



IBM Almaden Services Research

Services



What are services?

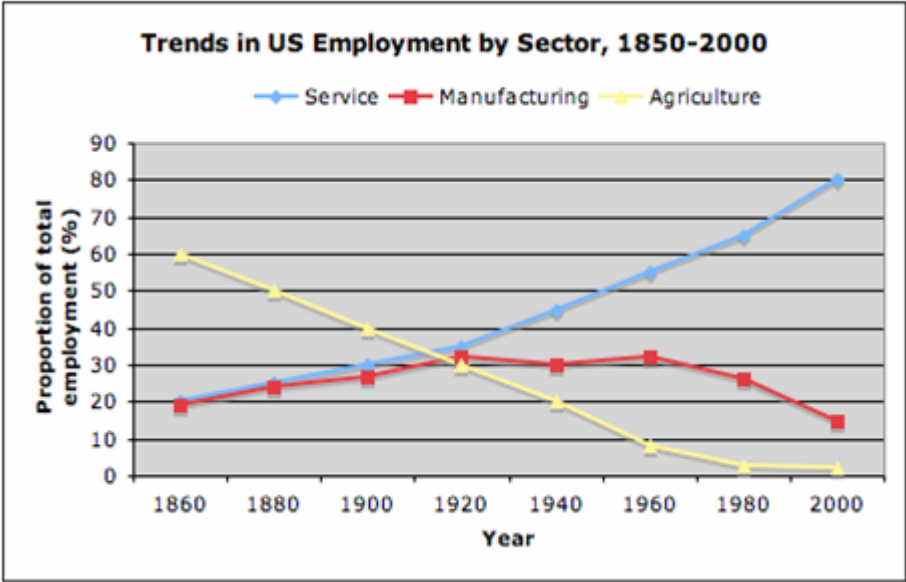


Unit objectives

- Attain a comprehensive definition of *services*
 - Give context to the study of services
 - Discuss history and early definitions of services
 - Discuss differences between products and services
- Recognize modern thinking behind *services dominant logic* of economic exchanges

Context and motivations

- Services becoming the new hub of most modern economies
- Services dominating current economic activities



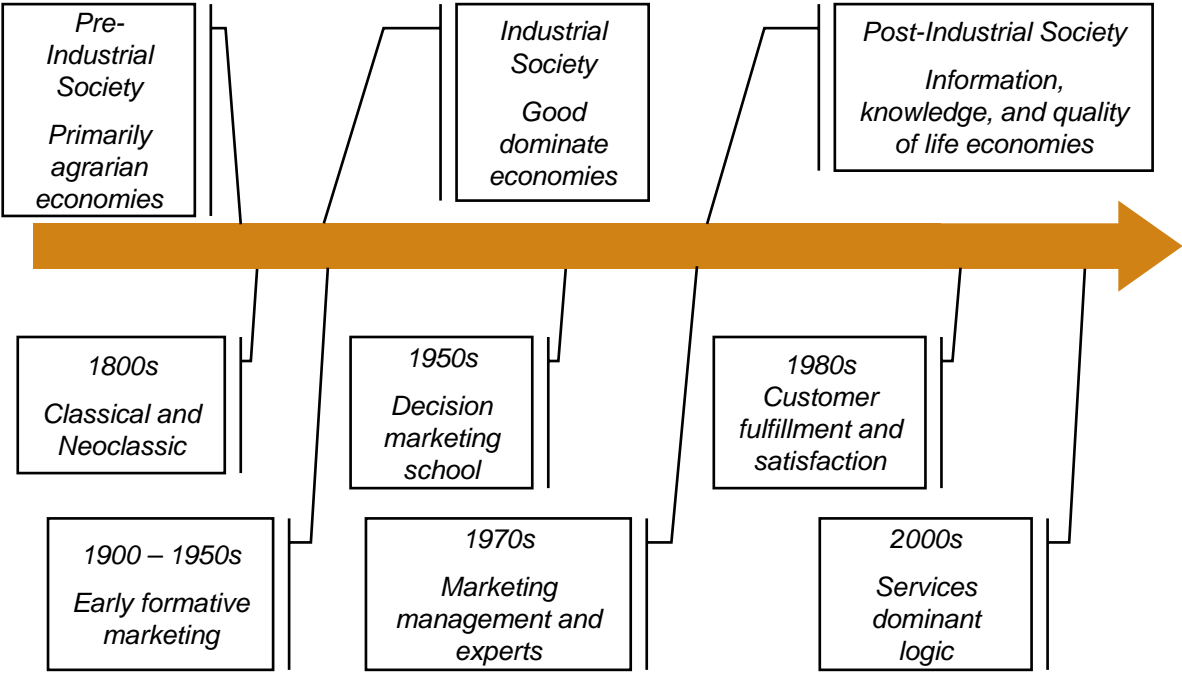
(U.S. Department of Commerce, 1995, p. 417)

Percent employment in service jobs

	1980	1987	1993	1999
<i>USA</i>	67.1	71	74.3	80.4
<i>Canada</i>	67.2	70.8	74.8	73.9
<i>Japan</i>	54.5	58.1	59.9	72.4
<i>France</i>	56.9	63.6	66.4	70.8
<i>Italy</i>	48.7	57.7	60.2	61.1
<i>China</i>	13.1	17.8	21.2	26.4

(United Nations, 1999, p. ??)

Economic evolution of services



What was occurring during these time periods that may have influenced shifts in economies and changes in business?

What is a service?

Per Wikipedia (2006):

In economics and marketing, a service is the non-material equivalent of a good.

It 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.

By supplying some level of skill, ingenuity, and experience, providers of a service participate in an economy without the restrictions of carrying stock (inventory) or the need to concern themselves with bulky raw materials. On the other hand, their investment in expertise does require marketing and upgrading in the face of competition which has equally few physical restrictions.

Service dominant view

- Three primary notions
 1. Co-creation of value
 2. Relationships
 3. Service provisioning

Provider-Client relationship

- Provider
 - An entity (person, business, or institution) that makes preparations to meet a need
 - An entity that serves

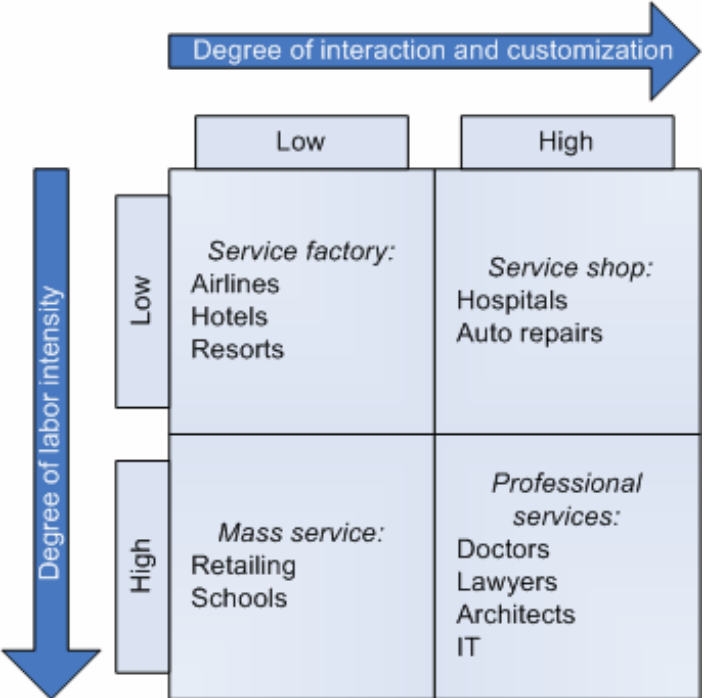
- Client
 - An entity (person, business, or institution) that engages the service of another
 - An entity being served

- Some general relationship characteristics are that the client
 - Participates in the service process (also known as the service engagement)
 - Co-produces the value
 - The quality of service delivered depends on customers preferences, requirements, and expectations

Service process matrix

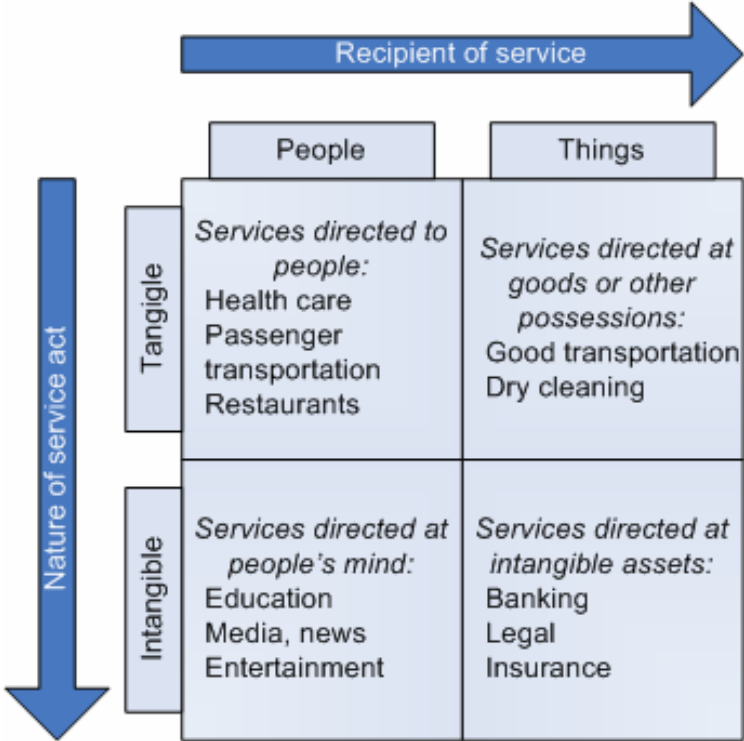
Degree of labor intensity
the ratio of labor cost to capital cost

Degree of interaction and customization
ability of the client to affect specialization

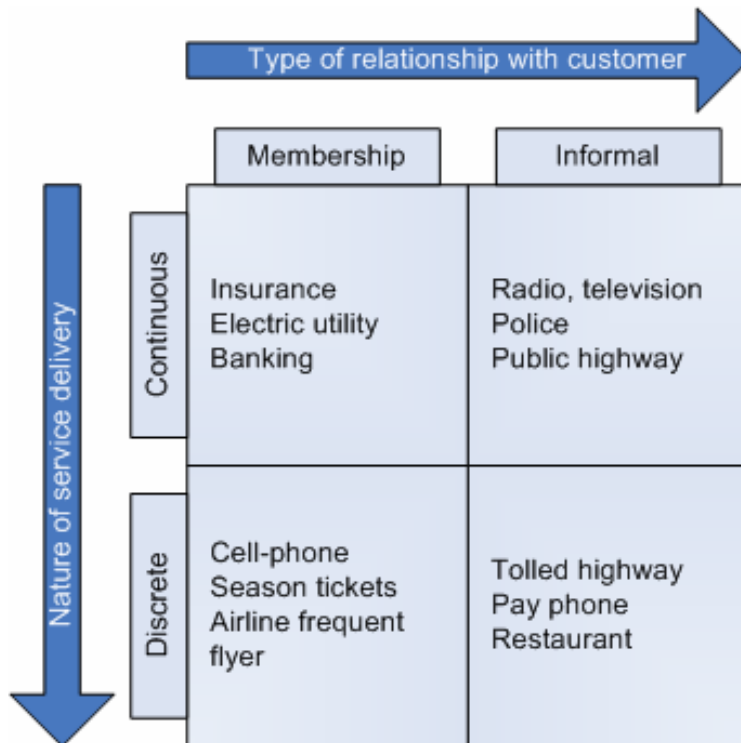


(Adapted from Lovelock (1983) and Fitzsimmons & Fitzsimmons (2003))

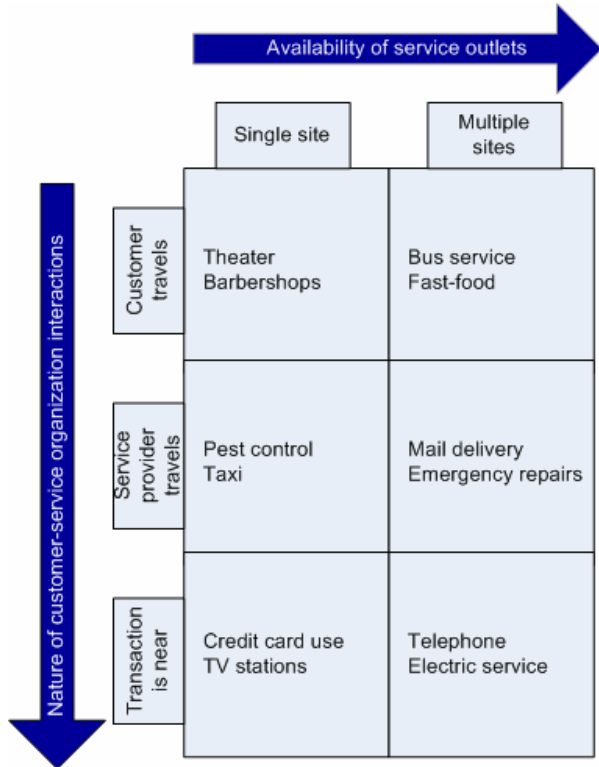
Nature of services act matrix



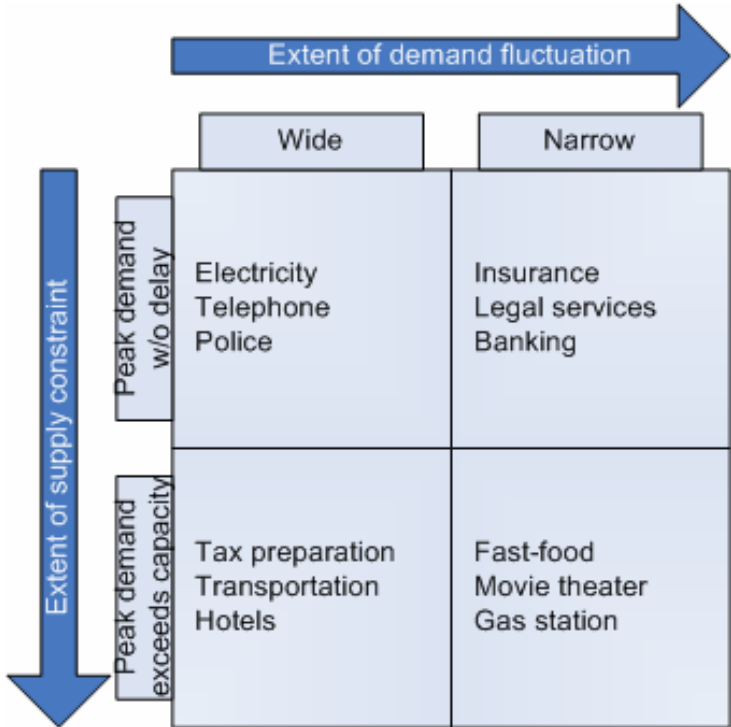
Client relationship matrix



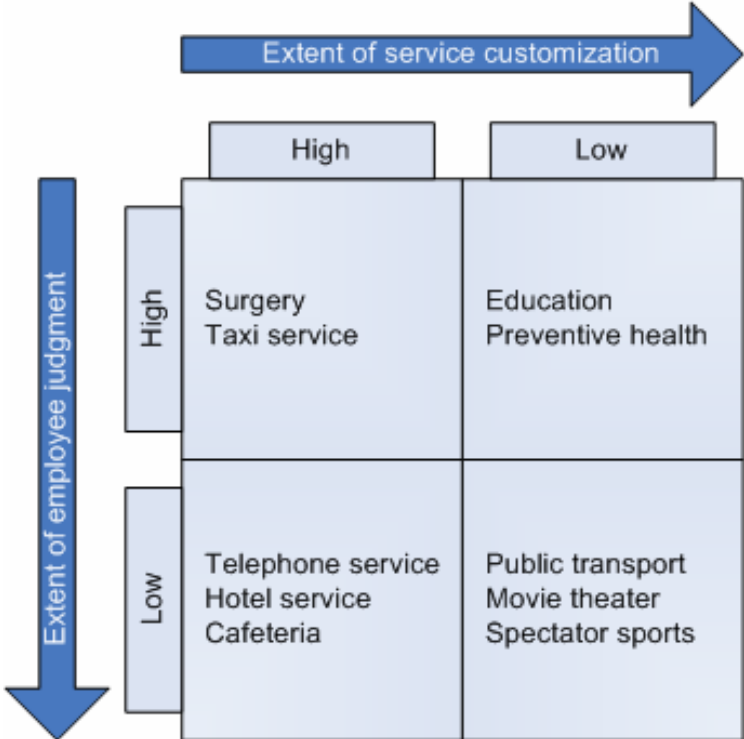
Availability of services matrix



Service demand variation matrix



Service delivery matrix



Distinguishing services from goods

Inseparability

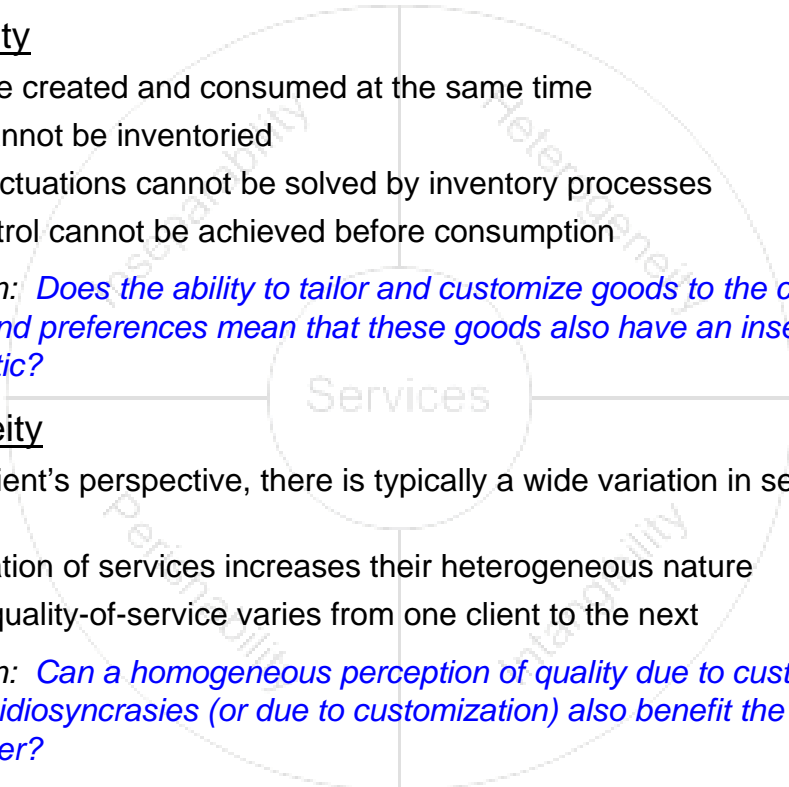
- Services are created and consumed at the same time
- Services cannot be inventoried
- Demand fluctuations cannot be solved by inventory processes
- Quality control cannot be achieved before consumption

Consideration: Does the ability to tailor and customize goods to the customers' demands and preferences mean that these goods also have an inseparability characteristic?

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?



Distinguishing services from goods

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?

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?

Current services thinking

- A service is a provider-to-client interaction that creates and captures value while sharing risks
- Services are value that can be rented
- Services are the application of specialized competences (skills and knowledge)
- Services are autonomous, platform independent, business functions

What are some everyday services?

- Transportation
 - Trains, planes, delivery
- Hospitality
 - Hotels, restaurants
- Infrastructure
 - Communications, electricity, water
- Government
 - Police, fire, mail
- Financial
 - Banking, investments
- Entertainment
 - Television, movies, concerts
- Professional Services
 - Doctors, lawyers, skilled craftspeople, project management

Recipients of the service

<i>What is the service acting upon and how is it doing it?</i>	People Processing	Possessions Processing
Tangible Actions	Service is aimed at people's physical body	Service is aimed at material items
Intangible Actions	Service is aimed at people's psyche	Service is aimed at information

(Adapted from The Nature of the Service Act, Lovelock, 1983, p. 15)

Example: Complex business-to-business services

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Business Transformation and Optimization

On Demand Innovation Services

Center for Business Optimization

Component Business Modeling

Consulting Services

IT Services