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# SERVICE DESIGN

Value in the context of services

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# RECAP

- » Many definitions of what is a service
- » Services are extremely diverse
- » Service offering and 3 key spheres: care, access, response
- » Service vs.product
- » Services can exist around products
- » Many business interested in servitization
- » Product-service hybrids

# SERVITIZATION

“the transformation of a business to compete through a combination of services and products, rather than products alone”

1. We sell  
bulbs

2. We change  
bulbs in your  
company

3. We offer  
leasing  
options for  
your  
company

4. We offer  
an energy  
certification  
and training  
for your  
staff to save  
energy and  
reduce total  
energy costs

5. We offer a  
complete service of  
energy management,  
including lighting  
installation, change  
maintenance and  
management. An  
app help your team  
to monitor and  
manage lighting  
across your company  
to save costs and  
be environmentally  
friendly

## PRODUCT-SERVICE HYBRIDS/SYSTEMS

- ▶ Miettinen: Companies developing products are also increasingly developing hybrid products (increase profitability, growth, customer retention) → service is designed as an inseparable part of the product

# PRODUCT? SERVICE? PRODUCT-SERVICE HYBRID?

AUTONOMOUS GROCERY STORE BRINGS FOOD AT CONSUMERS' DOORSTEP



**US-based startup is building a fleet of self-driving vehicles powered by an on-demand ordering system.**

No more going to the store for your shopping, now the store will come to you. Although the worldwide grocery industry is worth nearly USD 1 trillion, less than 5 percent of grocery sales currently take place online. [Robomart](#) is building a fleet of autonomous delivery vehicles designed like mini-stores, which they will license to retailers.

Customers will use an app to request the nearest Robomart. Once it arrives, they unlock the doors and chose what they want. When done, they simply close the doors and the Robomart moves on to the next customer. The Robomart will track what customers take using proprietary "grab and go" technology, and customers will be charged automatically and sent a receipt.

Look also at <https://www.aalto.fi/en/news/alepa-introduces-robotic-food-deliveries-in-otaniemi-first-in-finland>

# PRODUCT? SERVICE? PRODUCT-SERVICE HYBRID?

Product-service hybrids

## PURE MATERIAL GOODS

The offer is made only by tangible goods (product) that isn't accompanied by any service - e.g. soap, toothpaste, salt...

## PREDOMINANT MATERIAL GOODS WITH ACCOMPANYING SERVICES

The offer consists primarily of a product that is accompanied by a minor service (or retail services) - e.g. clothes item with a return or mending service

## HYBRID

The offer is made equally by products and services - e.g. Apple, Ikea, Nike...

## PREDOMINANT SERVICE WITH ACCOMPANYING GOODS

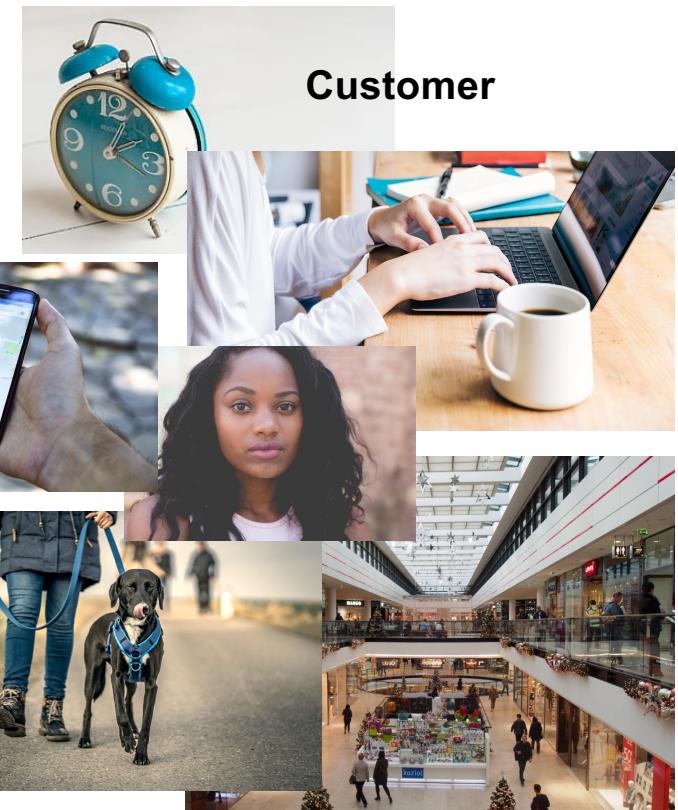
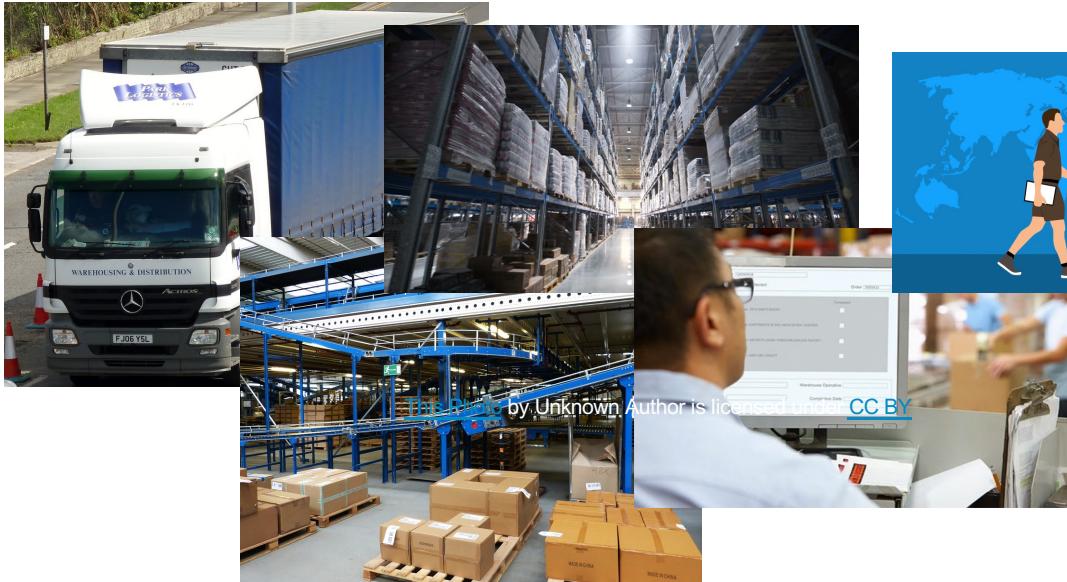
The essence of offer is a service, accompanied by (minor) goods - e.g. basis of air transport is a service (transportation) accompanied by food, beverage, tax-free items etc.

## PURE SERVICE

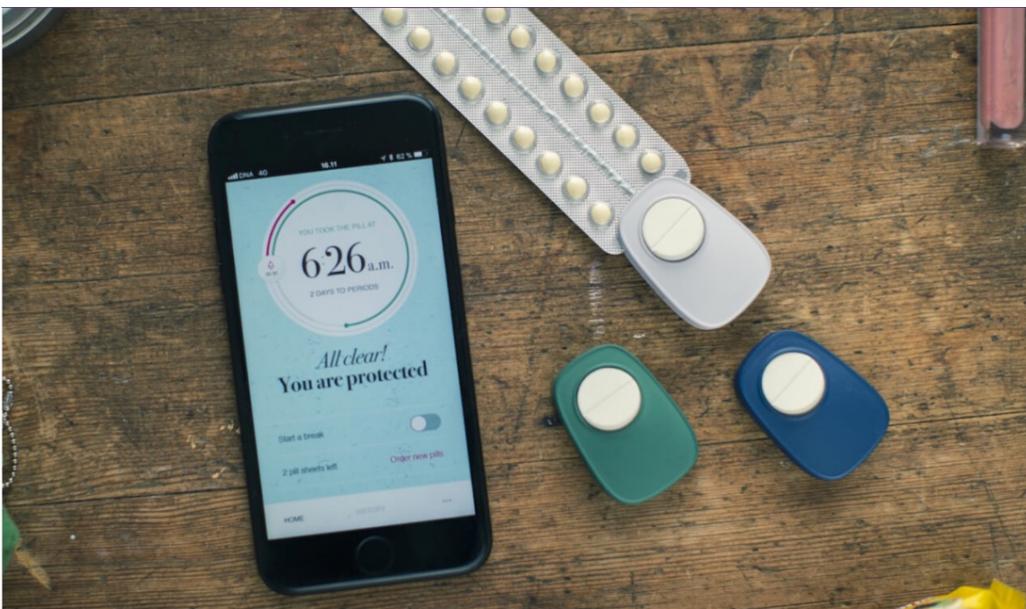
The offer is made only through services - e.g. physiotherapy, babysitting

# BACKSTAGE AND FRONTSTAGE

Provider



## DEVICE CREATES ALERTS WHEN BIRTH CONTROL PILL HAS BEEN FORGOTTEN



**Clip-on device attaches onto a regular pill sheet and uses patented technology to ensure daily medication is not forgotten.**

The device clips on to the pill pack, and uses patented technology and three sensors to detect if the daily pill has been taken. If it has been forgotten, it creates an alert on a connected app that can be downloaded by the user. The app can also be linked to other people, such as the partner of the person taking the pill. The device and adjoined app does not create any form of alert if the pill has been taken, so daily phone reminders can be a thing of the past. Its battery life spans up to 12 months, has a Bluetooth range of up to 30m, and comes in eight colours.

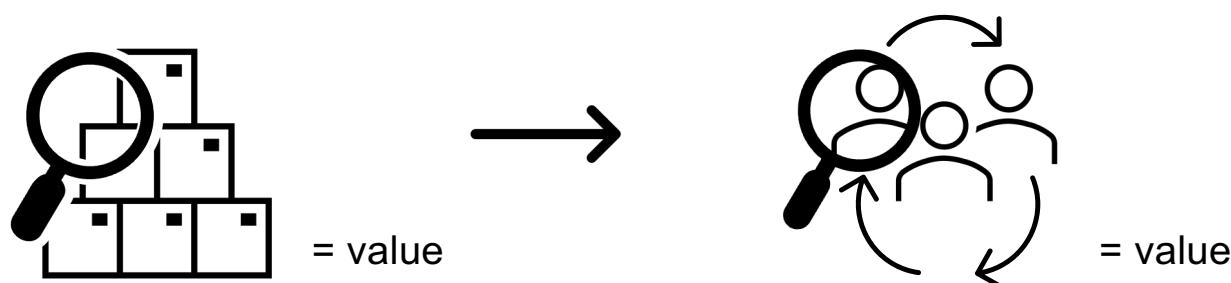
## G-D LOGIC AND S-D LOGIC PARADIGMS

- » G-D logic = Good-Dominant logic
- » S-D logic: Service-Dominant logic
  
- » A paradigm: a set of theories that explain the way a particular subject is understood at a particular time, usually related to a particular field of knowledge

## FROM G-D LOGIC TO S-D LOGIC

- » In field of marketing – departure from previously prevalent G-D logic toward S-D logic  
(by Stephen L. Vargo and Robert F. Lusch)
- » G-D logic: traditional paradigm more than 100 years old: goods as focus of exchange
- » S-D logic: specialised skills and knowledge as focus of economic exchange, humans exchange services (application of specialised skills and knowledge), goods can be mechanisms for service provision

## FROM G-D LOGIC TO S-D LOGIC



G-D logic: focus on  
transaction of tangible  
goods

S-D logic: focus on  
intangible resources and  
relationships

## G-D LOGIC VS. S-D LOGIC: RETHINKING EXCHANGE

	G-D logic	S-D logic
<b>Primary unit of exchange</b>	Goods	Knowledge and skills, services
<b>Purpose of economic activity</b>	To make and distribute tangible units of output (goods)	Exchange of services
<b>Value</b>	It is embedded in goods during manufacturing. It is determined by the producer	It is co-created in the service exchange. It is determined by the consumer in use. Firms only make “value propositions”
<b>Role of goods and services</b>	Services are immaterial goods or add-ons to tangible products – they have a secondary role	Goods are vehicles for service production.

## HEAR VARGO EXPLAIN S-D LOGIC



Prof. Stephen Vargo: Service-dominant logic: Basics, Developments  
and State-of-the-art @UBT

<https://www.youtube.com/watch?v=J1h4JQ7bTmA>

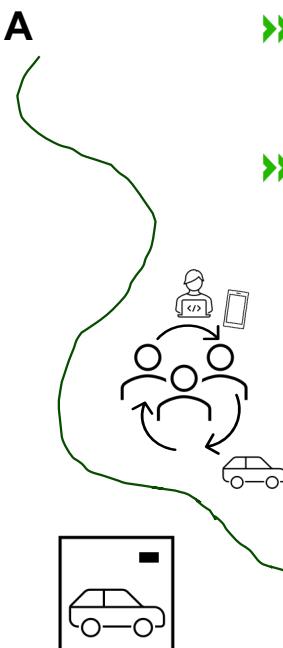
Foundational principles and axioms of S-D logic (Vargo & Lusch, 2006; 2008; 2016)

Foundational principle	Status	
FP1	Axiom 1	<b>Service is the fundamental basis of exchange</b>
FP2		Indirect exchange masks the fundamental basis of exchange
FP3		Goods are distribution mechanisms for service provision
FP4		Operant resources are the fundamental source of strategic benefit.
FP5		The customer is always a co-creator of value
FP6	Axiom 2	<b>Value is cocreated by multiple actors, always including the beneficiary</b>
FP7		Actors cannot deliver value but can participate in the creation and offering of value propositions
FP8		A service-centered view is inherently beneficiary oriented and relational
FP9	Axiom 3	<b>All social and economic actors are resource integrators</b>
FP10	Axiom 4	<b>Value is always uniquely and phenomenologically determined by the beneficiary</b>
FP11	Axiom 5	Value cocreation is coordinated through actor-generated institutions and institutional arrangements

## FP1 / AXIOM 1: SERVICE IS THE FUNDAMENTAL BASIS OF EXCHANGE

The  
“what”

- » Historically, service have been exchanged for service
- » Service – applied knowledge for another party's benefit – is exchanged for service
- » Example: move from City A to B
  - G-D logic: car manufacturer sells you a car
  - S-D logic: renting out a car (physical resources, systems and often employees), or a peer-to-peer platform to connect travellers with free seats in cars (system). Money exchange involved is also a part of related service (credit card, bank)



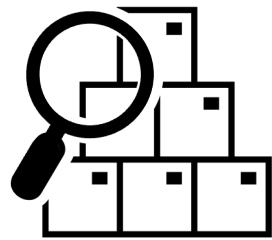
<https://solvinnov.com/what-is-value/>

## FP6 / AXIOM 2: VALUE IS COCREATED BY MULTIPLE ACTORS, ALWAYS INCLUDING THE BENEFICIARY

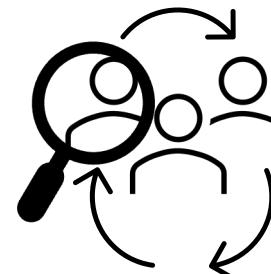
- Shift from traditional worldview, in which firms are seen as the sole creator of value

## IMPORTANT NOTE: VALUE IN S-D LOGIC!

- Value arises in the use of the exchanged resources, knowledge and skills



= value



= value

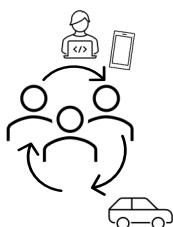
G-D logic

S-D logic

<https://solvinnov.com/what-is-value/>

## FP6 / AXIOM 2: VALUE IS COCREATED BY MULTIPLE ACTORS, ALWAYS INCLUDING THE BENEFICIARY

- » Shift from traditional worldview, in which firms are seen as the sole creator of value
- » Value creation as a multiple-way process involving multiple social and economic actors
- » The customer (beneficiary) is always involved in co-creating value - There is no value until an offering is used
- » Note: value cocreation DOESN'T MEAN "active participation in the firm's design, definition, creation, etc. of its offering" IT MEANS "the actions of multiple actors, often unaware of each other, that contribute to each other's wellbeing" (Vargo & Lusch, 2016)



The  
“how”

## FP9 / AXIOM 3: ALL SOCIAL AND ECONOMIC ACTORS ARE RESOURCE INTEGRATORS

- » All social and economic actors: e.g. individuals, households, firms, nations, etc.
- » Service occurs when these actors integrate their resources, based on an attractive value proposition, in order to follow through a process of co-creating value

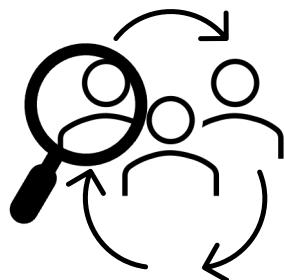


Photo: Helsingin kaupunki

The  
“who”

## IMPORTANT NOTE: VALUE PROPOSITION

- » Value proposition: value provided by the service offering of a provider – the value that customers can expect from the services provided by a service provider
- » Service offering: set of services, features, benefits provided by a business or organisation for its customers to meet their needs or solve their problems
- » Example: Netflix
- » Value proposition: “Watch Anywhere, Cancel Anytime”
- » Service offering: subscription models, access from several devices, downloading option to view offline, profiles for children
- » We will return to value propositions later in the course

## FP9 / AXIOM 3: ALL SOCIAL AND ECONOMIC ACTORS ARE RESOURCE INTEGRATORS

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Photo: Helsingin kaupunki

The  
“who”

## FP10 / AXIOM 4: VALUE IS ALWAYS UNIQUELY AND PHENOMENOLOGICALLY DETERMINED BY THE BENEFICIARY

- » Value is based on subjective experience
- » All value propositions (e.g., goods, service provision, etc.) are perceived and integrated differently by each actor → value is also uniquely experienced and determined



The  
“how”

- » Example: Netflix
- » Value proposition: “Watch Anywhere, Cancel Anytime”
- » Service offering: subscription models, access from several devices, downloading option to view offline, profiles for children

## FP11 / AXIOM 5: VALUE COCREATION IS COORDINATED THROUGH ACTOR-GENERATED INSTITUTIONS AND INSTITUTIONAL ARRANGEMENTS

- ▶ Institutions = humanly devised rules, norms, and beliefs that enable and constrain action and make social life predictable and meaningful



Photo: Helsingin kaupunki

## DISCUSS WITH YOUR NEIGHBOR

“S-D logic argues that in order to create value, that is to maintain and increase wellbeing and viability, actors engage in interdependent and reciprocally beneficial service exchange (Lusch and Vargo, 2014). Hence, value creation occurs in networks in which resources are exchanged among multiple actors and is therefore more accurately conceptualized as value cocreation (Vargo and Lusch, 2008, Vargo, Maglio and Akaka, 2009).”

(Wikipedia article on S-D logic)

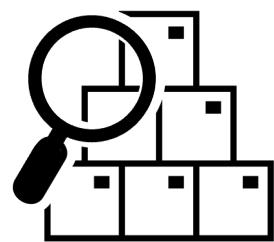
- 1) Read the text above about S-D logic
- 2) Think of an example of a service
- 3) Who are the key actors in this service?
- 4) How is value co-created?

## MORE INFO

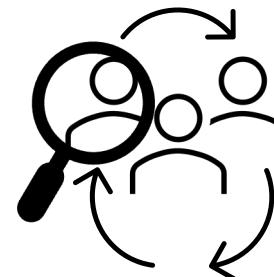
- » In depth academic article on S-D logic, from scholars in the field of marketing
  - Service-dominant logic: What it is, What it is not, What it might be. The service dominant logic of marketing: Dialog debate and directions (in Moodle)
  
- » Popularising and trying to explain S-D logic in an easier way
  - Adam Tacy on SolvInnov.com: Making Service-Dominant Logic More Approachable (in Moodle and <https://solvinnov.com/making-service-dominant-logic-more-approachable/>)

We will return to FP7 and Value Proposition in more detail later in the course

## VALUE IN S-D LOGIC!



= value



= value

G-D logic

S-D logic

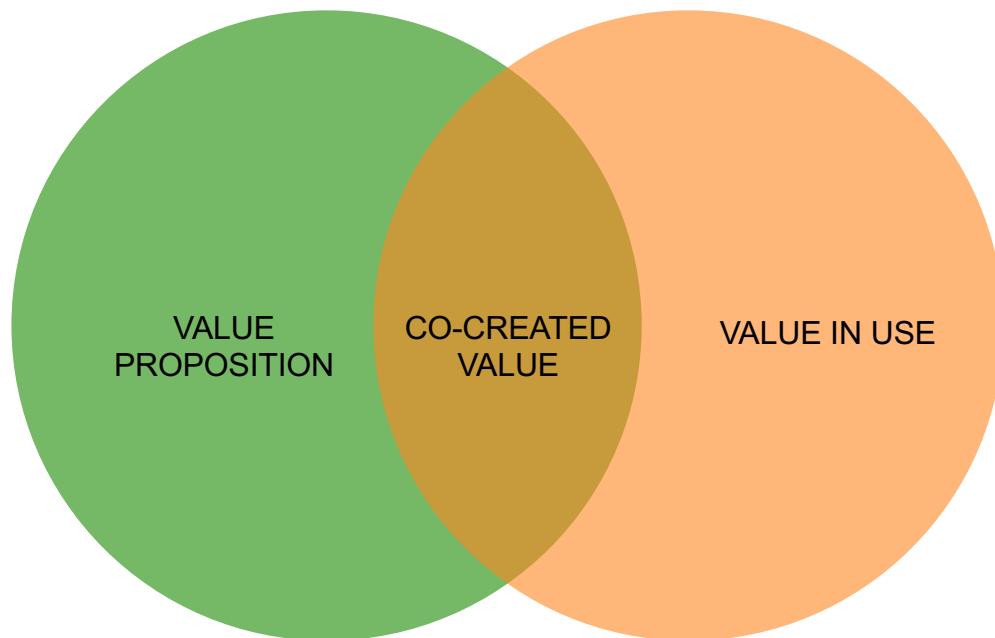
## APPLICATION TO INFORMATION SYSTEMS (IS)

- » So far, all we have seen comes from service theories from field of marketing
- » How can we apply them to IS?
- » Proposal by Geiger et al. to address the gap between service-centric theories and IS design
- » Propose “Value in Interaction Model” for designing new and improving existing services in domain of IS
- » Interaction: Term used in IS not in marketing
- » Interaction has a key role in creating value when it takes place between providers and consumers

Geiger et al. (2020; 2021)



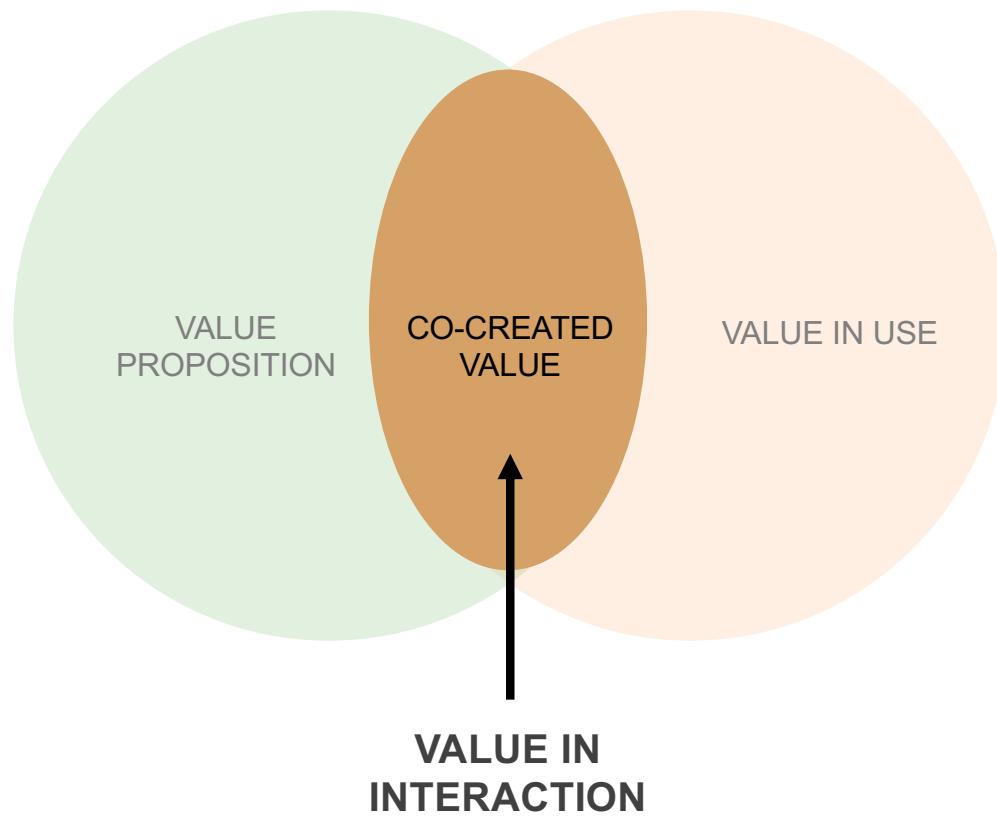
## PROVIDER SPHERE      CUSTOMER SPHERE





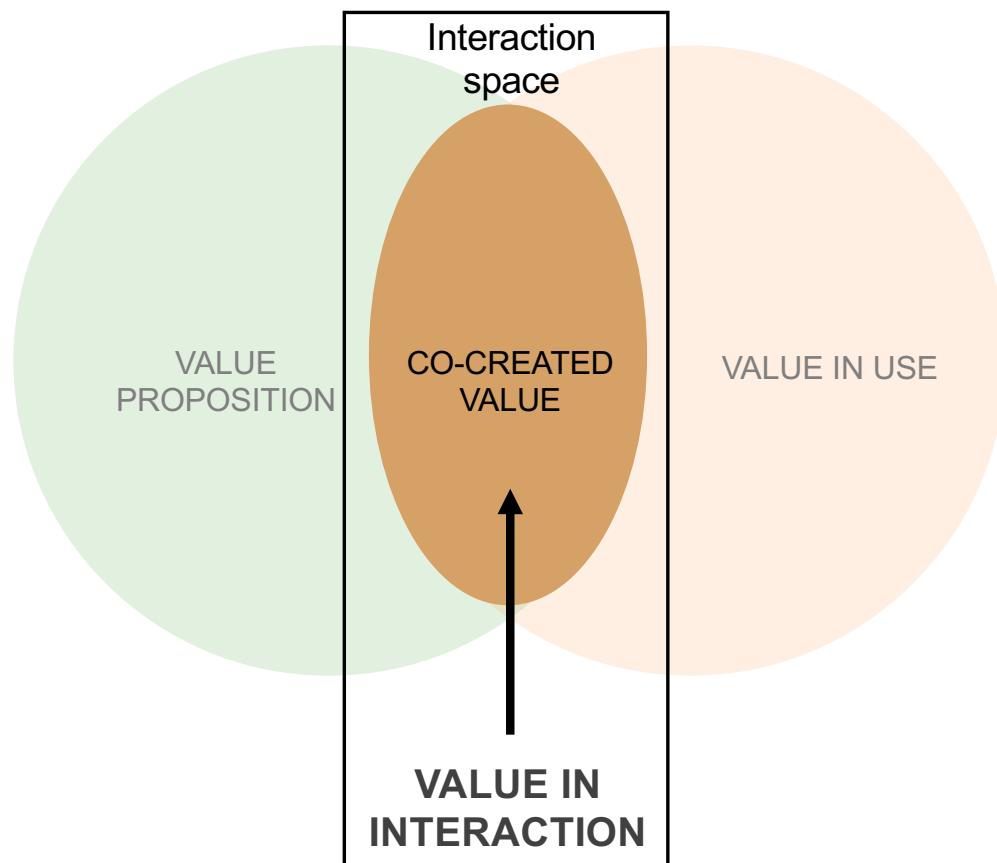
PROVIDER SPHERE

CUSTOMER SPHERE





## PROVIDER SPHERE      CUSTOMER SPHERE

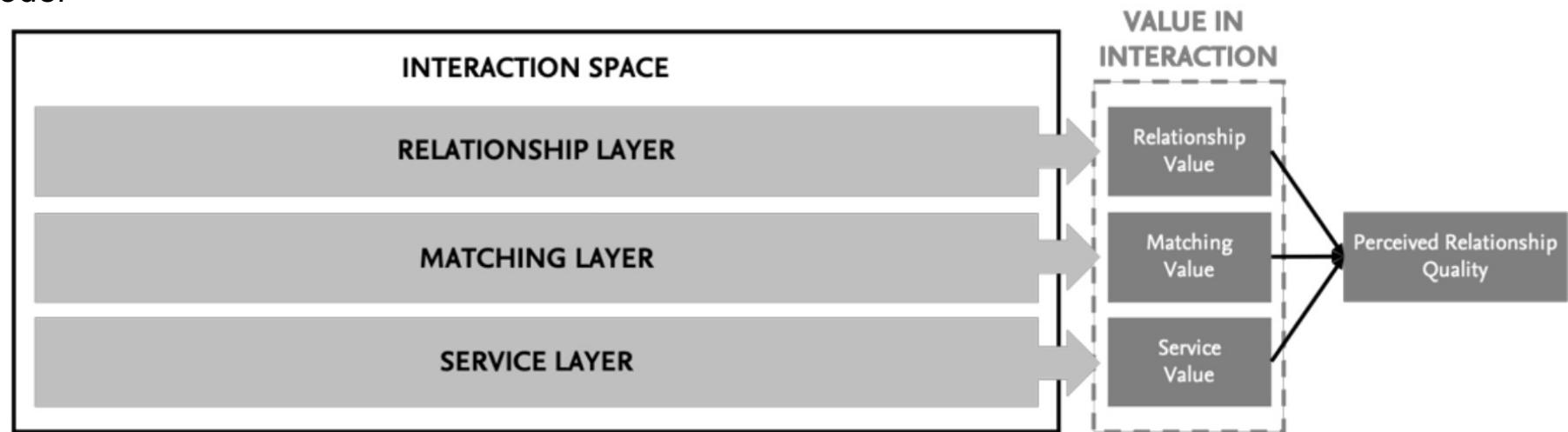


## INTERACTION SPACE

- » Co-created value can take place in an interaction space and be referred to Value in Interaction
- » The interaction space can be e.g. a physical space (store, restaurant, library), or a virtual one (e.g. Website, App, VR)
- » It is where the actors from the providers' side and customers interact

# VALUE IN INTERACTION MODEL

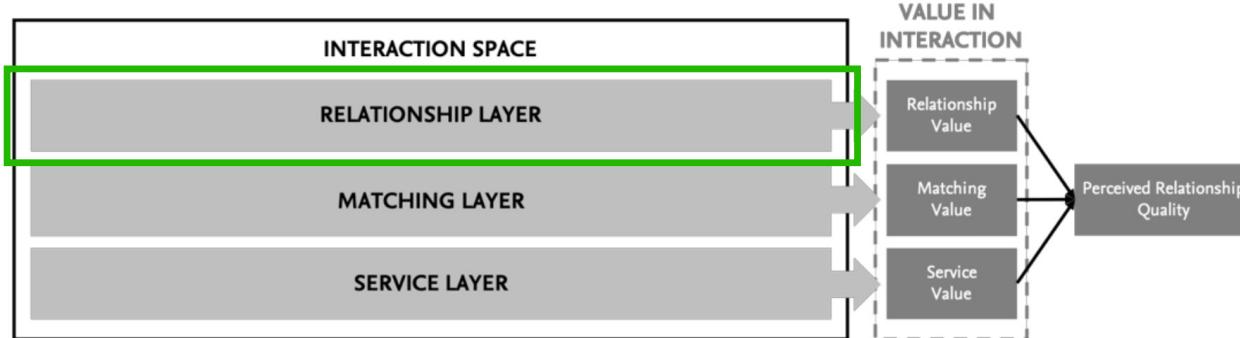
Aim: to simplify the design of valuable interactions in IS by actively designing the individual levels of the model



Geiger et al., 2020; 2021

# RELATIONSHIP LAYER

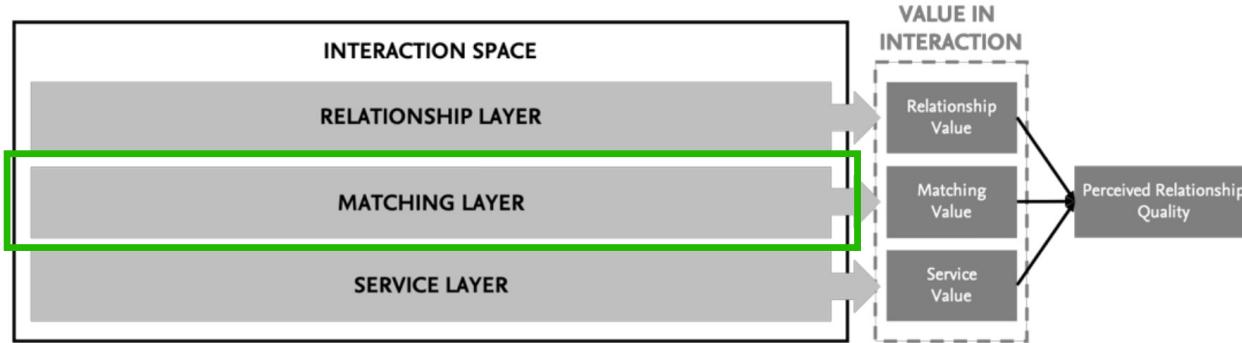
- Describes the quality of the relationship influenced by interactions between actors
- Deals with the emergence, influence and maintenance of the relationship value
- Important at earlier stages of interaction
- Relationship value can be interpreted as a cumulative value across successive interactions
- Actors can expand or re-open the Interaction Space so that it can be filled with valuable interactions and for Relationship Value to be created



Geiger et al., 2020; 2021

## MATCHING LAYER

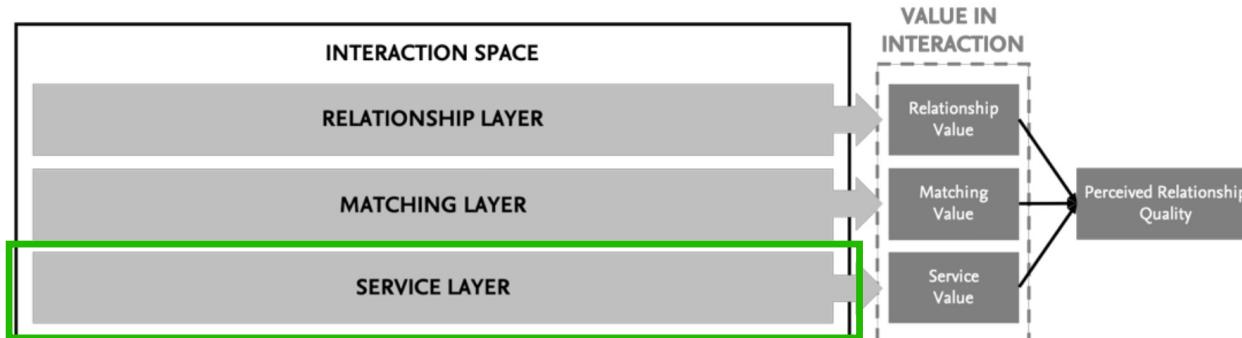
- Ability of the actors to anticipate the needs of the other and to "match" these with their own abilities and competencies
- The aim is to offer the best possible service with the appropriate interaction at the Relationship Layer.



Geiger et al., 2020; 2021

# SERVICE LAYER

- Describes how the interaction itself influences the actual service
- Service value arises directly within the interaction or during the simultaneous processes of the actors in the value co-creation
- Rates high if Relationship and Matching values are high



Geiger et al., 2020; 2021

## USING THE MODEL

- » The Relationship Layer, Matching Layer and Service Layer should be taken into account from a company's perspective when designing any interaction.
- » If a company manages to satisfy the needs of the customer on the individual layers in the interaction, this positively influences the Perceived Relationship Quality.

# Good Services

**How to design services that work**

**Lou Downe**

**Good services are:**

**Good for the user of the service**

**It does what they need it to do, in a way that works for them**

**Good for the organisation providing it**  
**It's profitable and easy to run**

**Good for society as a whole**

**It does not destroy the world we live in, or negatively affect the society as a whole**

## KEY TAKE AWAYS

- » Service-Dominant logic is a key paradigm from the field of Marketing
- » It is different than the so far prevalent paradigm of Goods-Dominant logic
- » S-D logic focuses on service and their exchange (exchange of knowledge and skills) rather than on goods, as the purpose of economic activity
- » In S-D logic, value is co-created in the service exchange. Provider can only propose value propositions. Value emerges during use
- » There are a set of Foundational Principles and Axioms in S-D logic – we looked at some key ones
- » Scholars in Information Systems (IS) have interpreted S-D logic to fit IS
- » They propose the Value in Interaction model to help simplify the design of valuable interactions in IS by addressing the 3 layers to insure value in interaction

## REFERENCES

- » Geiger, M., Jago, F., & Robra-Bissantz, S. (2021). Physical vs. Digital Interactions: Value Generation Within Customer-Retailer Interaction. BLED 2021 Proceedings. <https://aisel.aisnet.org/bled2021/7>
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- » Vargo, S., & Lusch, R. (2006). Service-dominant logic: What it is, What it is not, What it might be. The service dominant logic of marketing: Dialog debate and directions. Journal of the Academy of Marketing Science, 6, 281–288.
- » Vargo, S., & Lusch, R. (2015). Institutions and axioms: An extension and update of service-dominant logic. Journal of the Academy of Marketing Science, 44. <https://doi.org/10.1007/s11747-015-0456-3>

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## FOR THURSDAY

- » Be ready to go on a service safari!
- » Groups?



