# Service Management

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# SERVICES: Role, Nature, Strategy

1

## Services?

Quiz subject

- A service is an activity or series of activities
  - of more or less intangible nature
  - that normally, but not necessarily, take place in interactions between
    - customer and
    - service employees and/or
    - physical resources or
    - goods and/or
    - systems of the service provider,
  - which are provided as solutions to customer problems.

"(Christian Gronroos, Service Management and Marketing, Lexington, Mass: Lexington Books, 1990, p. 27.)"

- Most authorities consider the services sector to include
  - all economic activities whose output
    - is not a physical product or construction,
    - is generally consumed at the time it is produced, and
    - provides added value in forms (such as
      - convenience,
      - amusement,
      - timeliness,
      - comfort, or
      - health) that
    - are essentially intangible concerns of its first purchaser.

(James Brian Quinn, Jordan J. Baruch, and Penny Cushman Paquette, Scientific American, vol. 257, no. 2, December 1987, p. 50.)

#### "Services are economic activities

- offered by one party to another,
- most commonly employing time-based performances
  - to bring about desired results in
    - recipients themselves or in
    - objects or
    - other assets for which purchasers have responsibility.

#### In exchange for their

- money,
- time, and
- effort,

#### service customers expect

- to obtain value from access to
  - goods,
  - labor,
  - professional skills,
  - facilities,
  - networks, and systems;
- but they do not normally take ownership of any of the physical elements involved."



(Christopher Lovelock and Lauren Wright, Services Marketing: People, Technology, Strategy, 6 th ed., Upper Saddle River, NJ: Prentice-Hall, 2007, p. 6.)

"A service system is a

- value-coproduction configuration of
  - people,
  - technology,
  - other internal and external service systems, and
  - shared information (such as
    - language,
    - processes,
    - metrics,
    - prices,
    - policies, and
    - laws)."

(Jim Spohrer, Paul Maglio, John Bailey, and Daniel Gruhl, Computer, January 2007, p. 72.)

#### A service is

- a
- time-perishable,
- intangible
- experience
  - performed for a customer acting in the role of co-producer.

(James Fitzsimmons)

#### "A service is

- an act of performance that
  - one party can offer to another that
  - is essentially intangible and
  - does not result in the ownership of anything.

Its production may or may not be tied to a physical product"

Quiz subject

(Philip Kotler)

https://www.slideshare.net/sanchitgangar/classification-and-characteristics-of-a-service/2

# Classifying economic activities (including services) by the EU

https://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF

#### Classification of economic activities



134. The following table presents the "high-level SNA/ISIC aggregation A\*10/11":

	ISIC Rev. 4/ NACE Rev. 2 sections  Description  Description			
1	A	Agriculture, forestry and fishing		
2	B, C, D and E	Manufacturing, mining and quarrying and other industry		
2a	C	Of which: manufacturing		
3	F	Construction		
4	G, H and I	Wholesale and retail trade, transportation and storage, accommodation and food service activities		
5	J	Information and communication		
6	K	Financial and insurance activities		
7	L	Real estate activities*		
8	M and N	Professional, scientific, technical, administration and support service activities		
9	O, P and Q	Public administration, defence, education, human health and social work activities		
10	R, S, T and U	Other services		

<sup>\*</sup> which includes imputed rents of owner-occupied dwellings

	A*38	ISIC Rev. 4/ NACE Rev. 2	Divisions
	code		
1	Α	Agriculture, forestry and fishing	01 to 03
2	В	Mining and quarrying	05 to 09
3	CA	Manufacture of food products, beverages and tobacco products	10 to 12
4	CB	Manufacture of textiles, apparel, leather and related products	13 to 15
5	CC	Manufacture of wood and paper products, and printing	16 to 18
6	CD	Manufacture of coke, and refined petroleum products	19
7	CE	Manufacture of chemicals and chemical products	20
8	CF	Manufacture of pharmaceuticals, medicinal chemical and botanical products	21
9	CG	Manufacture of rubber and plastics products, and other non-metallic mineral products	22 + 23
10	CH	Manufacture of basic metals and fabricated metal products, except machinery and equipment	24 + 25
11	CI	Manufacture of computer, electronic and optical products	26
12	CJ	Manufacture of electrical equipment	27
13	CK	Manufacture of machinery and equipment n.e.c.	28
14	CL	Manufacture of transport equipment	29 + 30
15	CM	Other manufacturing, and repair and installation of machinery and equipment	31 to 33
16	D	Electricity, gas, steam and air-conditioning supply	35
17	E	Water supply, sewerage, waste management and remediation	36 to 39
18	F	Construction	41 to 43
19	G	Wholesale and retail trade, repair of motor vehicles and motorcycles	45 to 47

19	G	Wholesale and retail trade, repair of motor vehicles and motorcycles	45 to 47
20	Н	Transportation and storage	49 to 53
21	1	Accommodation and food service activities	55 + 56
22	JA	Publishing, audiovisual and broadcasting activities	58 to 60
23	JB	Telecommunications	61
24	JC	IT and other information services	62 +63
25	K	Financial and insurance activities	64 to 66
26	L	Real estate activities*	68
27	MA	Legal, accounting, management, architecture, engineering, technical testing and analysis activities	69 to 71
28	MB	Scientific research and development	72
29	MC	Other professional, scientific and technical activities	73 to 75
30	N	Administrative and support service activities	77 to 82
31	O	Public administration and defence, compulsory social security	84
32	Р	Education	85
33	QA	Human health services	86
34	QB	Residential care and social work activities	87 + 88
35	R	Arts, entertainment and recreation	90 to 93
36	S	Other services	94 to 96
37	T**	Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	97 + 98*
38	U**	Activities of extra-territorial organisations and bodies	99*

<sup>\*</sup> including imputed rents of owner-occupied dwellings

<sup>\*\*</sup> All of U and part of T (division 98) are outside the SNA production boundary, and will be empty for SNA data reporting, but are included for completeness.

#### Services features

- 1. Intangibility
- 2. Perishability
- 3. Inseparability
- 4. Heterogeneity
- 5. Ownership
- 6. Simultaneity
- 7. Quality measurement
- 8. Nature of demand
- 9. Customer Participation
- 10. Customized / Taylored / Personalized
- 11. Quota in the Added Value

https://www.slideshare.net/sanchitgangar/classification-and-characteristics-of-a-service/2

#### 1. Intangibility

Quiz subject

- Can not be touched (not physical objects)
- Seeing, touching, hearing, smelling or tasting the goods not applicable to services
- Services not known the the customer before taking them

#### Characteristics of Service Operations: Intangibility – a service innovation is not patentable

- Fast expansion (before competition does)
- Franchizing
- As opposed to goods, service quality level is to be experienced on delivery:
  - Registration
  - Licensing
  - Regulation

by the government in defending customer's interest.

#### 2. Perishability

Quiz subject

- Value of service exists at the point when it is required
- Services perish as they are used
- Services last for a specific time and cannot be stored like a product for later use

# Characteristics of Service Operations: Perishability – a service is lost forever if not used

- Smoothening demand
  - Reservations or appointments
  - Price incentives (for service consumption outside peak hours)
  - Marketing against peak times
- Adjust service capacity
  - Using part-time help during peak hours
  - Scheduling work shifts according to demand
  - Increasing Customer self-service
- Allow customers to wait

### 3. Inseparability

- From the service provider
- Therefore: the service provider is part of the service
- Production and consumption of services go hand in hand



## 4. Heterogeneity

Difficult to standardize the quality



## 5. Ownership

No transfer of ownership as for goods



# Characteristics of Service Operations: Non-ownership – no transfer of ownership takes place

Type of Service	<b>Customer Value</b>	Examples	Management
			Challenge
Goods rental	Obtain temporary	Vehicles, tools,	Site selection and
	right to exclusive use	furniture, equipment	maintenance
Place and space rental	Obtain exclusive use	Hotel room, seat on	Housekeeping and
	of defined portion of	airplane, storage unit	achieving
	a larger space		economies
			of scale
Labor and expertise	Hire other people to	Car repair, surgery,	Expertise is a
	do a job	management	renewable
		consulting	resource,
			but time is
			perishable
Physical facility usage	Gain admission to a	Theme park, camp	Queuing and
	facility for a period of	ground, physical	crowd
	time	fitness gym	control
Network usage	Gain access to	Electric utility, cell	Availability and
	participate	phone, Internet	pricing decisions

## 6. Simultaneity

• The moment of delivery = moment of consumption



### Characteristics of Service Operations: Simultaneity of delivery and consumption

No absorbtion of fluctuations in demand = no storage possibility

## 7. Quality measurement

- Tools required
- Service Level
- Difficult to rate-quantify



#### 8. Nature of Demand

- Fluctuating in nature
- Abnormal, sudden, seasonal, situational, dependent
- A service, once consumed, cannot be returned



# Services by Customer Participation

	Customer participation	
	Passive	Active
Absorption	Entertainment (movie)	Education (language)
Immersion	Estheticism (tourist)	Escapism (scuba diving)

# Characteristics of Service Operations: Customer participation in the Service Process



### Characteristics of Service Operations: Heterogeneity – intrinsic variability of service

- Development of standards
- Development of metrics performance indicators
- Measuring Customer Satisfaction

Happy customers = Happy employees

# Typology of services

#### **TABLE 1.4**

Typology of Services in the 21st Century

Source: Adapted from Bryson, J. R., P. W. Daniels, and B. Warf. Service Worlds: People, Organizations, Technologies. New York: Routledge, 2004, p. 33.

Core Experience	Essential Feature	Examples
Creative	Present ideas	Advertising, theater
Enabling	Act as intermediary	Transportation, communications
Experiential	Presence of customer	Massage, theme park
Extending	Extend and maintain	Warranty, health check
Entrusted	Contractual agreement	Service/repair, portfolio mgt.
Information	Access to information	Internet search engine
Innovation	Facilitate new concepts	R&D services, product testing
Problem solving	Access to specialists	Consultants, counseling
Quality of life	Improve well-being	Health care, recreation, tourism
Regulation	Establish rules and regulations	Environment, legal, patents

# Packaging products and services

## The blurry border between goods and services

• Goods+Services come together in many cases

Element	Core Goods Example	<b>Core Service Example</b>
Business	Custom clothier	Business hotel
Core	Business suits	Room for the night
Peripheral goods	Garment bag	Bathrobe
Peripheral service	Deferred payment plans	In-house restaurant
Variant (differentiating from competitors)	Coffee lounge	Airport shuttle

# The goods-services continuum

#### Services features



- $1. \quad \mathsf{Intangibility}$  Can not be touched (not physical objects), can not be returned
- 2. Perishability Services last for a specific time and cannot be stored like a product for later use
- 3. Inseparability From the service provider
- 4. Heterogeneity Difficult to standardize the deliverable / quality
- 5. Ownership No transfer of ownership as for goods
- 6. Simultaneity The moment of delivery = moment of consumption
- 7. Quality measurement Difficult to rate-quantify
- 8. Nature of demand fluctuant, abnormal, sudden, seasonal, situational, dependent
- 9. Participation Customer's participation in the value-creation process
- 10. Customized / Taylored / Personalized specific for the Customer's needs (specifications)
- 11. Quota in the Added Value How much of the product is a pure good and how much is it a service

https://www.slideshare.net/sanchitgangar/classification-and-characteristics-of-a-service/2

### Let's identify some services

- You have to decide if an activity is producing a good or a service
- You have to do this for 30+ activities in a form

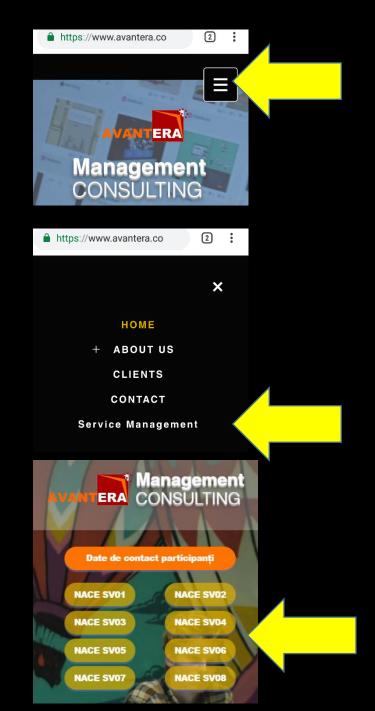
https://ec.europa.eu/eurostat/statisticsexplained/index.php/Glossary:Statistical classification of economic activities in the European Community (NACE)



#### NACE SV01 Please check the below activities if services based on analyzing their features. \*Obligatoriu 01.1 Growing of non-perennial crops \* The activity produces a SERVICE (check if true) 1.Intangibility - Can not be touched (not physical objects), can not be 2.Perishability - Services last for a specific time and cannot be stored like a 3.Inseparability – From the service provider 4. Heterogeneity - Difficult to standardize the deliverable / quality 5.Ownership - No transfer of ownership as for goods 6.Simultaneity - The moment of delivery = moment of consumption 7.Quality measurement - Difficult to rate-quantify 8.Nature of demand – fluctuant, abnormal, sudden, seasonal, situational, dependent 9. Customer Participation - Customer's participation in the value-creation 10. Customized / Taylored / Personalized - specific for the Customer's needs (specifications) 11. Quota in the Added Value - How much of the product is a pure good and how much is it a service 02.1 Silviculture and other forestry activities \* The activity produces a SERVICE (check if true)

## Let's identify some services

- Split into 16 teams
- Enter our site from your mobile phones
- Choose the Service Management section
- Choose the proper form:
- 1 and 9 choose NACE SV01
- 2 and 10 choose NACE SV02
- 3 and 11 choose NACE SV03
- 4 and 12 choose NACE SV04
- 5 and 13 choose NACE SV05
- 6 and 14 choose NACE SV06
- 7 and 15 choose NACE SV07
- 8 and 16 chose NACE SV08



## GENERAL AGREEMENT ON TRADE IN SERVICES



https://unstats.un.org/unsd/tradekb/Knowledgebase/Sectoral-Classification-List-W120





























Professional Services
Computer and Related Services
Research and Development Services
Real Estate Services
Rental/Leasing Services without Operators
Other Business Services





### **Professional Services**

Computer and Related Services
Research and Development Services
Real Estate Services
Rental/Leasing Services without Operators
Other Business Services



**Legal Services** 

Accounting, auditing and bookeeping services

**Taxation Services** 

Architectural services

**Engineering services** 

Integrated engineering services

Urban planning and landscape architectural services

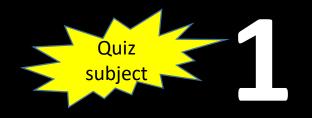
Medical and dental services

Veterinary services

Services provided by midwives, nurses, physiotherapists and para-medical personnel Other



Professional Services
Computer and Related Services
Research and Development Services
Real Estate Services
Rental/Leasing Services without Operators
Other Business Services



Advertising services

Market research and public opinion polling services

Management consulting service

Services related to man. consulting

Technical testing and analysis serv.

Services incidental to agriculture, hunting and forestry

Services incidental to fishing

Services incidental to mining

Services incidental to manufacturing

Services incidental to energy distribution

Placement and supply services of Personnel

Investigation and security

Related scientific and technical consulting services

Maintenance and repair of equipment (not including maritime

vessels, aircraft or other transport equipment)

Building-cleaning services

Photographic services

Packaging services

Printing, publishing

Convention services

Other





Postal services
Courier services
Telecommunication services
Audiovisual services
Other





General construction work for buildings
General construction work for civil engineering
Installation and assembly work
Building completion and finishing work
Other

Commission agents' services
Wholesale trade services
Retailing services
Franchising
Other





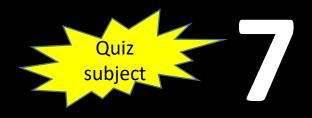


Primary education services
Secondary education services
Higher education services
Adult education
Other education services





Sewage services
Refuse disposal services
Sanitation and similar services
Other



All insurance and insurance-related services Banking and other financial services Other





Hospital services
Other Human Health Services
Social Services
Other



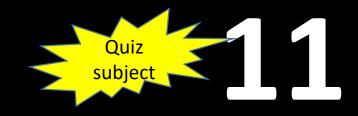
Hotels and restaurants (incl. catering)
Travel agencies and tour operators services
Tourist guides services
Other





Entertainment services (including theatre, live bands and circus services)
News agency services
Libraries, archives, museums and other cultural services
Sporting and other recreational services
Other



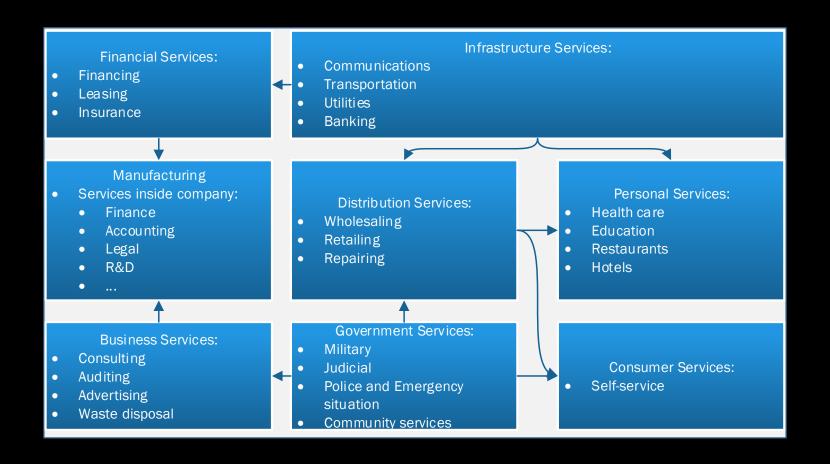


Maritime Transport Services
Internal Waterways Transport
Air Transport Services
Space Transport
Rail Transport Services
Road Transport Services
Pipeline Transport
Services auxiliary to all modes of transport



## ROLE OF SERVICES IN AN ECONOMY

### Services for services



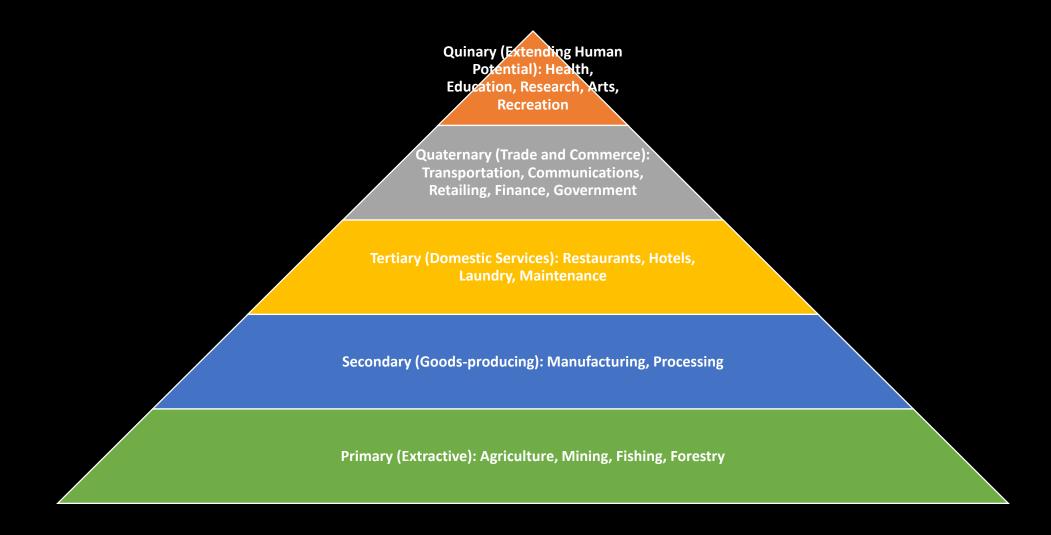
## Development, diversification, employment shift

Colin Clark argues that as nations become industrialized, there is an inevitable shift of employment from one sector of the economy to another.

As productivity increases in one sector, the labor force moves into another.

This observation, known as the Clark-Fisher hypothesis, leads to a *classification of economies by noting the activity of the majority of the workforce*.

## Development, diversification, employment shift



# Services weight in national economies

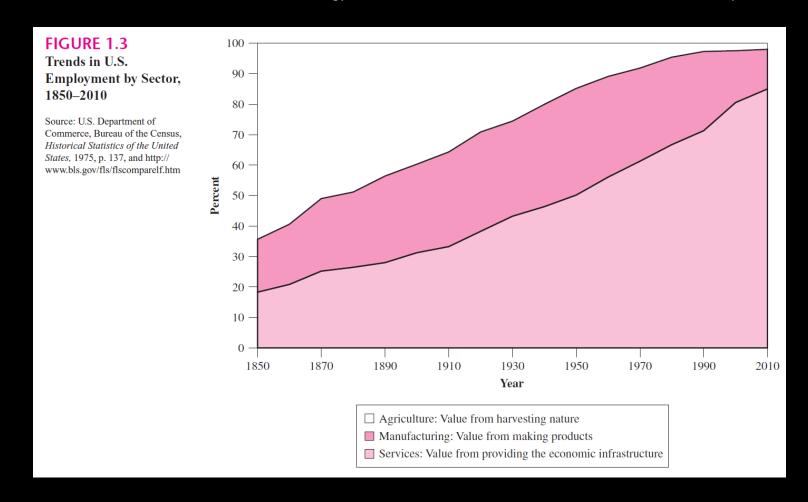


Percent Employment in Services for the Top Ten Postindustrial Nations, 1965–2005					
Country	1965	1975	1985	1995	2005
United States	59.5	66.4	70.0	74.1	78.6
United Kingdom	51.3	58.3	64.1	71.4	77.0
The Netherlands	52.5	60.9	68.3	73.4	76.5
Sweden	46.5	57.7	66.1	71.5	76.3
Canada	57.8	65.8	70.6	74.8	76.0
Australia	54.6	61.5	68.4	73.1	75.8
France	43.9	51.9	61.4	70.0	74.8
Japan	44.8	52.0	57.0	61.4	68.6
Germany	41.8	46.7	51.6	60.8	68.5
Italy	36.5	44.0	55.3	62.2	65.5

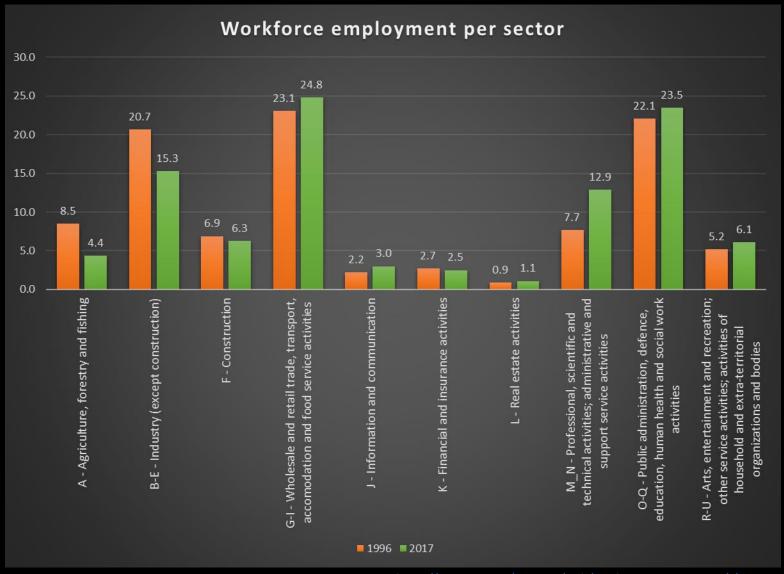
# Employment by Sector, 1850-2010



Fitzsimmons, James, A., Fitzsimmons, Mona, J. "Service Management – Operations, Strategy, Information Technology", 7th edition, McGraw-Hill Irwin, ISBN 978-0-07-340335-9, p7



## Employment per sector in the EU



## Classifying societies

Fitzsimmons, James, A., Fitzsimmons, Mona, J. "Service Management – Operations, Strategy, Information Technology", 7th edition, McGraw-Hill Irwin, ISBN 978-0-07-340335-9, p8

TABLE 1.2 Comparison of Societies **Features** Use of Standard Predominant Human Unit of of Living Game Activity Social Life Technology Society Labor Measure Structure Agriculture Subsistence Simple hand Pre-Against Raw Extended Routine industrial Mining household Traditional muscle tools nature Authoritative power Machine Machines Industrial Against Goods Individual Quantity Bureaucratic fabricated of goods Hierarchical production tending nature Post-Services Artistic Community Quality of Inter-Information Among Creative industrial life in terms dependent persons Intellectual of health, Global education, recreation

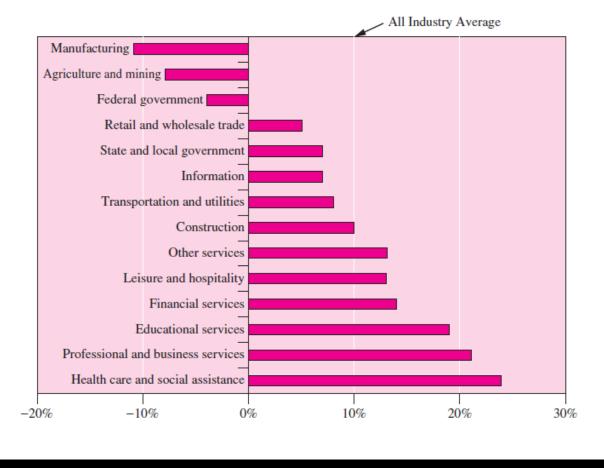
### Workforce demand shift



#### FIGURE 1.5

Projected Percent Change in U.S. Employment by Industry, 2006–2016

Source: http://www.bls.gov/news. release/ecopro.t01.htm



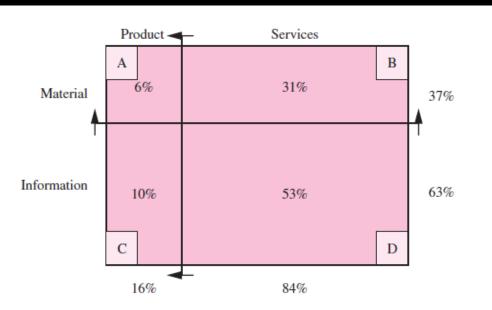
Fitzsimmons, James, A., Fitzsimmons, Mona, J. "Service Management – Operations, Strategy, Information Technology", 7th edition, McGraw-Hill Irwin, ISBN 978-0-07-340335-9, p10

### TRENDS IN THE GOODS-SERVICES BALANCE

#### FIGURE 1.7

Distribution of GDP in the U.S. Economy

Source: Karmarkar, Uday and Uday M. Apte. "Operations Management in the Information Economy: Information Products, Processes, and Chains," *Journal of Operations Management* 25 no. 2 (March 2007), p. 440.



Sector	Description	Example
A	Physical Products	Automotive, Steel, Chemicals
В	Physical Services	Transportation, Retailing
C	Digital Products	Computers, DVDs, HDTV
D	Information Services	Finance, Telecommunications

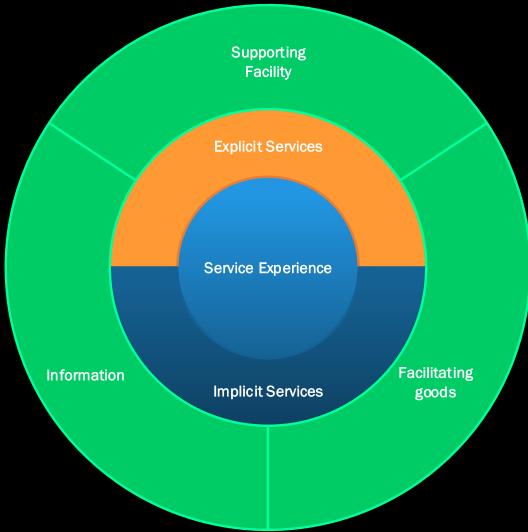
## The service package



- A bundle of goods and services with information that is provided in some environment
  - Supporting facility. The physical resources that must be in place before a service can be offered. Examples are a golf course, a ski lift, a hospital, and an airplane.
  - Facilitating goods. The material purchased or consumed by the buyer, or the items provided by the customer. Examples are golf clubs, skis, food items, replacement auto parts, legal documents, and medical supplies.
  - Information. Data that is available from the customer or provider to enable efficient and customized service. Examples include electronic patient medical records, airline Web site showing seats available on a flight, customer preferences from prior visits, GPS location of customer to dispatch a taxi, and Google map link on a hotel Web site.
  - Explicit services. The benefits that are readily observable by the senses and that consist of
    the essential or intrinsic features of the service. Examples are the absence of pain after a
    tooth is repaired, a smooth-running automobile after a tuneup, and the response time of a
    fire department.
  - Implicit services. Psychological benefits that the customer may sense only vaguely, or the extrinsic features of the service. Examples are the status of a degree from an Ivy League school, the privacy of a loan office, and worry-free auto repair.
- Customer's perception depends on these features

# The service package





## Criteria for Evaluating the Service Package

- Infrastructure
- Facilitating goods
- Information
- Explicit Services
- Implicit Services

### The Service Process Matrix

#### FIGURE 2.2

### The Service Process Matrix

Source: From "How Can Service Businesses Survive and Prosper?" by Roger W. Schmenner, Sloan Management Review, vol. 27, no. 3, Spring 1986, p. 25, by permission of publisher. Copyright 1986 by the Sloan Management Review Association. All rights reserved.

Degree of labor intensity

Low

High

### Degree of interaction and customization

Low High *Service factory:* Service shop: Airlines Hospitals Trucking Auto repair Hotels Other repair services Resorts and recreation

### Mass service:

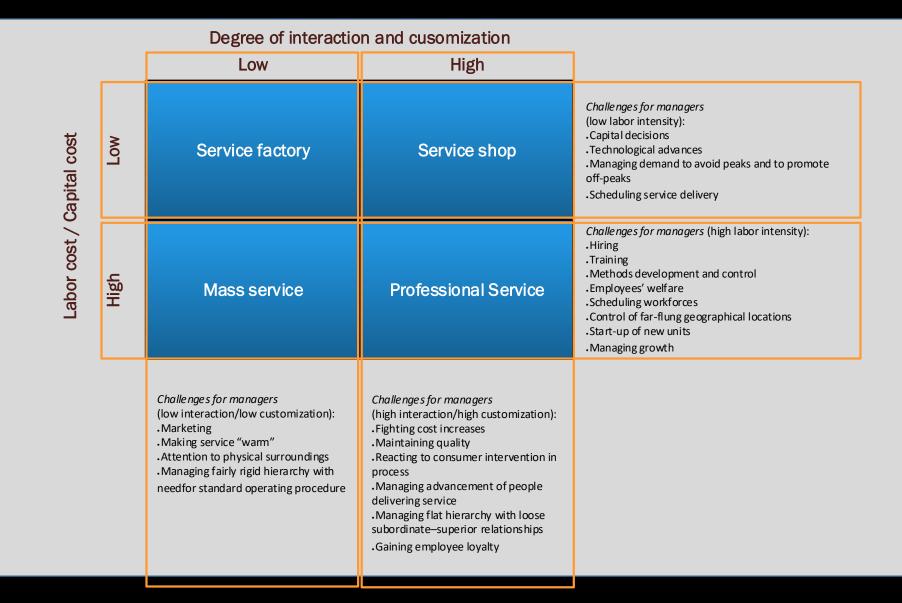
- Retailing
- Wholesaling
- Schools
- Retail aspects of commercial banking

### Professional service:

- Physicians
- Lawyers
- Accountants
- Architects

labor intensity = the ratio of labor cost to capital cost

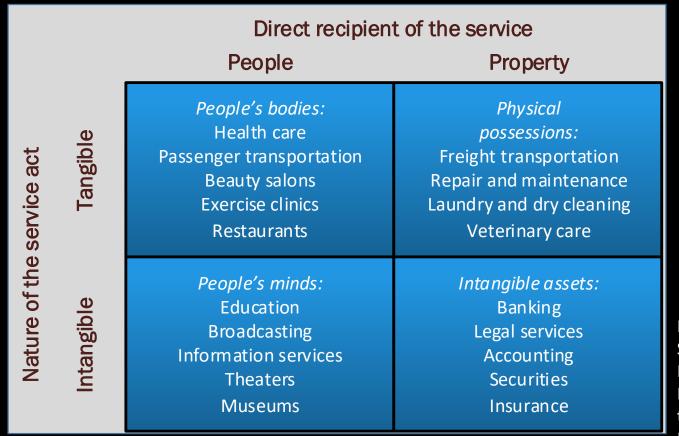
## Challenges for Service Managers



### **TOPICS** of discussion

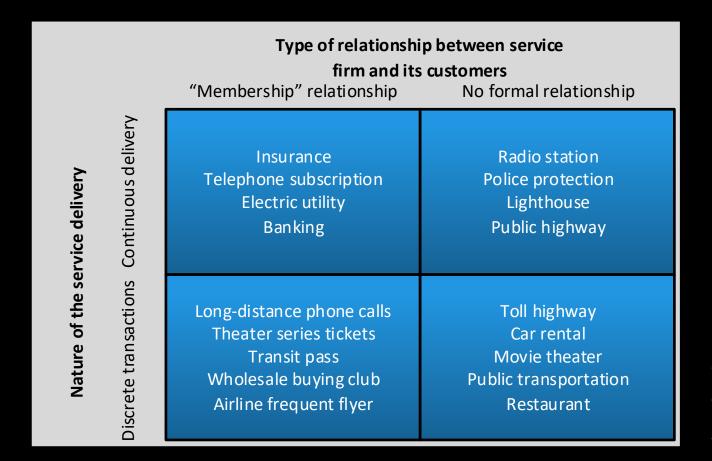
- 1. Illustrate how the type of work he or she does influences a person's lifestyle. For example, contrast a farmer, a factory worker, and a schoolteacher.
- 2. Is it possible for an economy to be based entirely on services?
- 3. What is the value of self-service in an economy?
- 4. Go on the Internet and find the percent employment in services over the past 40 years for a country not listed in Table 1.1
- 5. Go to Wikipedia.com and search under the topic of "service economy." What do you make of the data plotted on the world map?
- 6. Determine if the service sector is currently expanding or contracting based upon the Non-Manufacturing Index (NMI) found at the ISM Report on Business on the Institute of Supply Management Web site "http://www.ism.ws/pubs/ismmag/"

### Service Nature vs Service Recipient



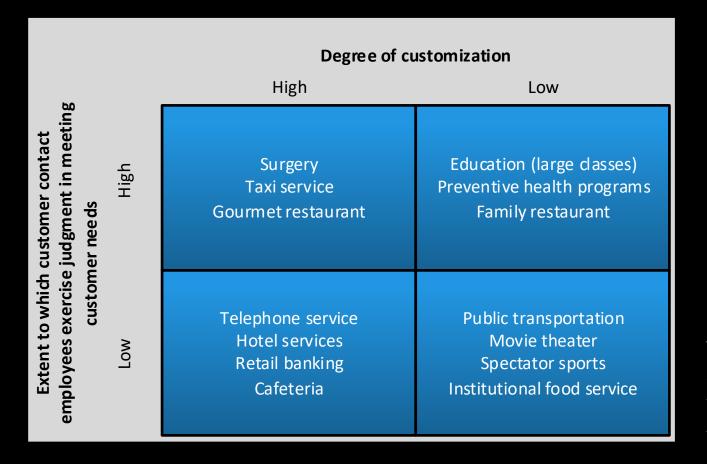
Nature of the Service Act Source: American Marketing Association: Christopher H. Lovelock, "Classifying Services to Gain Strategic Marketing Insights," Journal of Marketing, vol. 47, Summer 1983, p. 12.

### Nature of Service Delivery – Type of Relationship with Customers



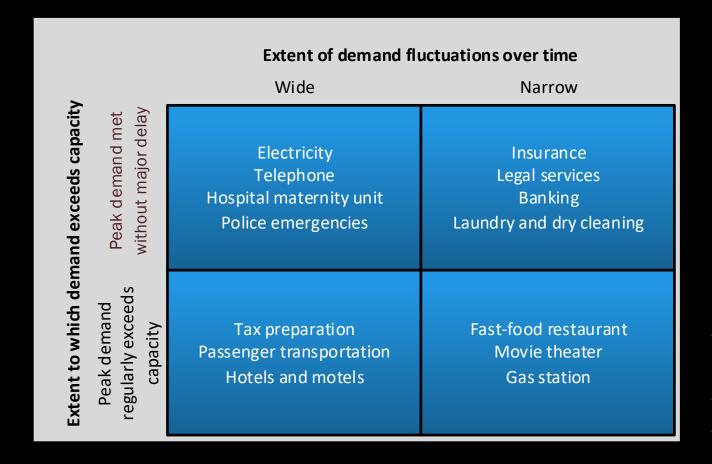
Relationships with Customers Source: American Marketing Association: Christopher H. Lovelock, "Classifying Services to Gain Strategic Marketing Insights," Journal of Marketing, vol. 47, Summer 1983, p. 13.

## Customer Contact Employees' Judgement - Customization



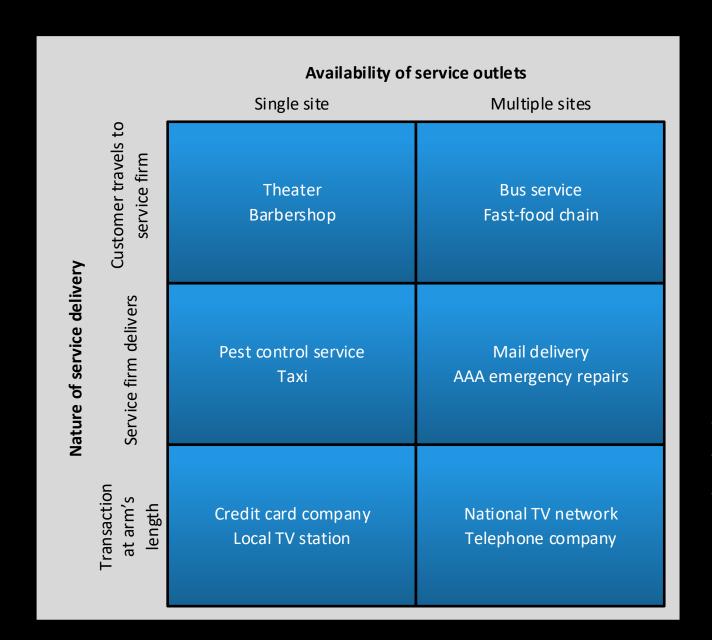
Customization and Judgment in Service Delivery Source: American Marketing Association: Christopher H. Lovelock, "Classifying Services to Gain Strategic Marketing Insights," Journal of Marketing, vol. 47, Summer 1983, p. 15.

## Demand vs Capacity – Fluctuation Size



Nature of Demand for the Service Relative to Capacity Source: American Marketing Association: Christopher H. Lovelock, "Classifying Services to Gain Strategic Marketing Insights," Journal of Marketing, vol. 47, Summer 1983, p. 17.

## Service Delivery Nature vs Availability of Service Outlets



Method of Service Delivery Source: American Marketing Association: Christopher H. Lovelock, "Classifying Services to Gain Strategic Marketing Insights," Journal of Marketing, vol. 47, Summer 1983, p. 18.

FP1: Service is seen as an

- activity or
- process (thus singular),
- not an intangible unit of output (plural in the goods analogy),
   derived from applying (operant rather than operand) competencies (
- knowledge and
- skills)

for the benefit of another party.



FP2: The process of value creation in a postindustrial society is

- complex with
- many intermediary systems (e.g., Internet)

facilitating the process of exchange.



FP3: Although goods are a store of

- energy,
- material, and
- labor costs,

they realize a value only upon use

(e.g., a car providing the service of transportation).



FP4: Competitive advantage is captured in a firm's

- intellectual capital,
- skills, and
- knowledge

that can be applied to creating value for the customer.





FP5: If service is the application of competencies for the benefit of others, then

### all economic activity is essentially service

no matter whether the economy is considered

- agrarian,
- industrial, or
- postindustrial.

FP6: If value is co-created with the customer, then the service activity must involve the customer in some capacity (e.g.,

- mind,
- body,
- belongings,
- information)

in an interactive relationship.



Quiz subject

FP7: Just as a product has no intrinsic value until used, a service is only a capacity to create value upon customer activation (e.g., a seat on an airplane has no value if empty upon takeoff).

FP8: Because a service is co-created with the customer, the service exchange naturally becomes *customer-focused*.



FP9: Value is created when the customer

- integrates and
- applies

the resources of the service provider along with other resource-integrators to achieve the exchange (e.g., purchase on eBay using PayPal).



FP10: Each customer determines the

- value or
- quality of the service based on personal needs at the specific time (e.g., fast lunch or dinner date) and in the particular context (e.g., alone or group) as an experience.

