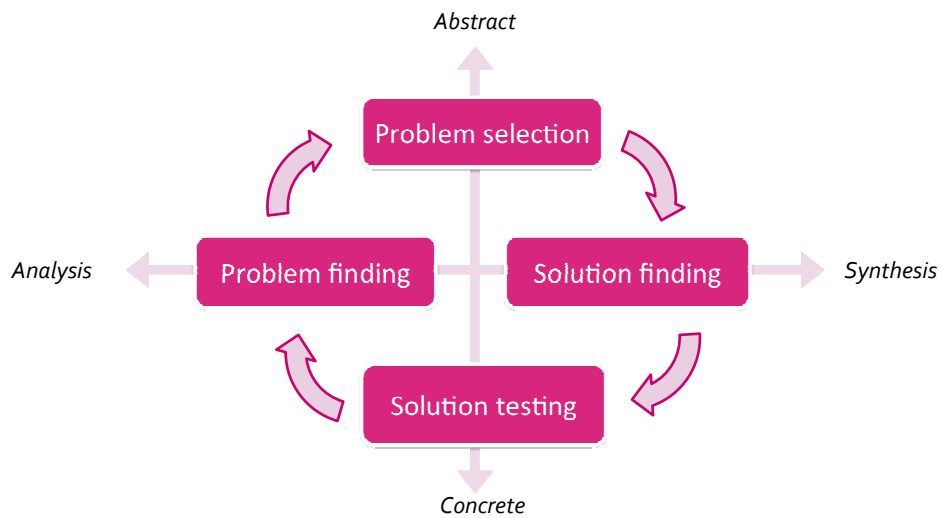
A service perspective for education, research, business and government



SSMED learning styles



SSMED learning styles



Source: Ostrom et al. (2010)

Service Science Factory



Multidisciplinary Teams

Approaching the project from multiple perspectives.

Value:
All-encompassing service innovation creation.

Co-Creation

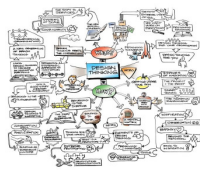
Actively involving partners in the learning process of the project.

Value:
Knowledge creation on how to innovate services.





Service Science Factory



Creative Thinking

Providing tools & methodologies to stimulate “room for thought”.

Value: Creative process to ensure innovative outcomes.

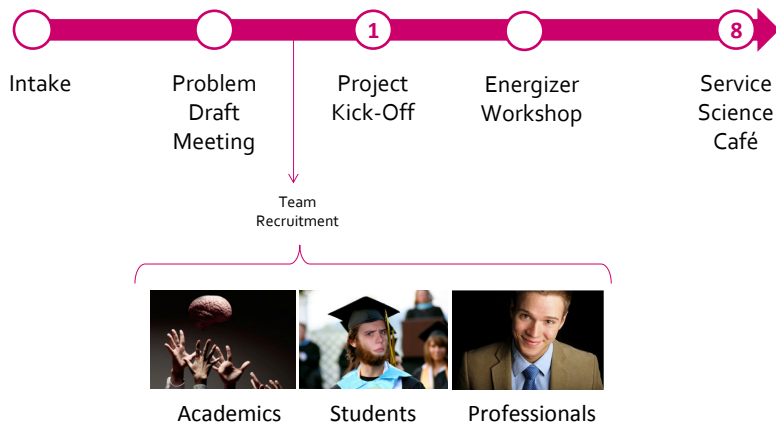
Factory Outputs

Creating a prototype of a service innovation.

Value: Tangible outcome to be shared with colleagues, partners & clients.



Service Science Factory





Service Science Factory

18
months

21
projects



Projects



Edutainment tool – Kids University for Cooking



Business park quality scan/index



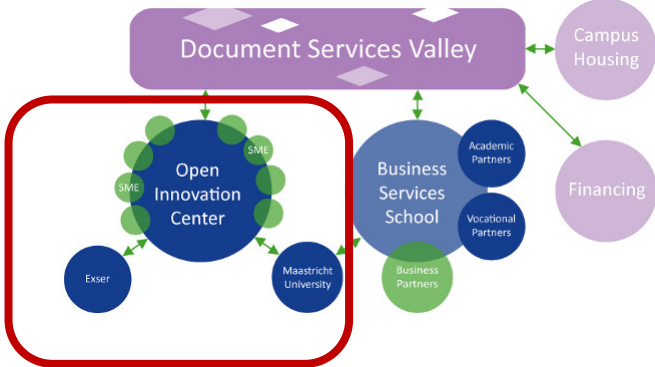
Interactive game for hospitality training

Service science research

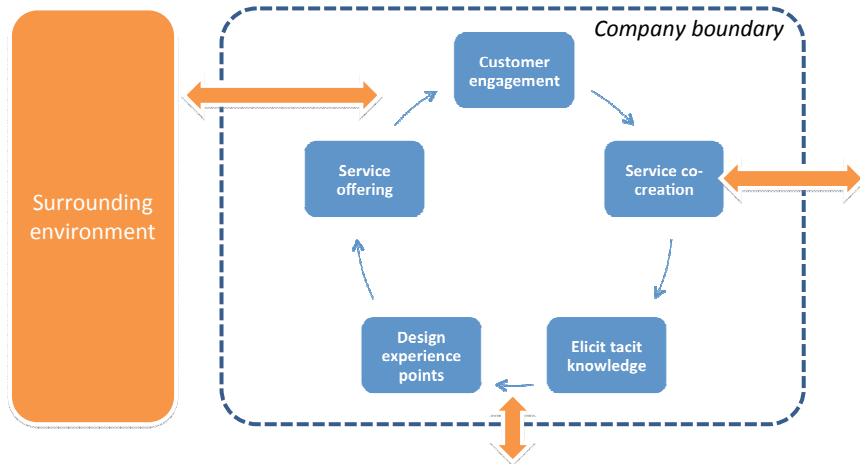


Source: Ostrom et al. (2010)

Document Services Valley



Open innovation



Source: Chesbrough, H. (2011). *Bringing Open Innovation to Services*.

Open innovation

Open innovation is the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively.

[This paradigm] assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as they look to advance their technology.

-- Henry Chesbrough

Source: Chesbrough, H. (2006). *Open Innovation: Researching a New Paradigm*.



Open innovation



Lucent Technologies
Bell Labs Innovations

Source: Chesbrough, H. (2006). *Open Innovation: Researching a New Paradigm*.



Open innovation



Hilton

*"How might Hilton
Hotels improve the
female guest
experience?"*

Source: Chesbrough, H. (2006). *Open Innovation: Researching a New Paradigm*.

Procter&Gamble



35%
products
with elements
that originated
outside P&G

Harvard Business Review (2006). *Connect and Develop: Inside Procter & Gamble's New Model for Innovation*

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