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MARK- E0010
Technology-driven Service Strategy:
Thematic Package 3 "Service and Technology"
24.01.2023

Spring 2023
09.01.2023 – 26.02.2023

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Department of Marketing

Technology-driven Service Strategy – Contents

"Service is the application of specialized competences (skills and knowledge) (1),

through deeds, processes, and performances (2)

for the benefit of another entity or the entity itself (self-service) (3)."

Vargo and Lusch (2004b), S. 326.

Wilson et al. (2012), p. 5; 37.

Introduction to Services (Jan. 10, 2023)

- Why study services?
- Defining services
- Servitization
- Value co-creation

Managing Service Excellence (Jan. 17, 2023)

- What is service quality?
- (Electronic) Service quality measurement
- Identifying "Moments of Truth"
- Customer Experience Management
- Service recovery

Service and Technology (Jan. 24, 2023)

- Self-service Technologies
- Four types of AI in service
- Omnichannel customer experience (Lemonade Insurance case study)
- Service robots
- Service platforms

Emerging Themes in Services (Feb. 07, 2023)

- Service ecosystems
- Sharing economy
- Transformative service research
- Service and society

Case study report (max. two word-pages) – deadline Feb. 3, 23.59 hours.

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Technology-driven Service Strategy
Reading Package #3 "Service and Technology" – Overview

#1 Gahler et al. (2022)

Customer Experience: Conceptualization, Measurement, and Application in Omnichannel Environments

- Customer Experience (CX)
- Scale development
- Figure 1

#2 Huang and Rust (2018)

Artificial Intelligence in Service

Ming-Hui Huang and Roland T. Rust

- Four types of AI
- Conceptual article
- Table 1
- Seminal work

#3 Huang and Rust (2021)

Engaged to a Robot? The Role of AI in Service

Ming-Hui Huang and Roland T. Rust

- Matching types of AI with service features
- Conceptual article
- Figure 2
- Table 2

#4 Meuter et al. (2005)

Matthew L. Meuter, Mary Jo Bitner, Amy L. Ostrom, & Stephen W. Brown

Choosing Among Alternative Service Delivery Modes: An Investigation of Customer Trial of Self-Service Technologies

- Adoption of Self-service Technologies
- Survey research
- Figure 1

#5 Wirtz et al. (2019)

Platforms in the peer-to-peer sharing economy

- Typology of platform-based business models
- Conceptual paper
- Figure 1

#6 Case study "Lemonade Insurance"

"Wow"-Experience for Lemonade Customers

Building a lovable and trustful brand
- New full-stack insurance model – from 'paper, hassle, effort' to 'frictionless, instant, fun'
- Policy 2.0 (digital, transparent, simple, and co-creative)
- B-corp certificate (purpose & profit; giveback program)
- Flexible monthly subscriptions (USD 5-25)
- Clear and flexible offering (home and pet insurance that can be modified)
- Customer-centric KPIs (happiness, churn)

Instant Everything
- D2C-model (direct-to-consumer)
- Speed as a central value proposition
- Chatbot "Maya" – purchasing and support processes
- Chatbot "Jim" – handling claims at warp speed
- Machine learning to optimize risk, assessment, payment rates
- Data collection (100x more per customer than established insurance incumbents) and data analytics (fraud detection)

Usability
- App-based
- Fast and convenient (90 sec to get an insurance, claim settling very fast too)
- No paperwork
- Customer-friendly claim handling
  - 1/3 of claims paid out/handled in one day, some claims repaid in seconds
  - Suspicious claims transferred to human Claims Experience Team

AI, Behavioral Economics, social impact

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Technology-driven Service Strategy
Service and Technology – Customer Experience in Omnichannel Environments

#1 Gahler et al. (2022)

**People don't buy products or services,
they buy experiences.**

„**An experience is not an amorphous construct; it is as real an offering as any service, good, or commodity**" (Pine and Gilmore 1998, p. 98).

Ongoing Trends:

- Customers interact with firms through a myriad of touchpoints in multiple channels and media
- Omnichannel management is the new normal
- Firms have less control of customer journeys (growing volume of customer-to-customer interactions and social media use)

Resulting Challenge:

"It has become increasingly complex for firms to create, manage, and attempt to control the experience and journey of each customer" (Lemon and Verhoef 2016, p. 69).

Lemon and Verhoef (2016), "Understanding customer experience throughout the customer journey," *Journal of Marketing*, *80* (6), pp.69-96.
Brynjolfsson et al. (2013), "*Competing in the age of omnichannel retailing,* Cambridge, MA: MIT..

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Slide 7

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Gahler et al. 2022

Technology-driven Service Strategy
Service and Technology – Customer Experience in Omnichannel Environments

CX responses

Affective	Cognitive	Physical	Relational	Sensorial	Symbolic
Emotions, feelings, and moods a customer perceives during the interaction with a brand, employees, or other customers.	Customer's intellectual stimulation and learning during an interaction.	Customer's perception of his or her body movement and body position during an interaction.	Customer's perception of his or her relationships to someone (employees, other customers) or something (brands) during the customer interaction.	Sensory qualities of a customer interaction that reflect uses of the five senses: vision, audition, tactile sense, scent, and/or sense of taste.	Customer's self-affirmation and self-expression during the interaction.
1. Good emotions 2. Positive feelings 3. Good mood	1. Intellectual stimulation 2. Learning something beneficial 3. Positive insights	1. Pleasant bodily movements 2. Actively moving in a likeable manner 3. Active in a likeable manner	1. Establishing a personal relationship 2. Positive connection 3. Belonging to a community	1. Positive sensory appeal 2. Good sensory impressions 3. Positive engagement of senses	1. Contact in line with personal values 2. Confirmation of personal beliefs 3. Contact in line with self-image

Gahler et al. 2022

Technology-driven Service Strategy
Service and Technology – Artificial Intelligence in Service

#2 Huang and Rust (2018)

Artificial Intelligence in Service

Artificial intelligence (AI) refers to intelligence demonstrated by machines and represents the counterpart of natural intelligence (NI) displayed by humans and animals (Russel and Norvig 2010).

#3 Huang and Rust (2021)

Engaged to a Robot! The Role of AI in Service

"Literature considers intelligence as the ability to learn from experience and adapt to the environment" (Huang and Rust 2018, p. 2).

"Artifical intelligence (AI) (…) is increasingly utilized in service (…). For example, robots for homes, health care, hotels, and restaurants have automated many parts of our lives, virtual bots turn customer service into self-service, big data AI applications are used to replace portfolio managers, and social robots such as Pepper are used to replace human greeters to welcome customers in customer-facing services" (Huang and Rust 2018, p. 1).

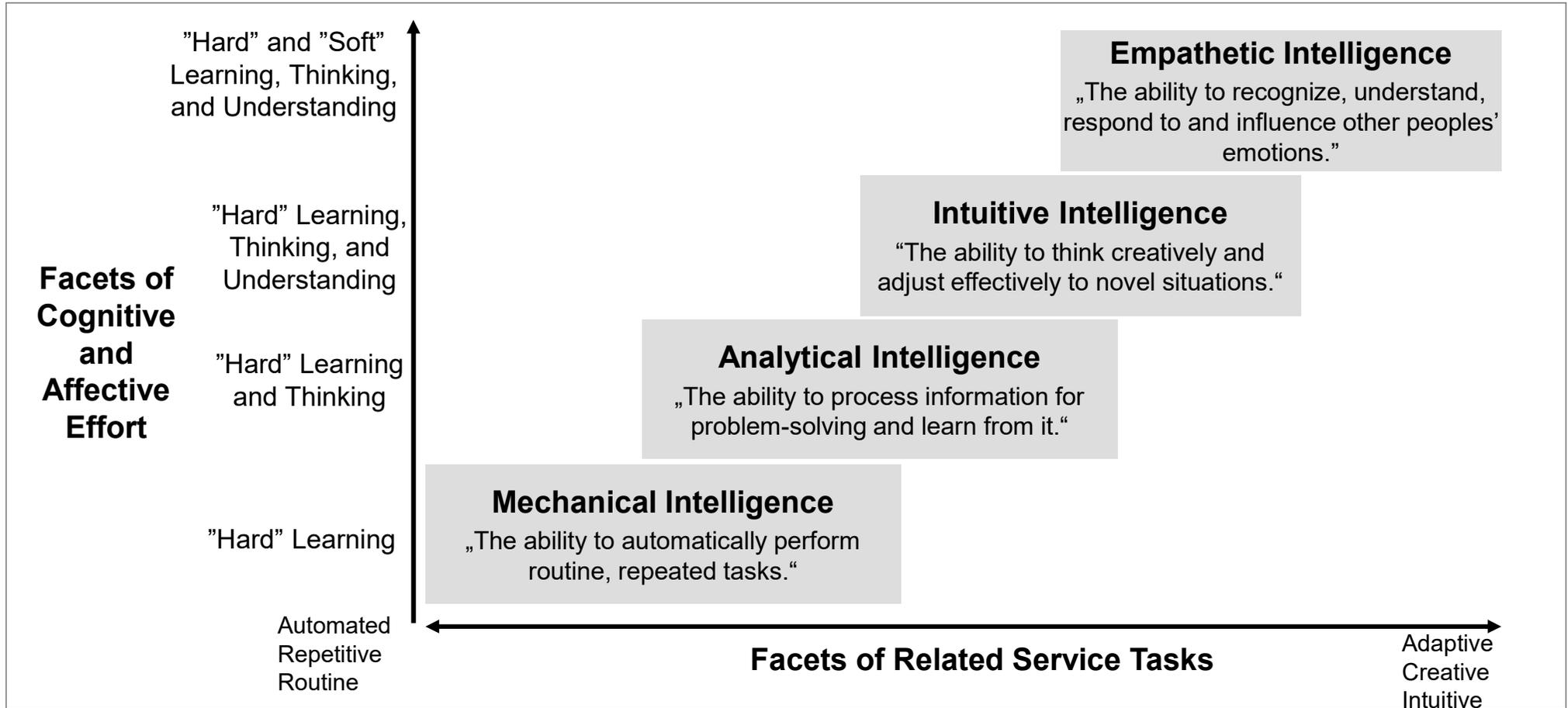https://www.hs.fi/kaupunki/helsinki/art-2000009199596.html

https://www.inquisitr.com/3133308/youre-fired-pizza-hut-hires-softbanks-pepper-apple-supplier-replaces-60000-workers-with-robots/
https://www.quora.com/Are-there-any-medical-uses-of-robots-not-included-in-this-cool-infographic-Robotics-in-Healthcare

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Technology-driven Service Strategy
Service and Technology – Artificial Intelligence in Service

Facets of Cognitive and Affective Effort (vertical axis):
- "Hard" and "Soft" Learning, Thinking, and Understanding
- "Hard" Learning, Thinking, and Understanding
- "Hard" Learning and Thinking
- "Hard" Learning
- Automated Repetitive Routine

Empathetic Intelligence
„The ability to recognize, understand, respond to and influence other peoples' emotions."

Intuitive Intelligence
"The ability to think creatively and adjust effectively to novel situations."

Analytical Intelligence
„The ability to process information for problem-solving and learn from it."

Mechanical Intelligence
„The ability to automatically perform routine, repeated tasks."

Facets of Related Service Tasks (horizontal axis): Adaptive Creative Intuitive

Adapted based on Huang and Rust (2018), pp. 3

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Service and Technology – Artificial Intelligence in Service

Mori, M., MacDorman, K. F., & Kageki, N. (2012). The uncanny valley [from the field]. *IEEE Robotics & Automation Magazine*, *19*(2), 98-100.
https://spectrum.ieee.org/automaton/robotics/humanoids/what-is-the-uncanny-valley
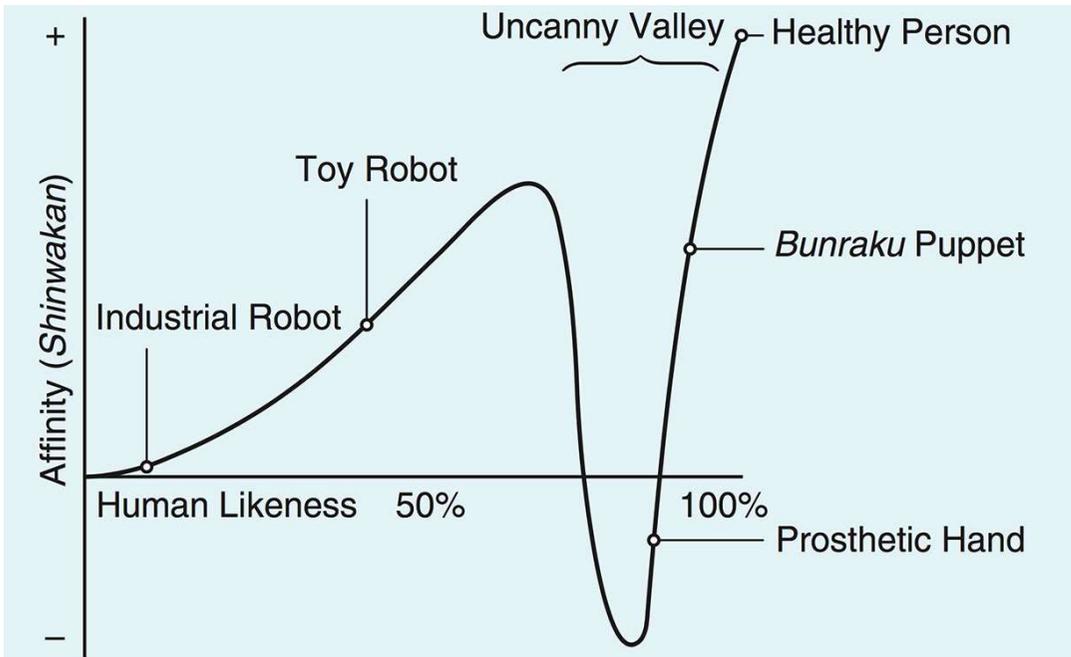
- As a robot's human likeness (horizontal axis) increases, our affinity towards the robot (vertical axis) increases too, but only up to a certain point.

- For some lifelike robots, our response to them plunges, and they appear repulsive or creepy.

→ **That's the uncanny valley.**

Sophia the Robot

Geminoid HI-1

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Technology-driven Service Strategy
Service and Technology – Artificial Intelligence in Service

Intelligence/Skill Level

Stage 5: Total replacement or integration

Stage 4: AI takes over empathetic tasks

Stage 3: AI takes over intuitive tasks

Stage 2: AI takes over analytical tasks

Stage 1: AI takes over mechanical tasks

Time

Huang and Rust (2018), p.12

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Technology-driven Service Strategy
Service and Technology – Self-Service Technologies

#4 Meuter et al. (2005)

Matthew L. Meuter, Mary Jo Bitner, Amy L. Ostrom, & Stephen W. Brown

Choosing Among Alternative Service Delivery Modes: An Investigation of Customer Trial of Self-Service Technologies

Self-service technologies (SSTs) are technological interfaces that enable customers to produce a service independent of direct service employee involvement (Meuter et al. 2000).

www.shutterstock.com

https://insideretail.asia/2015/11/09/singapore-government-backs-self-service-technology/

https://www.passengerselfservice.com/2014/05/finnair-launches-scanfly-self-service-bagdrop-at-helsinki/

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Technology-driven Service Strategy
Service and Technology – Self-Service Technologies

Antecedent Predictors

Innovation Characteristics
- Relative advantage
- Ease of use
- Complexity
- Compatability
- Perceived risk

Individual Differences
- Inertia
- Technology anxiety
- Need for interaction
- Previous experience
- Demographics

Mediating Variables

Consumer Readiness
- Role clarity
- Motivation (extrinsic, intrinsic)
- Ability

Adoption Process

Awareness

Investigation

Evaluation

Trial

Repeated use

Commitment

Meuter et al. (2005), p. 63

Technology-driven Service Strategy
Service and Technology – Platform-based Business Models

#5 Wirtz et al. (2019)

"A digital platform ecosystem comprises a platform owner (or provider) (1)

that implements governance mechanisms (2)

to facilitate value-creating mechanisms (3)

on a digital platform (4)

between the platform owner and an ecosystem of autonomous complementors (5) and

consumers (6)" (Hein et al. 2019).

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Technology-driven Service Strategy
Service and Technology – Platform-based Business Models

#5 Wirtz et al. (2019)

Wirtz et al. (2019, p. 454)

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Technology-driven Service Strategy
Service and Technology – Platform-based Business Models

#5 Wirtz et al. (2019)

Often, sharing economy business models facilitate people to transact directly with one another by connecting individuals in unprecedented ways (Caldieraro et al., 2018).

Specifically, (a) a platform provider enables exchange (e.g., Airbnb, Uber), (b) a customer seeks access to assets, and (c) a peer service provider (e.g., Airbnb host, Uber driver) grants this access (Benoit et al. 2017).
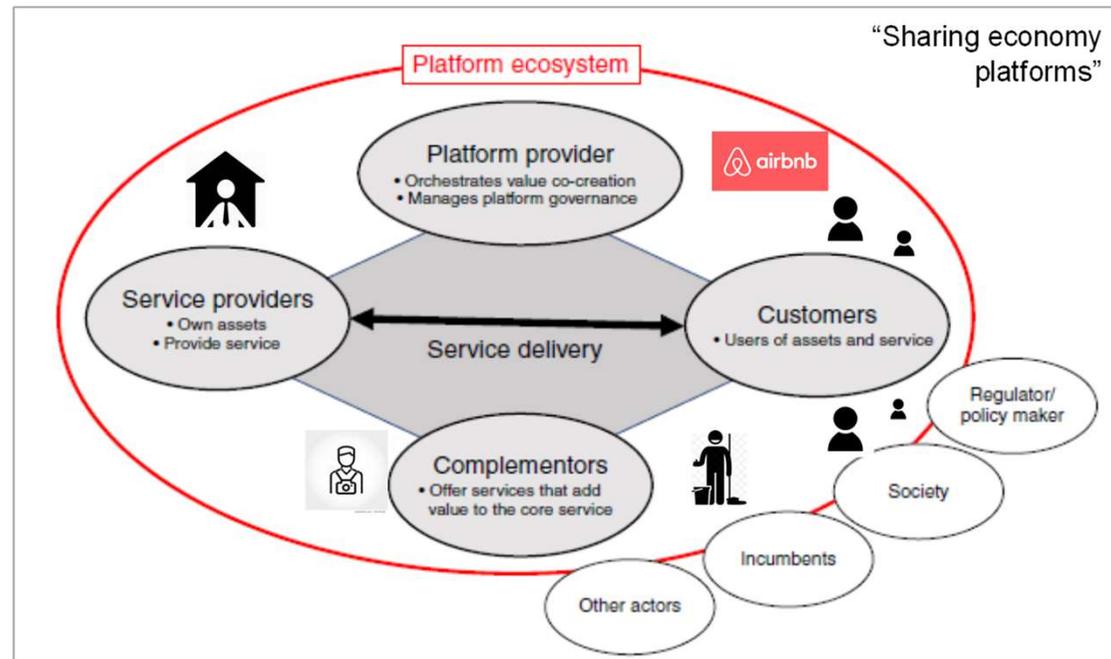
Adapted based on Wirtz et al. (2019), p. 467

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Case Study: Lemonade – Delighting Insurance Customers

https://www.lemonade.com
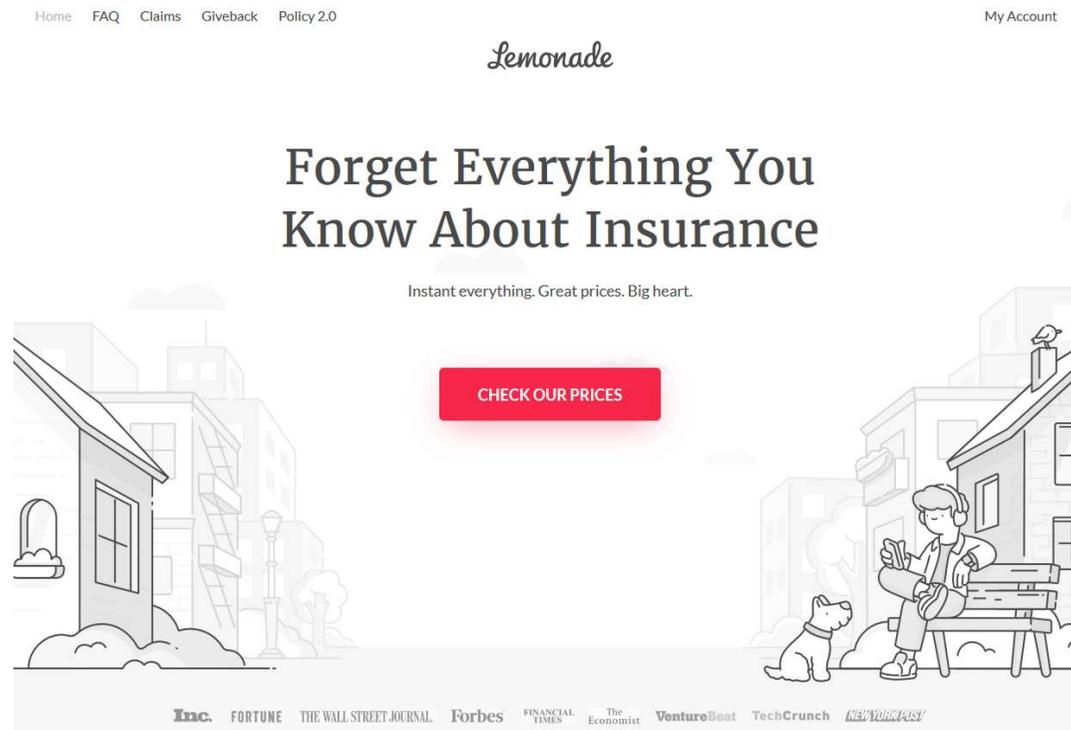
Case Study: Lemonade – Delighting Insurance Customers

Lemonade – Timeline and Development

2015	Founded by Daniel Schreiber, Shai Winninger, and Ty Sagalow
2016	Several successful funding rounds granting funding from Sequoia Capital, XL Innovate, Thrive Capital, Tusk Ventures, and GV (formerly Google Ventures)
	Lemonade is granted a B-Corp certification establishing the company as a Public Benefit Corporation
	Prof. Dan Ariely (Prof. of Psych. and Behavioral Econ., Duke University) joins as Chief Behavioral Economist
2017	In a Series C round of funding, Lemonade attracts additional investors such as Allianz, Softbank and actor Ashton Kutcher and increases the total funding raised to USD 180 million
2018	Lemonade insures more than 425.000 homes with almost USD 50 bn in total insured value
2019	Series D round of funding adds another USD 300 million of funds
2020	Lemonade becomes a public company (IPO on July 1 at USD 29)
2021-23	Lemonade operates in the US, France, Germany, and the Netherlands Revenue: USD 128 million (Dec. 2021) Net loss: USD 241 million (Dec. 2021) Employees: 1.119 (Dec. 2021) Acquisition of Metromile for approx. USD 500 million (pay-per-mile car insurance) announced in Nov. 2021 Stock price (Feb. 08, 2021): USD 163,93; Stock price (Jan. 20, 2023): USD 15,12

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Case Study: Lemonade – Delighting Insurance Customers

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Clearsurance names Lemonade "**the most innovative insurer of 2019**" - based on customer review data.

Lemonade

Lemonade Renters & Homeowners Insurance Reviews 2020

Pros and Cons - Sourced from customer reviews

✓ Easy-to-use website
✓ Explains coverage well
✓ Transparent pricing
✓ Flexible billing options
✓ Variety of coverage options

❌ Doesn't reward loyal customers

"Wow"-Experience for Lemonade Customers

Building a lovable and trustful brand	Instant Everything	Usability

• New full-stack insurance model – from 'paper, hassle, effort' to 'frictionless, instant, fun'
 • Policy 2.0 (digital, transparent, simple, and co-creative)
 • B-corp certificate (purpose & profit; giveback program)
 • Flexible monthly subscriptions (USD 5/25)
 • Clear and flexible offering (home and pet insurance that can be modified)
 • Customer-centric KPIs (happiness, churn)
	• D2C-model (direct-to-consumer)
	 • Speed as a central value proposition
	 • Chatbot "Maya" – purchasing and support processes
	 • Chatbot "Jim" – handling claims at warp speed
	 • Machine learning to optimize risk, assessment, payment rates
	 • Data collection (100x more per customer than established insurance incumbents) and data analytics (fraud detection)
		• App-based
		 • Fast and convenient (90 sec to get an insurance, claim settling very fast too)
		 • No paperwork
		 • Customer-friendly claim handling
		  • 1/3 of claims paid out/handled in one day, some claims repaid in seconds
		  • Suspicious claims transferred to human Claims Experience Team

AI, Behavioral Economics, social impact

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Slide 23

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Case Study: Lemonade – Delighting Insurance Customers

Case study questions

1.	Which typical customer pain points does Lemonade Insurance's service approach tackle? Outline at least two pain points many insurance customers are typically facing. (2 p)
2.	What are customer benefits that Lemonade Insurance offers? Sketch at least three customer benefits. (3 p)
3.	Is Lemonade's business model sustainable over time? Evaluate Lemonade's business model based on the Business Model Canvas-approach. (5 p)

Answer the three case study questions in a max. two-page word document. You may use tables or charts, but they are not required. The task is designed as an individual work.

The deadline for submitting the case study report is February. 3, 2023, 23.59 Finnish time. Please upload your answer document to the respective assignment box on the MyCourses homepage. Do not forget to clearly indicate your name on the submission and the respective files!

Case Study: Lemonade – Delighting Insurance Customers

1.

Which typical customer pain points does Lemonade Insurance's service approach tackle? Outline at least two pain points many insurance customers are typically facing. (2 p)

Zone A The Lens	Context: You want to buy a home insurance for your newly purchased holiday apartment.			
Zone B The stages and CX	Learn →	Purchase →	Manage →	Claim → Review/Renew
Activities	Check current bank's homepage	Check current bank's homepage	Want to get a new quote – need to check current contract	Oh no, water damage in my nice apartment – how to make and settle a claim?
Touchpoints	Bank XY's websites	Bank XY's hotline	Bank XY's homepage and hotline	Bank XY's homepage and hotline
Thoughts and feelings	Where can I quickly find relevant information?	How long do I have to wait in the queue?	Where can I quickly find relevant information?	Hopefully they cover the damage, how long might it take to receive their answer?
Dramatic arc	Why does it have to be so complicated? I will continue tomorrow…	I still don't like the music that they play while cueing…	Complicated and not very user-friendly –again!	I am skeptical – last time I really had to fight for reimbursement
Zone C The Insights				
Customer pain points				
How Lemonade insurance aims to overcome typical pain points				

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Case Study: Lemonade – Delighting Insurance Customers

2.

Customer Benefit Typology

What are customer benefits that Lemonade Insurance offers? Sketch at least three customer benefits. (3 p)

Customer value = customer benefits – customer costs

"Customer value is the "customers' net valuation of the **perceived benefits** accrued from an offering that is based on the **costs** they are willing to give up for the needs they are seeking to satisfy" (Kumar and Reinartz 2016, p. 37).

Functional benefits	Emotional benefits
Economic benefits	Social benefits
Relational benefits	

versus

Search costs	Monetary costs
Learning costs	Control costs
Negotiation costs	Costs of ownership

Case Study: Lemonade – Delighting Insurance Customers

2.

Exemplary Means-End-Chain

What are customer benefits that Lemonade Insurance offers? Sketch at least three customer benefits. (3 p)

Customer value

Time savings/ efficiency

Customer benefits

Insurance purchase in 90 sec

Lemonade service attributes

Mobile app

Chatbot Maya

…

…

…
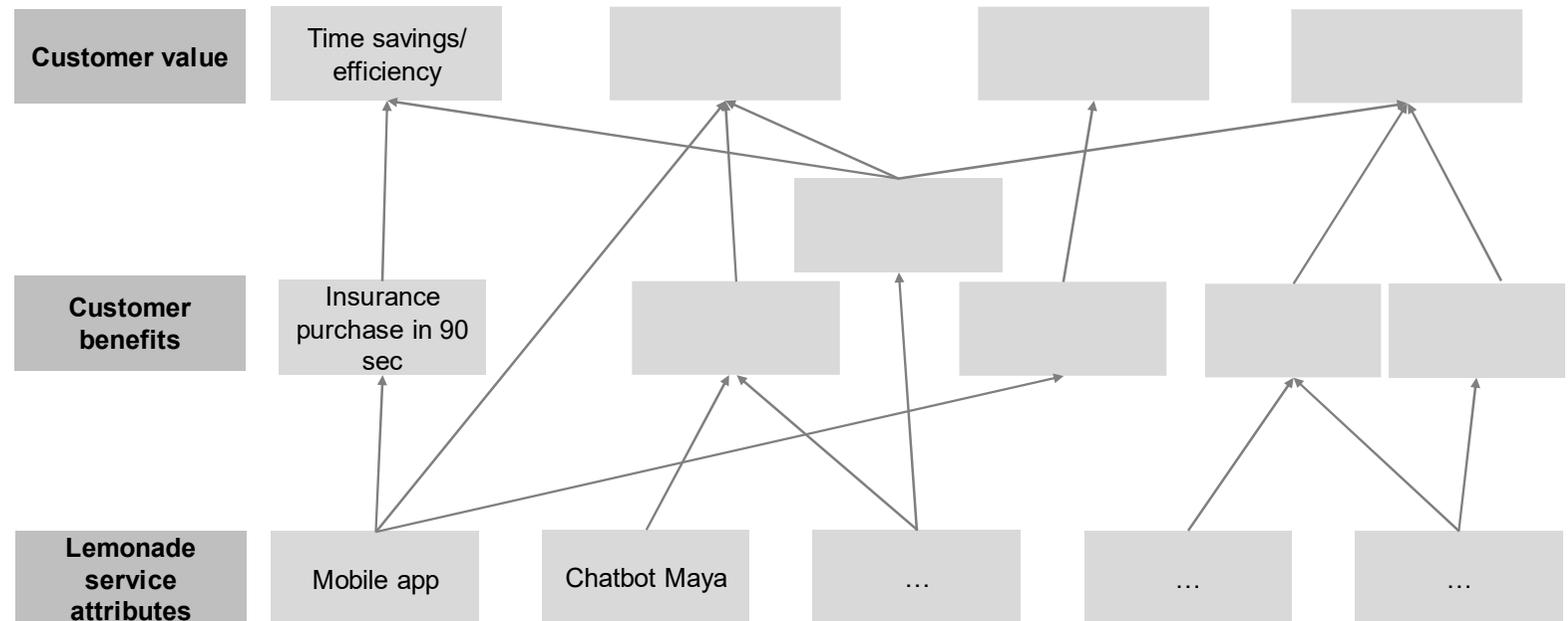
Case Study: Lemonade – Delighting Insurance Customers

3. Is Lemonade's business model sustainable over time? Evaluate Lemonade's business model based on the Business Model Canvas-approach. (5 p)

Key partners	Key activities	Customer promise	Customer relationships	Segment(s)
Charities				Millenials (Gen Y)
	Key resources	**Offer**	**Channel** Mobile App	

Cost structure	Revenue streams

Based on Osterwalder and Pigneur, see www.strategizer.com

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Technology-driven Service Strategy – Contents

"Service is the application of specialized competences (skills and knowledge) (1), through deeds, processes, and performances (2) for the benefit of another entity or the entity itself (self-service) (3)." Vargo and Lusch (2004b), S. 326. Wilson et al. (2012), p. 5; 37.	**Introduction to Services (Jan. 10, 2023)**	**Managing Service Excellence (Jan. 17, 2023)**	**Service and Technology (Jan. 24, 2023)**	**Emerging Themes in Services (Feb. 07, 2023)**
	• Why study services? • Defining services • Servitization • Value co-creation	• What is service quality? • (Electronic) Service quality measurement • Identifying "Moments of Truth" • Customer Experience Management • Service recovery	• Self-service Technologies • Four types of AI in service • Omnichannel customer experience (Lemonade Insurance case study) • Service robots • Service platforms	• Service ecosystems • Sharing economy • Transformative service research • Service and society

Learning reflection: Essay on the future of services – deadline Feb. 22, 2023, 23.59 hours.

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Slide 35

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