

## Digital and Sustainable Service Innovation for the Cultural and Creative Sectors

# SERVICE INNOVATION & SERVICE DESIGN





# The Nature of Services Define Service Innovation and Service Design

- Services are immaterial and intangible
- Services cannot be stored
- Services are performed and consumed while produced cannot be stored, but conditions and enabling elements can be created: the user of the service coproduces it
- Service create experiences
- Each service delivery is different despite the same procedure outline
- Replicable and reproduciable elements (process or the outcome): mass or customised
- The perception of the quality is individual





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# 1. SERVICE INNOVATION





# What is Service Innovation? Definition

Business Finland: "A new or significantly improved service concept that is taken into practice."

Van Ark et al. (2003)<sup>[1]</sup> states it as a "new or considerably changed service concept, client interaction channel, service delivery system or technological concept that individually, but most likely in combination, leads to one or more (re)new(ed) service functions that are new to the firm and do change the service/good offered on the market and do require structurally new technological, human or organizational capabilities of the service organization."

- Source: EuropeanCommission (2012) The Smart Guide to Service Innovation, p. 12 (<u>https://s3platform.jrc.ec.europa.eu/en-US/web/guest/w/the-smart-guide-to-service-innovation</u>)
- <u>https://en.wikipedia.org/wiki/Service\_innovation</u> for Business Finland (TEKES) and Van Ark





# **Benefits of Service Innovation**

- Innovation has increased in services a new area to innovate. Also for technical companies (e.g. ship engine producers)
- Service society and need to create income from services
- Improved productivity
- Reduced costs
- Increased competitiveness
- Readiness to react on the changes of the society
- Trends and habits
- Digitalisation increased digitalization of the society
- Improved brand recognition and value
- New partnerships and relationships (enabling transparency)

Sources, e.g.: <u>https://www.nibusinessinfo.co.uk/content/advantages-innovation</u> and <u>https://www.tilastokeskus.fi/tietotrendit/blogit/2020/palveluiden-innovointi-kirii-kiinni-tavaroiden-</u> tuotekehitysta-mutta-kuinka-innovaatiotoiminta-uudistuu-ja-kehittyy-kriisin-jalkeen/





# What is Service Innovation? Applications

- Concepts (i.e. a defined and developed idea a service) and offerings (the nature of service the company offers, e.g. home delivery)
- Introduced by a service company or a manufacturing company or an organization.
- What it can be, for example:
  - A service process or infrastructure
  - $_{\circ}\,$  A new customer interaction channel
  - A distribution system or a technological concept or a combination
  - A business model
  - Commercialisation (sales, marketing, delivery)
  - Service productivity and hybrid forms of innovation serving several user groups in different ways
  - New solutions in a customer interface or novel application of technology.
  - New dsictirution methods
  - $_{\odot}\,$  New cooperation with the supply chain to manage services.

Sources, e.g.: <u>https://www.nibusinessinfo.co.uk/content/advantages-innovation</u> and <u>https://www.tilastokeskus.fi/tietotrendit/blogit/2020/palveluiden-innovointi-kirii-kiinni-tavaroiden-</u> tuotekehitysta-mutta-kuinka-innovaatiotoiminta-uudistuu-ja-kehittyy-kriisin-jalkeen/





# What can be Innovated – in a Nutshell

- Service concent
- From products into services
- A new service
- Service process and service delivery
- Client service interface
- Value chains and networks
- Technology: the source of innovation, or an important part of it, might be using more or less technology in the service.
- The changes can be: incremental improvements, radical changes, new concepts
- New or existing martkets and target groups and services: e.g. diversification

Sources, e.g.: <u>https://www.nibusinessinfo.co.uk/content/advantages-innovation</u> and <u>https://www.tilastokeskus.fi/tietotrendit/blogit/2020/palveluiden-innovointi-kirii-kiinni-tavaroiden-tuotekehitysta-mutta-kuinka-innovaatiotoiminta-uudistuu-ja-kehittyy-kriisin-jalkeen/</u>



# **Examples of Service Innovation**



#### • Apps for food delivery

- The innovation is to provide a simple to use way to order food directly trough the app on the phone instead of making phone calls and cue on the phone. This saves time for the customers and the company.
- Selecting personalised shampoo or hair colour etc. online
  - The online store has developed questionnaires for customers to identify their hair type. One will receive e.g. personalised shampoo based on the answers on the questionnaire. This should be specific for own hair and one might be able to choose the colour of the shampoo too.
- Online personal training and voice coaching
  - Training can be a challenge, especially during COVID-19 pandemic and for busy people who hardly have time for it, let alone for a personal trainer. Training outside home might also be ab issue for mothers. Therefore providing training online might help solving this problem.







## The Core Questions

- WHEN to innovate
- WHY to innovate
- HOW to innovate
- WHAT to innovate
- WHICH are the tools to innovate
- WHO innovates







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# 2. SERVICE DESIGN





# What is Service Design – The Definition

"Service design helps to innovate (create new) or improve (existing) services to make them more useful, usable, desirable by clients and efficient as well as effective for organisations. It is a new holistic, multidisciplinary, integrative field."

– Stefan Moritz





# What is Service Design – Using Design Mindset

It can be used for:

- Creating new
- Modifying existing service

The concept of service design derives from design thinking: using the principles, ways, methods and tools of working to design services.

- The family of Design Thinking
- Using designers' sensibility and working methods to design services
- A way of thinking
- Experiences, functionality and cost effectiveness





# Design as Thinking forms of

"Design as Thinking" By Tim Brown. IDEO 2000s

Designer's sensibility	Design discipline	Design methods
Designer's sensibility and Design discipline to create	Designer's sensibility and Design methods to create	Design discipline and Design methods to answer to
FEASIBIITY	BUSINESS STRATEGY	PEOPLE'S NEEDS

All combined resulting as

#### **CUSTOMER VALUE AND MARKET OPPORTUNITY**



Table based on IDEO Tim Brown at https://www.pinterest.com/pin/104427285081455650/.



## Benefits of Service Design?

- Service economy and new ways of making living for the society and companies
- People have individual needs
- Workforce on the service sector
- Technology as an enabler manual professions decreasing
- COVID-19 and other global trends
- A tool for labour markets





#### Service Design is Used When...

- Optimising processes and influencing positively on consumer experience and satisfaction providing profit to the companies
- Developing a new service/s as such or e.g. as part of a (new) product or facility
- Improving a service/ the existing service experience
- Addressing (potential) new target groups and/or finding the right target group to address and discovering their needs
- Adding value to a product/ as part of a product offer
- Changing the image of a service
- Branding the service process and differentiating from the competitors
- Representing the idea in an understandable and concrete way
- Developing own activity (including strategy) and observing resources, hence this can be also towards internal customers (staff)
- Establishing consistency in services
- Determine the feasibility factors for implementation





# **Designing Immaterial Experiences**

- Using design methods to innovate, design and develop services
- How things are experienced
- Functionality
- Desires and expectation of clients, stakeholders and the organisation
- Ongoing interaction
- Consumed while produced
- Cultural perspectives





#### Also to Take into Consideration

- Motivation of the customer: e.g. obligatory, free will
- Expectations of the customer
- Beliefs of the customers, e.g. "Social services are always ..."
- The culture, lifestyle and values of the customer
- Do customers have resources for the service, e.g. level of knowledge for using ICT
- What is the time used
- Sustainability
- New systems and values\*
- Developing tools and props for services (can be tangible)\*\*

(\*) Adapted from Tuomo Ketola, Ego Beta, presentation at Helsinki Design Week 2008) (\*\*) According to the report of IfM and IBM (2008)



# 5 Service Design Principles by Stickdorn and Schneider



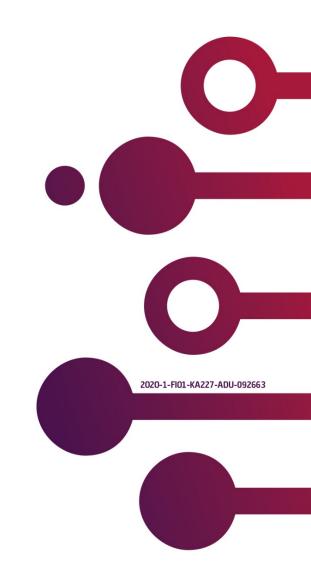
- 1. User-centered All users, qualitative research
- 2. Co-creative Including relevant stakeholders
- 3. Sequencing Breaking services into smaller units and separate processes
- 4. Evidencing Making service experiences tangible and comprehensible for the users
- 5. Holistic Multidisciplinary and multiperspective focusing on all touchpoints throughout experiences

Marc Stickdorn and Jakob Schneider, authors of *This is Service Design Thinking*, as on <u>https://www.interaction-design.org/literature/topics/service-design</u>.





# 2.1. SERVICE DESIGN Service Design Process and Process Terminology







#### Service Design is a Development Process

Service design (SD) is a development process that can be used for many purposes and target groups, e.g. for CCS sector, industrial companies, hospitals, etc.

- 1. As a development process, it uses a sequential development process model. This can be called a **Service design process model**.
  - The service design process model can be compared e.g. to baking a cake. Similarly a certain process id required to bake a cake.
  - In principle the process is always the same, although its steps, i.e. phases, may have may slightly different names.
- 2. The SD process model is divided into different **Phases** which each represent an essential step on the process towards the goal.
  - In baking these could be deciding on a type of cake to bake, buying ingredients, preparing the kitchen for baking, mixing dry ingredients, melting the butter, battering the egg white... putting the cake to the oven...decorating the cake, etc.
- 3. In each phase different **tools** (sometimes called methods) are used. They can be the same or also different in different process models and phases.
  - In baking these could be e.g. a bike to get to the shop to buy ingredients, a credit card to pay them, cleaning utensils to prepare the kitchen, a beater to batter the egg white, an oven to bake the cake, etc.





1. PROCESS MODEL OF BAKING A CAKE (=service design process model)							
2. PHASE 1: Deciding on the type of cake to bake		2. PHASE 2. Buying the ingredients		2. PHASE 3. Making cake dough			
3. TOOLS TO USE IN PHASE 1:		3. TOOLS TO USE IN PHASE 2:		3. TOOLS TO USE IN PHASE 3:			
1.	Recipe book	1.	Bike	1.	A beater		
2.	Online recipes	2.	Shopping cart	2.	A dough bowl		
3.	Family meeting	3.	Credit card	3.	A measure		





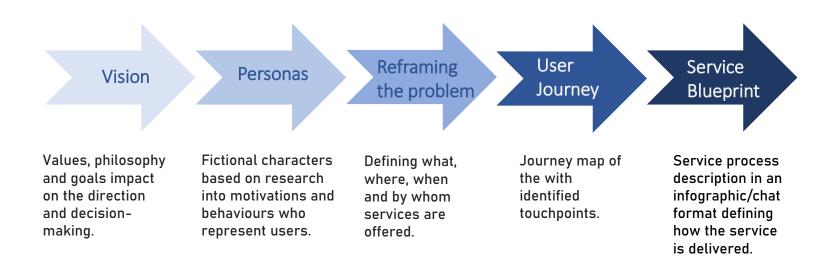
#### 1. Service Design Process Model

- 1. As a development process, it uses a sequential development process model. This can be called a **Service design process model**.
- 2. There are different process models. In principle the process is always the same, although its steps, i.e. phases, may have may slightly different names.
  - $\rightarrow$  See examples on the next two slides.





#### Service Design Process Model Example 1







#### Service Design Process Model Example 2



are offered.



making.

represent users.

how the service is

delivered.



# Using the Examples 1 to Break the Model into:

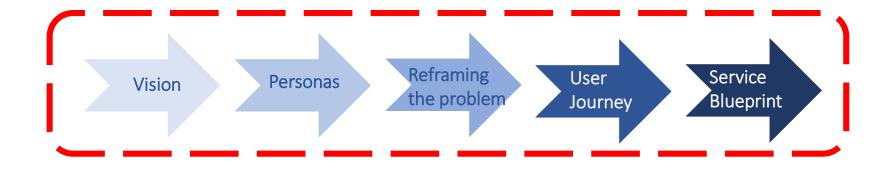
- 1. Service Design Process Model,
- 2. Phases,
- 3. Tools





#### 1. Service Design Process Model

This is a **Service Design Process Model**. It is a full development process composed of different phases. A full combination of phases is a process model.

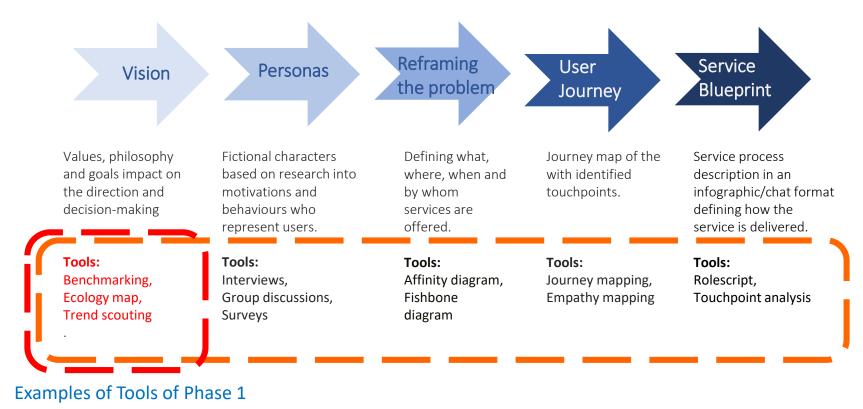






#### 3. Tools

Each Phases has a set of **Tools** which are used during that Phase to help to work on the issue and reach the goal.







- Benchmarking
- Critical incident technique
- Ecology map
- Ethnographical studies
- Shadowing
- Trend scouting
- Affinity diagram
- Fishbone diagram
- Touchpoints analysis
- Body-storming

- Unfocus group
- Heuristic evaluation
- Personas
- Pluralistic walkthrough
- Experience prototyping
- Metaphors
- Social network mapping
- Blueprint
- Role script





- **Blueprint:** A detailed description of the service process from the customer and provider point of view.
- **Building a servicescape of the service:** Documenting the physical environment as full, for example using photographs.
- **Customer journey:** A map which details different stages and activities during of the whole service process. This can include reactions and behaviours of customers as e.g. quotes.
- Ecology map: Or ecosystem map, maps the full ecosystem related to the case, e.g. the entities, flows and relationships. (https://servicedesigntools.org/tools/ecosystem-map)
- Experience prototyping: 'Walking the service in other's shoes' including all that the other person, whom to one in empathizing with, experiences, feels, remembers, senses, understands, etc.





- Interviews: Structured, Semi-structured, Unstructured
- Informance: In this drama inspired approach information is presented, explained and shared through acting and dramatizing to present insight. Also other methods, such as storytelling and videos can be included.
- **Personas:** Fictional characters which helps to define different kinds of users in a specific context. Personas are created to represent a particular group of people, based on their demographics, habits, characteristics, opinions, features, interests and behaviour. The tool can be used to define and understand the end users.
- **Pluralistic walkthrough:** Pluralistic walkthrough is used at an early stage of development using a paper-based tasks. The testing subjects are users.
- **Probes:** Cameras, journals and other artefacts are used for documenting what one sees, hears and feels in the surroundings.





- **Retrospective testing:** Users testing and commenting videos of the testing situation.
- **Role script:** Descriptions for operators for different customer service situations providing information how to act in the situation.
- Shadowing: Following and observing the user in use situations of the service.
- Social network mapping: This mapping helps to define and understand the social networks of an individual and their influence on the person and vice versa.
- Stakeholder mapping: Listing and creating an illustrative map of stakeholders, their relations and importance and influence levels on the service process.
- **Touchpoints analysis:** Detailed and holistic analysis of each touchpoint, who is involved and how, what are the props , time time used, etc.



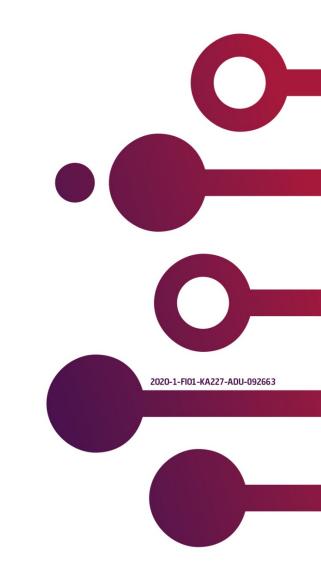


- **Group Discussions:** A discussion with a small group (max 10 people) about a topic without a specific agenda. The discussions is recorded.
- <u>Unfocus Group:</u> A discussion with a small group (max 10 people) about a topic without a specific agenda. The discussions is recorded
- Focus Group: It generally involves group interviewing which is led by a moderator (interviewer) in a loosely structured discussion of various topics of interest. The discussions is recorded.





# 2.2. SERVICE DESIGN The Service Journey and Terminology How a service happens







#### What happens during a Service

- Service is a holistic process which involves customers, service providers and elements enabling the service.
- A service can be, for instance, using a train.
- A service process is divided into:
  - What the customer experiences
  - What the organisation does and the customer benefits. Some of these are active and visible to the customer, some not. This includes supporting processes.
- The service provider may be passive during some parts of a service while the consumer consumes it with created assisting elements
- This journey and each of its steps and elements can be visualised
- Each service delivery, consumption and experience is different
- This service delivery and experience can be visualized by using service design.





#### Different Elements of a Service

A service can be divided into the following main parts:

- 1. Service journey
- 2. Service moments
- 3. Touchpoints

In addition there is **Servicescape** which are the artifacts, premises and surroundings linked to the service.





# 1. Service Journey

- A service journey visualizes the service experience and process including all its stages, service moments and touchpoints, for the consumer as whole.
- This can be, for instance, using a train from booking the train online to catching the train, travelling on the train, eating on the train, using Internet on the train, arriving to and exiting the destination station.
- This journey and each of its steps and elements can be visualized
- The journey includes moments where customers and organisations meet faceto-face, virtually or in other ways (e.g. phone, internet...)
- The journey is also a Process, with an Outcome and it creates Experiences to the participants





# 2. Service Moments

- An episode of the service journey which the consumer experiences. A service moment is further divided into touch-points.
- This can be for instance, for the train:
  - Booking the train online
  - Receiving a reminder of the journey on the phone
  - Arriving to the railway station
  - Waiting in the hall for the right platform and the train (the person may also have a cup of tea which creates other service moments)
  - Getting on the train
  - Placing the luggage
  - Showing the ticket
  - Getting information of the journey on the train, e.g. station and arrival information
  - Etc.





# 3. Touchpoints

- A concrete meeting point of the service moment, Physical evidence/ objects/mediums that help in conducting a particular action, e.g. touch screen, website, premises, phone, etc. which contribute to the service experience.
- In the case of the train, for instance:
  - Booking the train: The Internet website and screen (computer)
  - Arriving to the railway station: Signs indicating the railway station, arrivals and other areas of the station
  - Waiting in the hall for the right platform and the train: The information board of the trains and platforms, information announcements
  - Placing the luggage: Information signs of the luggage, luggage storage place.
  - Etc.





### **Different Elements of a Service**

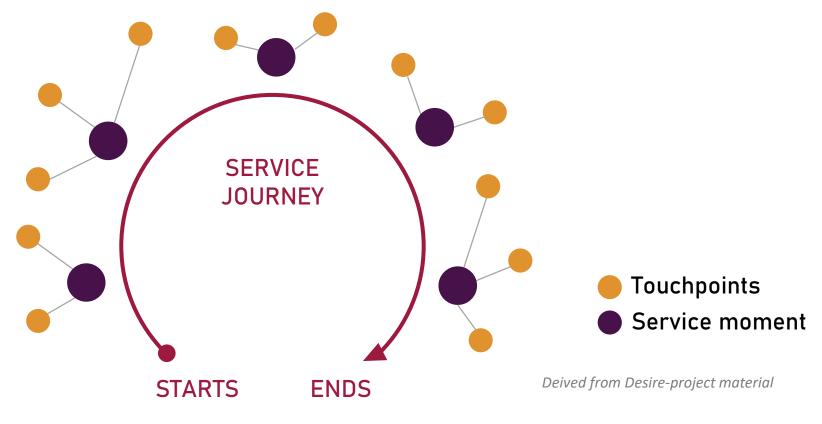
1. SERVICE JOURNEY: Using a train					
2.SERVICE MOMENT 1: Booking the train		2.SERVICE MOMENT 2. Arriving to the railway station		2.SERVICE MOMENT 3. Waiting hall	
<b>3. TOUCHPOINTS 1:</b>		2. TOUCHPOINTS 2:		2. TOUCHPOINTS 3:	
1.	Website	1.	The arrival area	1.	Info screens
2.	Booking system	2.	Signs	2.	Chairs/benches
3.	Banking system	3.	Arrival lines	3.	Announcements
SERVICESCAPE:		SERVICESCAPE:		SERVICESCAPE:	
1.	Own computer	1.	The railway station	1.	The railway station
2.	Own network				





### Different Elements of a Service 2

A service journey is a full experience composed of service moments and service episodes.







# Service Interface

- A service interface is where interaction between the customer and the organisation offering the service happens.
- It has the customer on the other side and the service providing organisation of the other side.
- It can be:
  - An active face-to-face event where both parties (client and service provider) are present physically, for instance buying a train ticket from the railway station from a clerk at the office
  - Active by one party: e.g. buying the ticket online from the website of the railway company
- The service provide can be partly created in advance (e.g. the website)
- Props used: e.g. the website, check-in machines...
- A service interface contains Touchpoints.

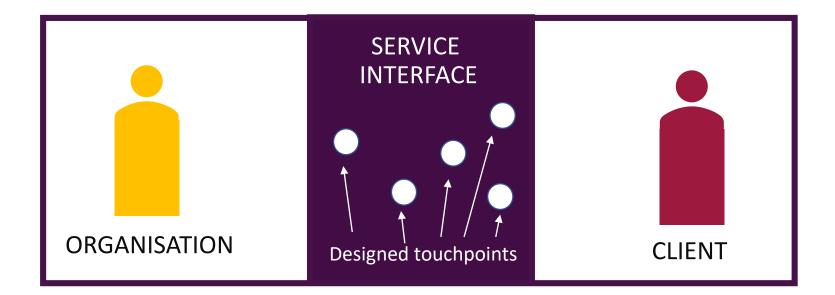




# Service Interface 2

Examples:

- Virtual: the app to order food
- F2F: hotel reception





#### Redrawn from Service interface by Moritz 2005:41



# **Roles During a Service Process**

- Starting point:
  - Service is delivered and produced at the same time
  - Service can be prepared beforehand with processes, props, etc.
- **Customer** participates in creating the service with own activity (e.g. interaction with the a shop assistant)
- The service providing organisation:
  - Front-end actions: These are actions provided by the service provider (company, organisation...) and delivered by its employee. Hence, the actions take place in direct contact with the customer, in direct interaction between the customer and the employees. For example, personal interaction at a hotel reception between the customer and hotel staff.
  - Back-end actions: These are actions provided by the service provider (company, organisation...) and delivered by its employee in order to make the front end actions possible. These actions take place in indirect contact with the customer, indirectly between the customer and the employees. For example, cooking food and creating menus in a restaurant.
  - Support process: Process that happen in the background which nobody sees but still happen. For example, creating and administrating and online food order app.





# 2.3. SERVICE DESIGN BLUEPRINT Visualising a Service Journey







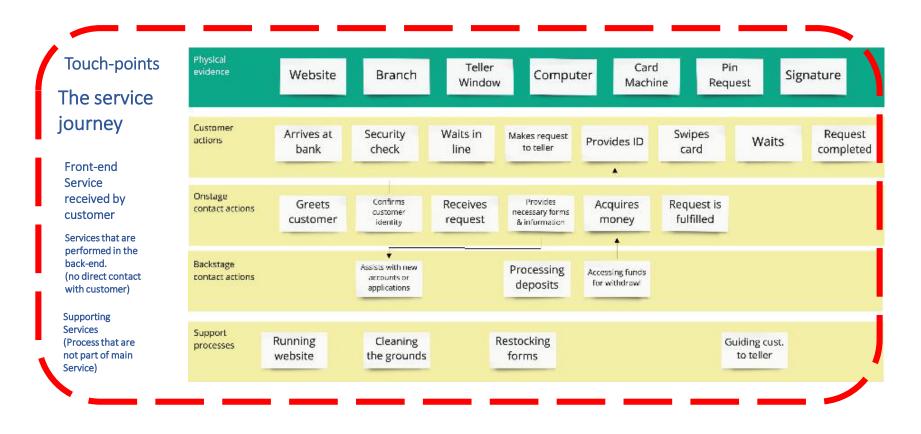
# A Service Service Blueprint – Visualising a Service

- A service process can be visualised and written open
- Visualising facilitates understanding
- A Service blue print:
  - Detailed description of the service process and how to implement and deliver it.
  - All steps of the process detailed (e.g. from entering the door, finding the right place, waiting for the turn, the interaction, after sales/ service...)
  - Both described: who offers the service and the user/ customer point of view
  - Strong focus on the user/customer





# An Example of a Service Blueprint: Case Bank Service







# A Detailed Example of a Service Blueprint: Case Hotel Service

#### The Narrative:

When a person goes to the hotel, he/she firstly parks the vehicle.

After parking, an attendant from the hotel comes and greets them and receives their luggage.

#### Steps:







# A Detailed Example of a Service Blueprint: **Case Hotel Service**

#### The Narrative:

Then hotel attendant collects their luggage, and customer goes to the reception area. There he/she does the registration process and checks in, collects the keys of the room and goes to the room.

#### Steps:

4 Attendant collects the luggage

5. **Customer does** check-in process

6. Customer goes to the room





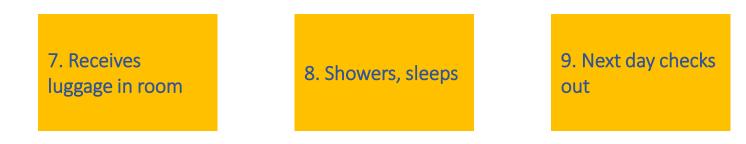
# A Detailed Example of a Service Blueprint: Case Hotel Service

#### The Narrative:

On reaching room he/she receives the luggage from the hotel attendant.

Takes a shower, goes to sleep, stays and next day checks out.

#### Steps:







### **Customer actions**









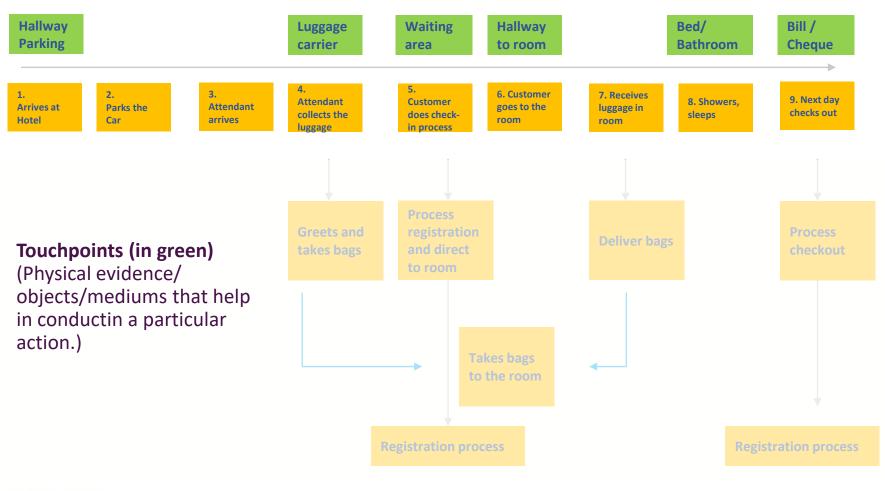












Co-funded by the Erasmus+ Programme of the European Union



# 2.3. SERVICE DESIGN BLUEPRINT Visualising a Service Journey







### Service Innovation Terminology to Start With

#### Service innovation

"a new or significantly improved service concept that is taken into practice." (Business Finland)

#### Concept

A defined and developed abstract idea a service which may be visualised e.g. by drawing and/or written.

#### Offering

The products and services a company provides to its customers and their nature, e.g. types or cars for a car seller, food on the menu and home delivery.

#### Incremental improvement

Small and continuous improvements to an existing product, process or a service. For instance, a gradual improvement of services.

#### Radical changes

Big changed that create a major change on the product, process or a service. For instance, a complete change of the service system.





### Service Innovation Terminology to Start With, 1/3

#### **Customer (Service)Journey**

A service journey visualizes the service experience and process including all its stages, service moments and touchpoints, for the consumer as whole.

#### **Service Moment**

An episode of the service journey which the consumer experiences. A service moment is further divided into touch-points.

#### Touch-points

A concrete meeting point of the service moment, e.g. touch screen, website, premises, phone, etc. which contribute to the physical evidence of service experience.

#### Moment of Truth

An episode of the customer journey where the service promise is delivered. Hence, a moment of truth may have the biggest impact on consumer's experience and opinion of the service.





### Service Innovation Terminology to Start With, 2/3

#### Service Blueprint

A detailed description of the service to implement and deliver. It includes a detailed description of the service with front-stage, Back-stage actions to implement and deliver, touch-points for marking physical evidence of the service.

#### Front-end actions:

These are action provided by the service provider (company, organisation...) and delivered by its employee. These are actions that take place in direct contact with the customer, in direct interaction between the customer and the employees.

#### Back end actions:

These are action provided by the service provider (company, organisation...) and delivered by its employee in order to make the front end actions possible. These are actions that take place in indirect contact with the customer, indirectly between the customer and the employees





### Service Innovation Terminology to Start With, 3/3

#### Support process

Process that happen in the background which nobody sees but still happen.

#### Service Ecology:

A system view on the service demonstrating the actors, relationships and roles to deliver the service, e.g. why, what, where, when, who and how.

#### ServiceScape:

The artifacts, premises and surroundings linked to the service.

#### Service Envy

One service might be more desirable than another.

#### Service Evidence

Description how the service is experienced by the consumer as whole including the service journey, touch-points and service moments.





# **Reference links**

#### Service Design

- <u>https://servicedesigntools.org</u>
- <u>https://servicedesigntoolkit.org/downloads.html</u>
- <u>https://www.designcouncil.org.uk/sites/default/files/asset/document/Design%20methods%20for%</u> <u>20developing%20services.pdf</u>
- <u>https://www.designorate.com/4-service-design-tools/</u>
- <u>https://medium.com/capitalonedesign/service-design-tools-methods-6e7f62fcf881</u>
- <u>https://www.interaction-design.org/literature/topics/service-design</u>
- https://blog.nexa.com.au/blog/service-design-what-are-the-5-principles-of-service-design
- <u>https://www.nngroup.com/articles/service-blueprints-definition/</u>

**Usability**:

- https://www.usabilitybok.org/pluralistic-walkthrough
- <u>https://peterfossick.co/approaches/tools/</u>
- https://www.interaction-design.org/literature/article/the-principles-of-service-design-thinkingbuilding-better-services





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