Interaction Design

Chapter 9 (July 13, 2017, 9am-12pm):

Service Design

Recap Day 8:

Requirements:

Type (variations of the original design)
Basic shape - few simple parts (industrial manufacturing)
Functionality (design for human needs)

Gestalt Psychology

• The Gestalt laws prescribe for us what we are to recognise as one thing' (Köhler,1920)

• How smaller objects are grouped to form larger ones

• Rules of the organisation of perceptual scenes (Heuristics)
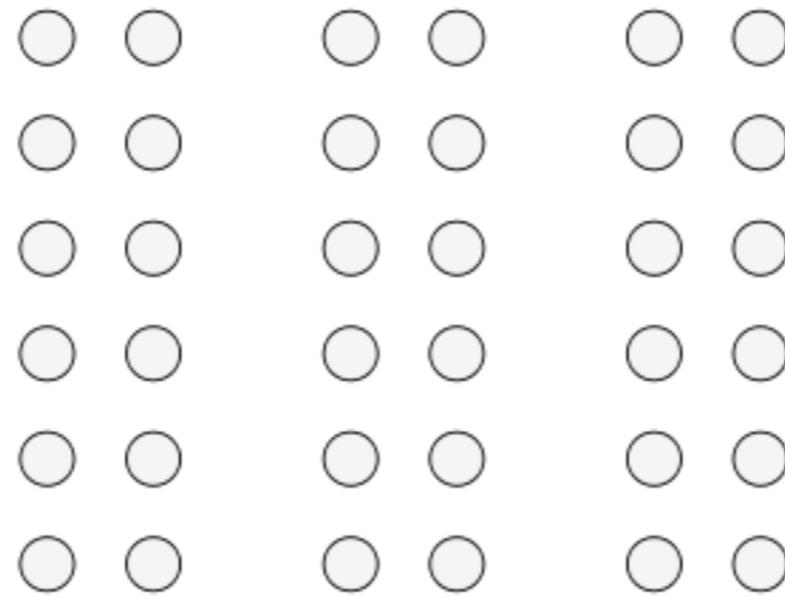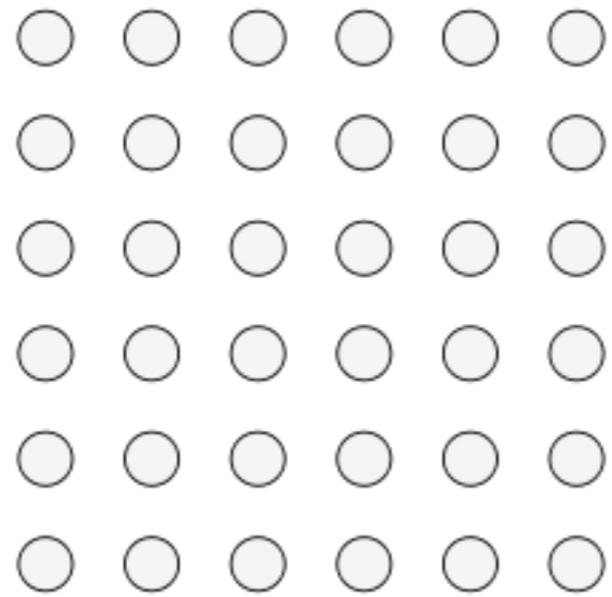
Proximity & Grouping

Constraints are closely related to real affordances: For example, it is not possible to move the cursor outside the screen: this is a physical constraint.

Locking the mouse button when clicking is not desired would be a physical constraint. Restricting the cursor to exist only in screen locations where its position is meaningful is a physical constraint.

Reduction means that you eliminate whatever isn't necessary. This technique has three steps: (1) decide what essentially needs to be conveyed by the design; (2) critically examine every element (feature, label, UI widget, etc.) to decide whether it serves an essential purpose; (3) remove it if it isn't essential.

Interaction Design

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III Beyond the Desktop

May   June   July

Two fundamental questions...

What is a product?

What is a service?

What do they have in common?

???

Front Stage

Back Stage

GRAPHIC DESIGN — **2D**

PRODUCT DESIGN — **3D** +Z-axis (spatial depth)

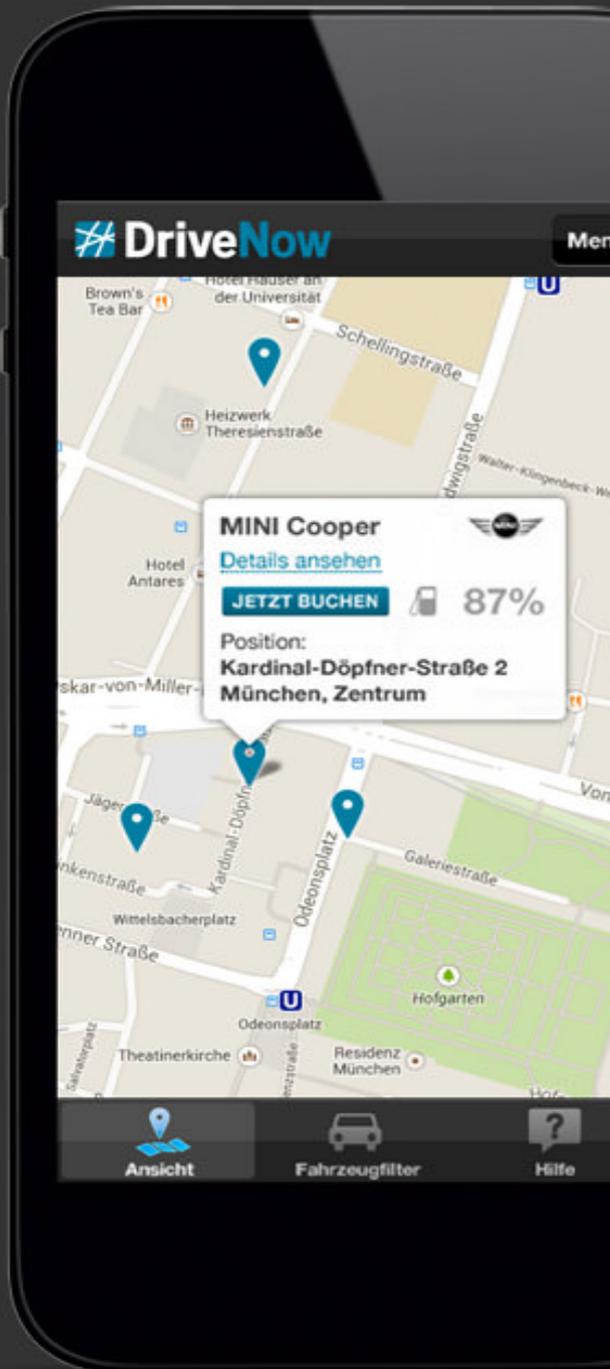INTERACTION DESIGN — **4D** +T-axis (temporal dimension)

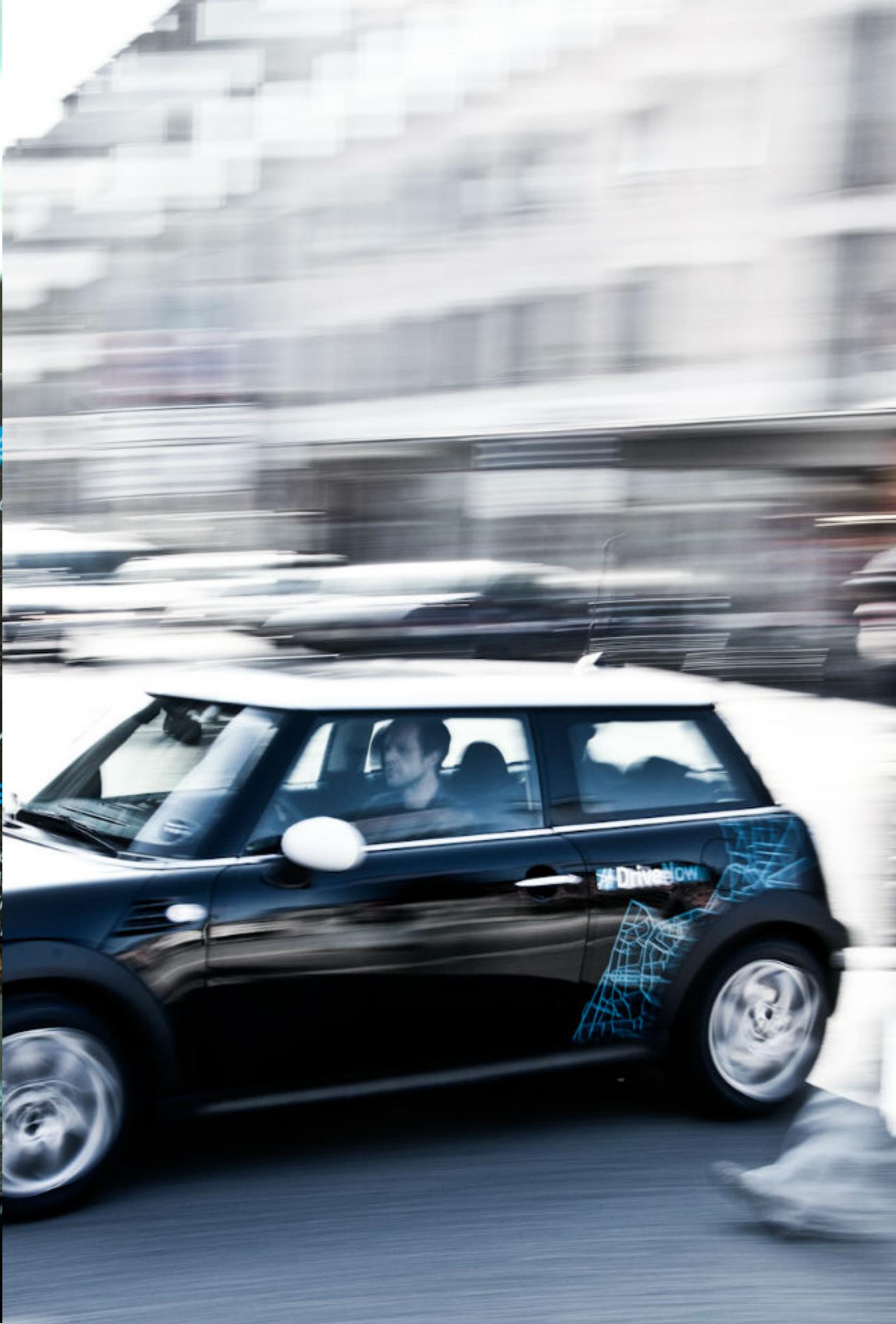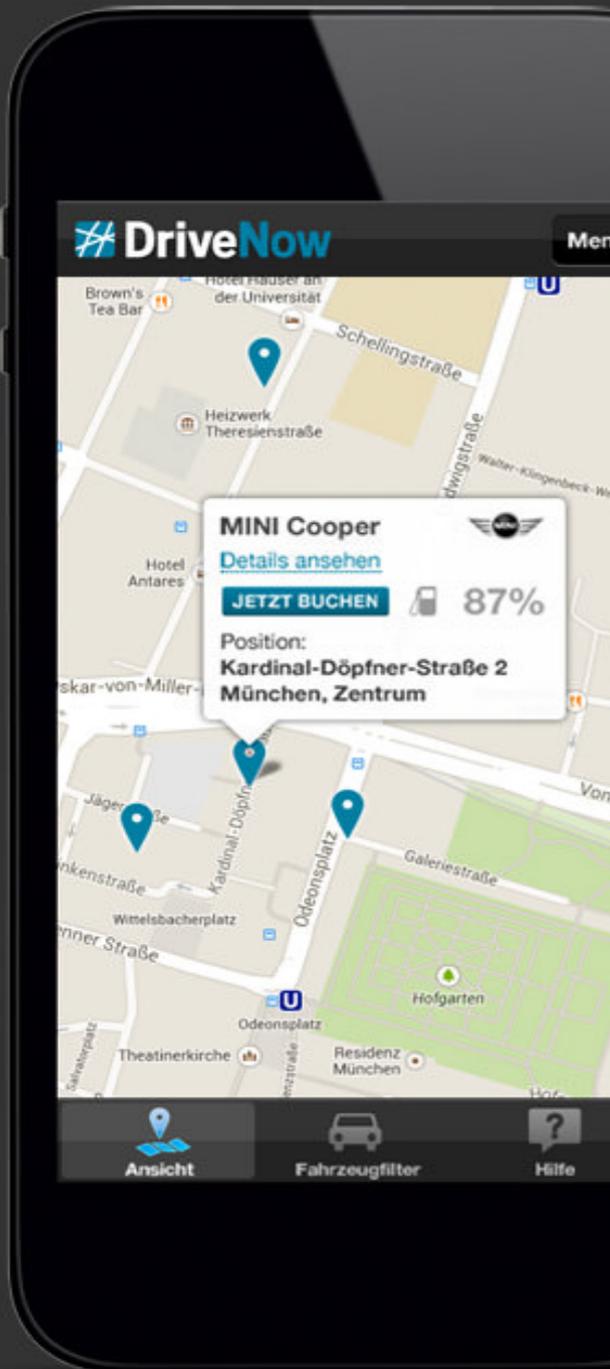SERVICE DESIGN — **5D** +W-axis (multi-local simultaneity)

Model: Benjamin N.N. Schulz; Icons: Dima Yagnyuk, Daphne Espinosa, George Agpoon / The Noun Project
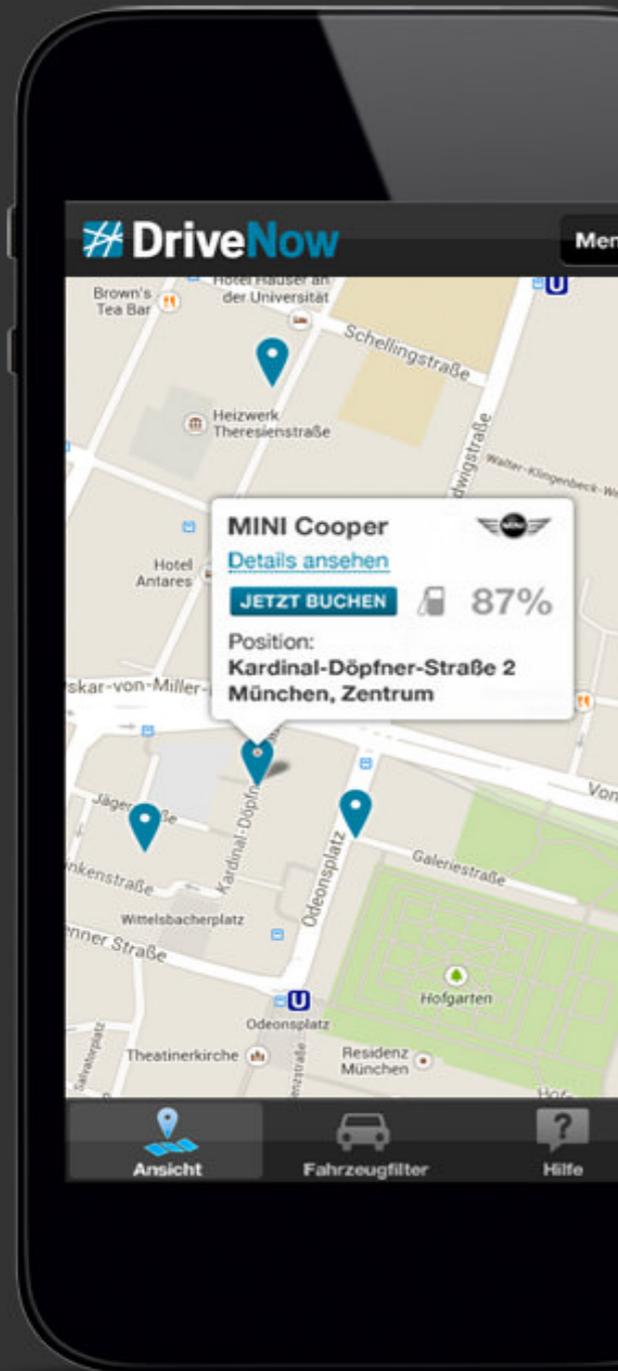
SERVICE FIRST, PRODUCTS SECOND

Product-dominant logic

Transition

Service-dominant logic

– 1950s

1950–2000+

today & tomorrow

Quelle: SinnerSchrader
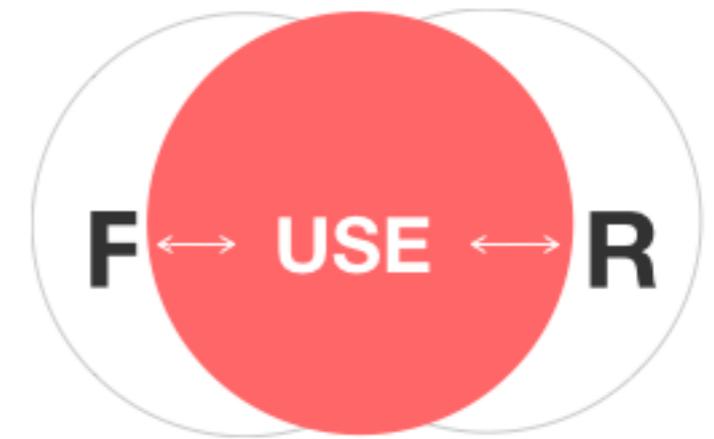
A new marketing logic.

The day before yesterday

FABRICATION **SELL** CONSUMER

FOCUS:
SALES

Yesterday

FASCINATION **CHOOSE** CONSUMER
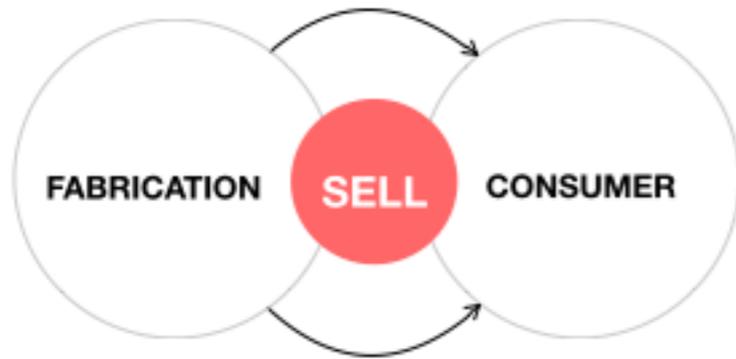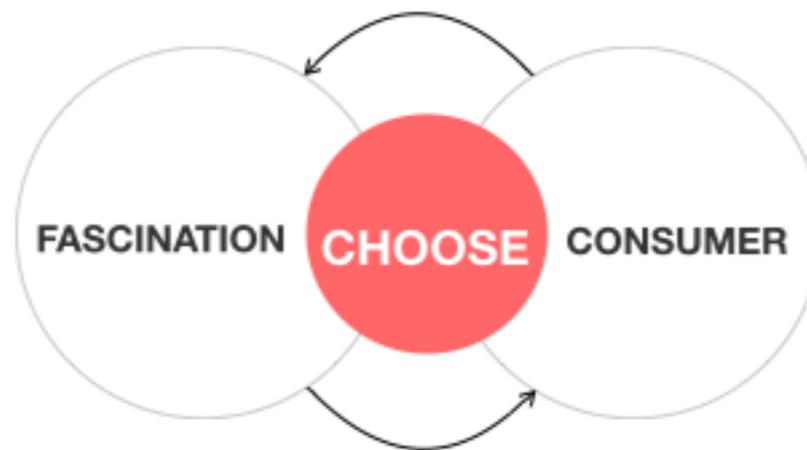
FOCUS:
ADVERTISING

Today

F **USE** R

FOCUS:
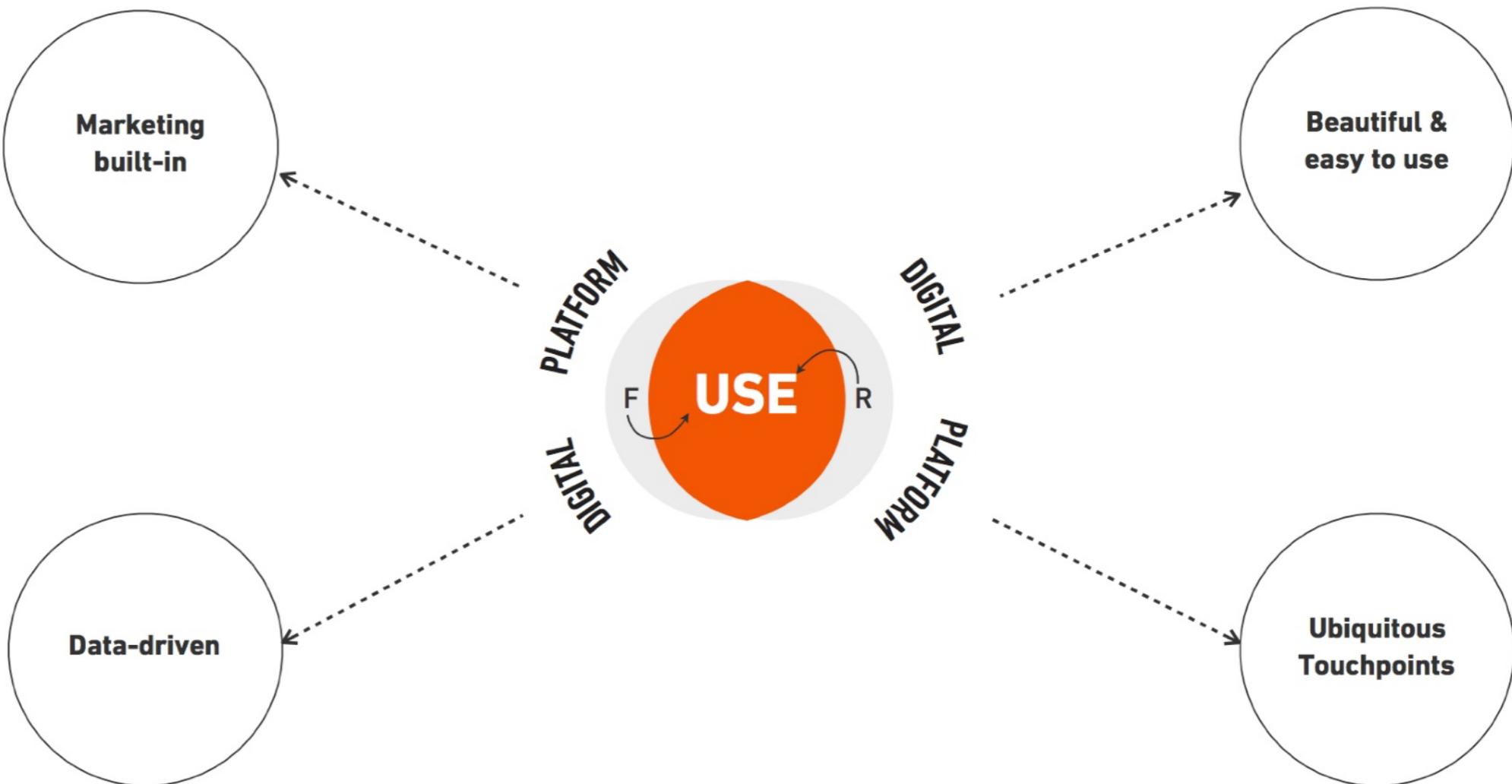**PRODUCTS & SERVICES**

Quelle: SinnerSchrader

IDENTIFY A RELEVANT INSIGHT

People don't want to buy and own cars,
but drive and experience integrated mobility.

Quelle: SinnerSchrader

CREATE A DIGITAL PLATFORM

Quelle: SinnerSchrader

What if someone is changing the game ?

Through Service ?

Disruptive Innovation

….an innovation that creates a new market and value network and eventually **disrupts an existing market** and value network, displacing established market leading firms, products, services and alliances…

Clayton M. Christensen

You are what you use...not what
you own

Slogan From Live/Work

Designing technology
enabled services is nothing new...

Telephone Service

The 5 P of Service Design...

People, Places, Products...

Processes and Performance

Urban Interfaces

Urban Interfaces

Service Design in a Nutshell

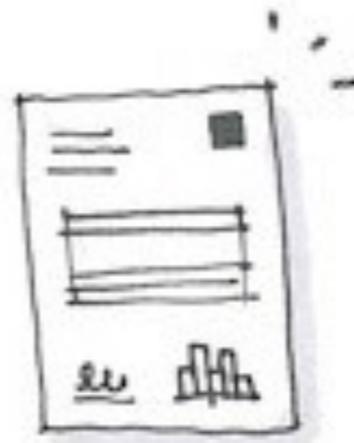One (over-) view form a company called LiveIWork...

Service Design

ensures that all the **touchpoints** work brilliantly...

source: http://www.livework.co.uk/

Service Design

ensures that the touchpoints work together to create wonderful **experiences**
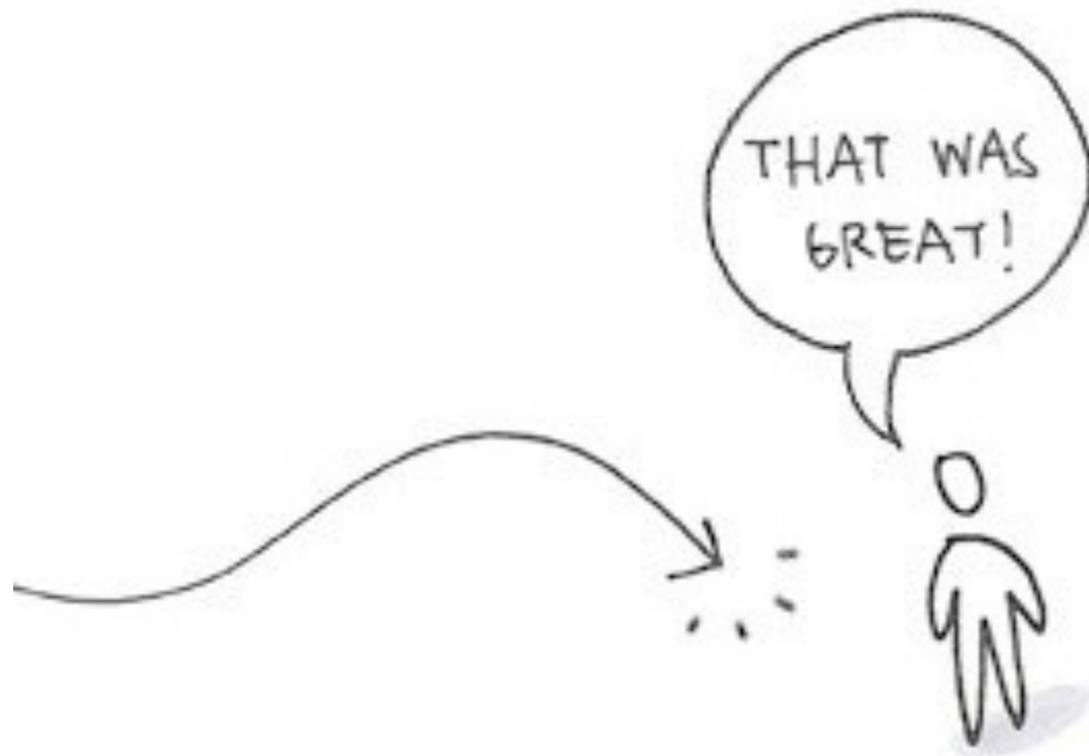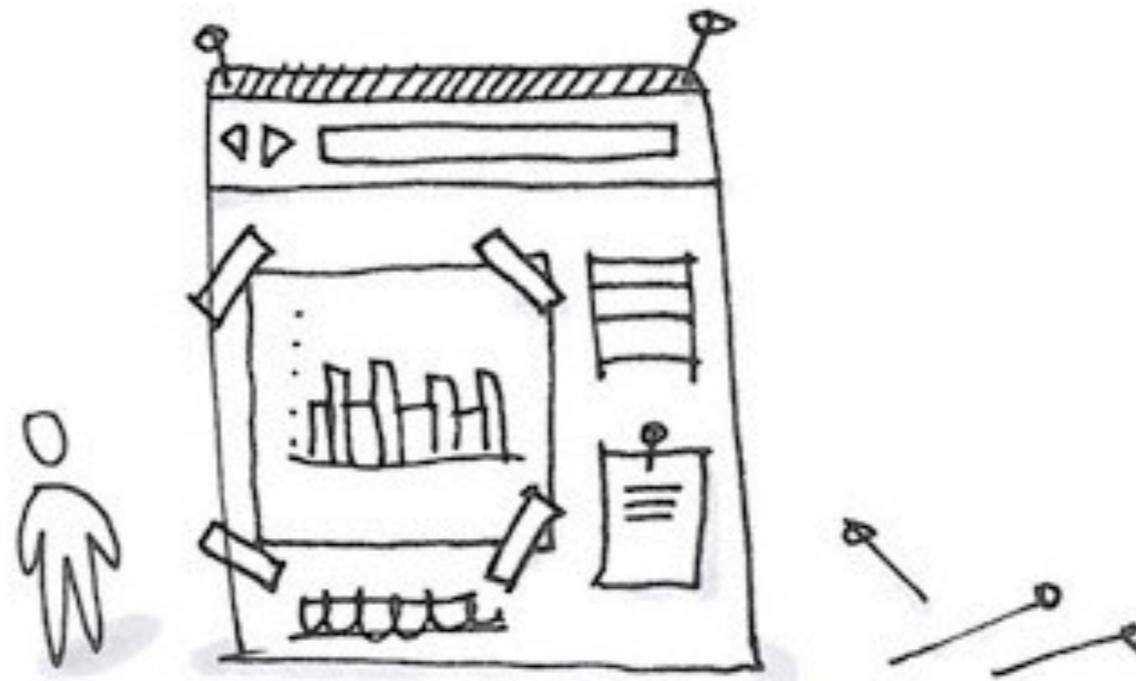

source:

Service Design

involves people that use and provide the service
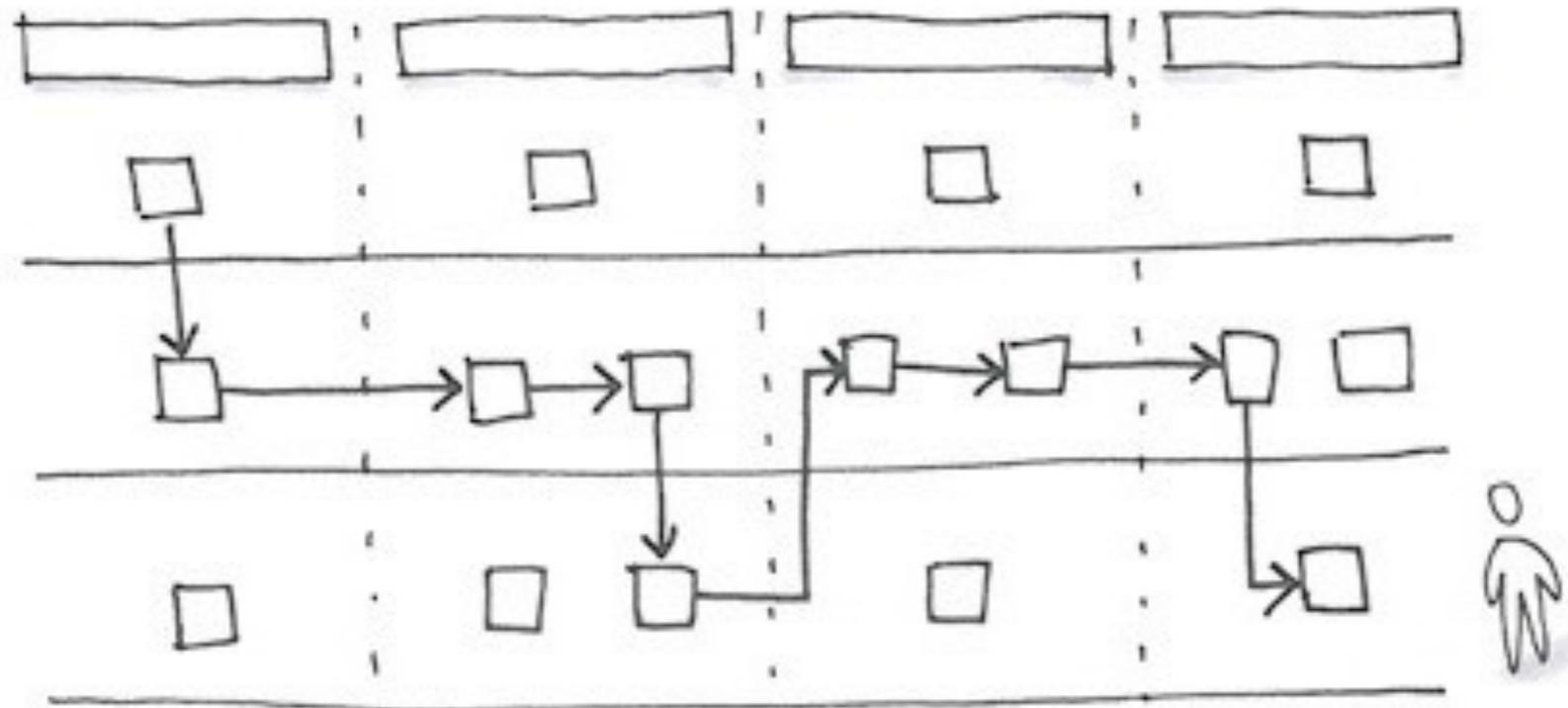

source: http://www.livework.co.uk/

Service Design

tests a new service with users to make sure all works

Service Design

ensures that all parts work together throughout the **customer journey**

source: http://www.livework.co.uk/
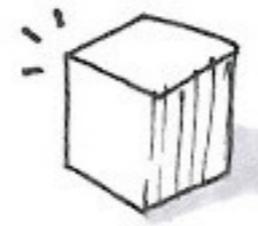
Service Design leads to:

...better customer experience

...reduced costs

...increased return on investment

...great new opportunities

source: http://www.livework.co.uk/

Summary: What is a service?

-a chain of activities that form a process and have value for the end user
(**customer journey**)

-services affect our daily qualify of life
(**user experience**)

-service design is somehow similar to systems design
(**service blueprints**)

-service design focuses on the entire system of use
(**via touchpoints**)

source: [5]

1. Intangible

Although services are often populated with objects, the service itself is ephemeral, customers can´t see or touch the service itself-only the physical embodiments

source: [5]
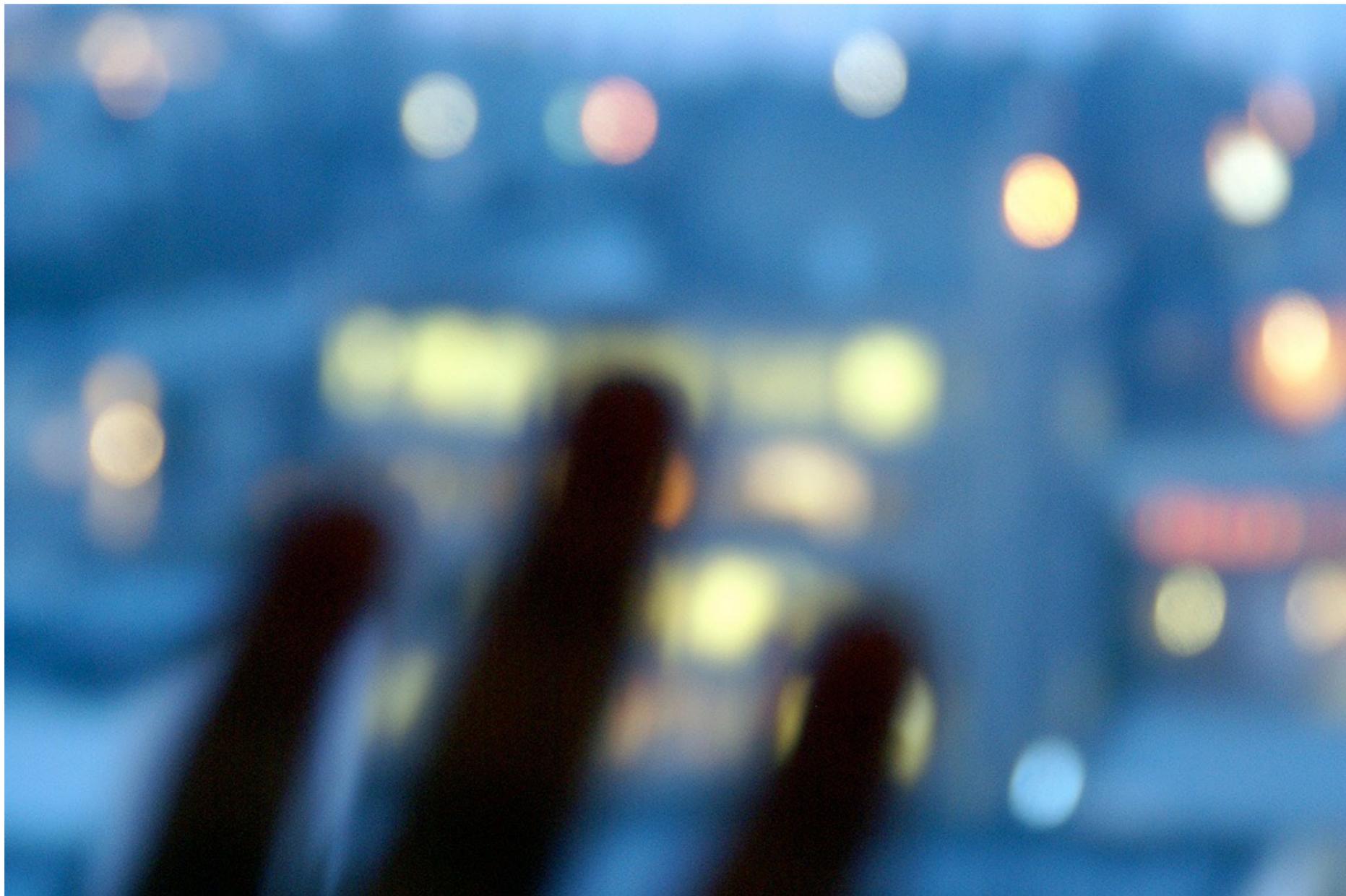
2. Provider ownership

Customers who use a service may come away from it with an owned object such as a cup of coffee or used car, but they don´t own the service itself.

source: [5]

3. Co-created

Services aren´t made by the service provider alone; they require the involvement and engagement of the customers as well.

source: [5]

4. Flexible

Each new situation or customer requires that the service adapt to it
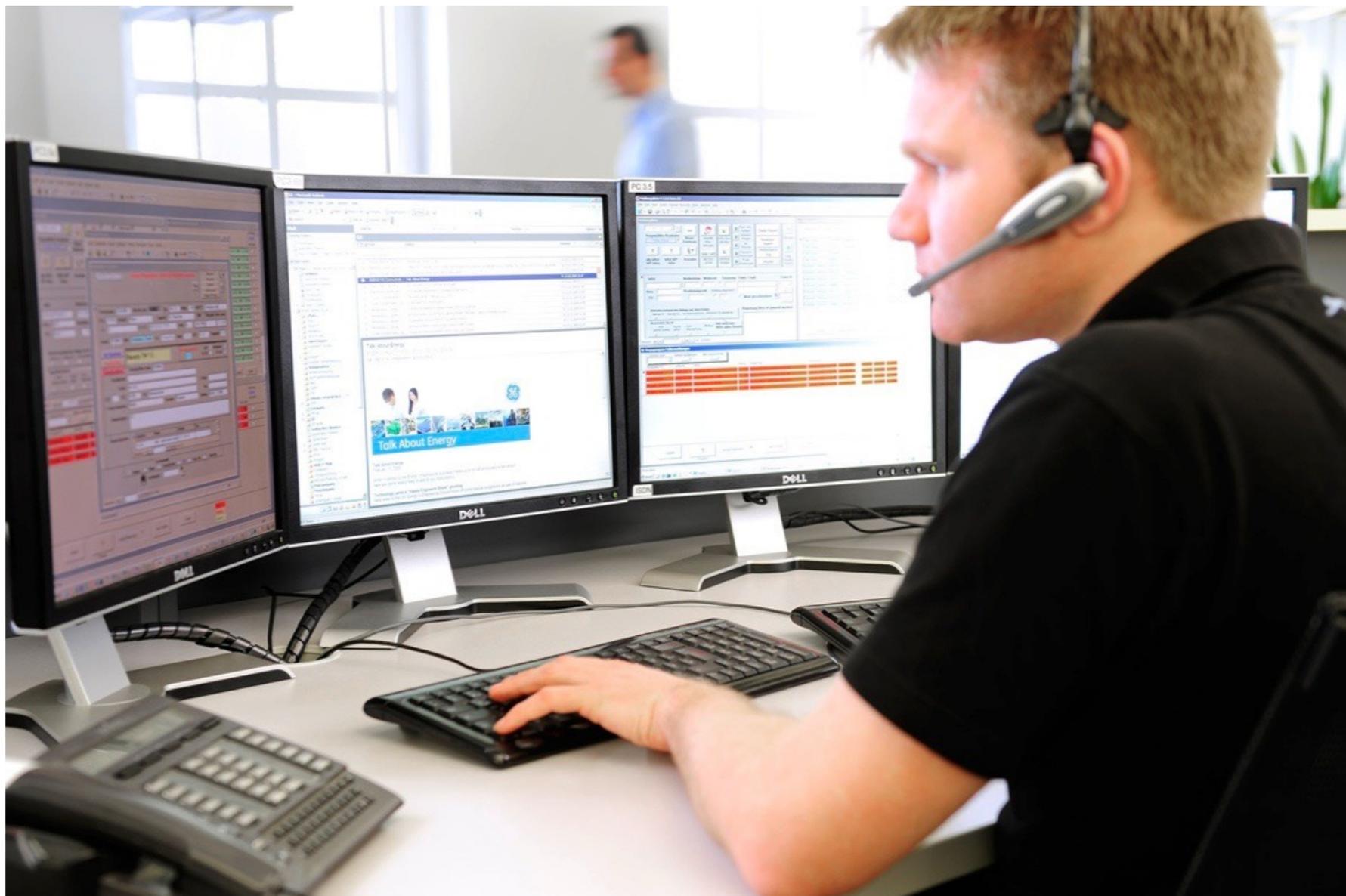

source: [5]

5. Time Based

Services take time to perform, and that time cannot be recovered
 if lost.

source: [5]

6. Active

Services a created by human labor and are thus difficult to scale.
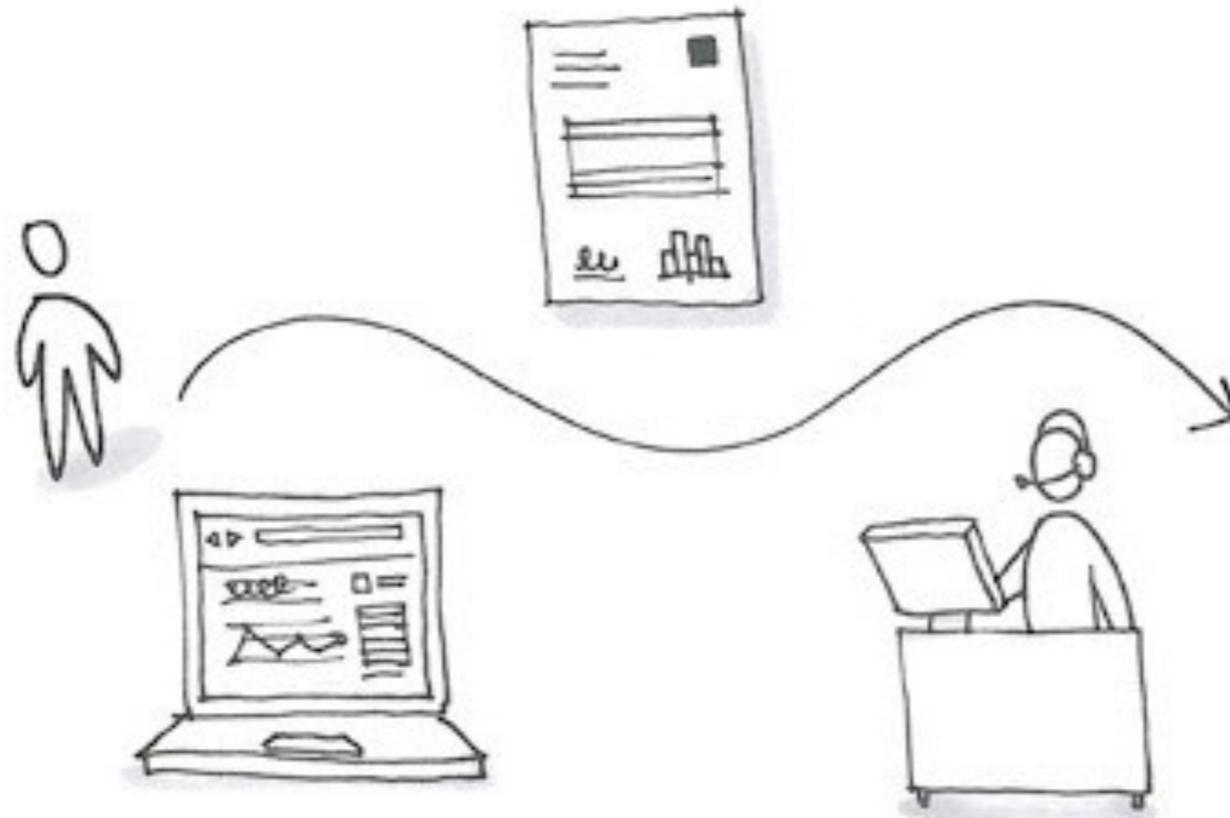
source: [5]

7. Fluctuating demand.

Most services vary by time of the day, season, and cultural mood.

source: [5]

Elements of Service Design:

Service design focuses on multiple **"touchpoints"** and the users interactions with these touch-points **over time.**

These touchpoints are typically **places**, **products**, **processes** and **people**.

source: http://www.livework.co.uk/

Touchpoints

some examples (but not limited):

-physical locations
-specific parts of locations
-signage
-objects
-web sites
-mailing
-spoken communication
-printed communications
-applications
-machinery
-customer service
-partners
.....
.....

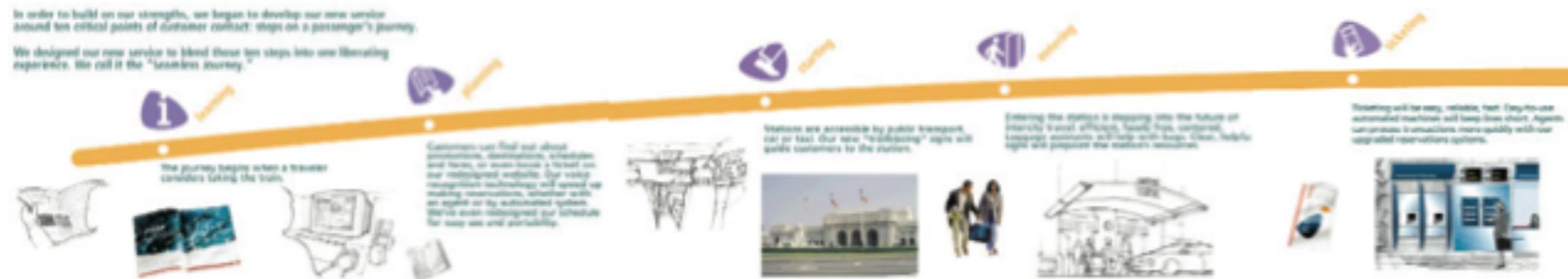source: [5]

Touchpoints

Touchpoints are the raw material interaction designers work with.
Once a map of existing and potential touch-points is created designers
can brainstorm on further details for each touchpoint.

source: [5]

Steps	Physical Aspects	Digital Aspects
1. Learning	Advertising, Travel Agent, Word of Mouth	On-line, Phone info., Intranet
2. Planning	Station Staff, Travel Agent, Brochure, Phone	On-line, Phone info.
3. Starting	Other form of transportation	Radio – up to the minute info.
4. Entering	Station Architecture	Signage
5. Ticketing	Ticket Office, Travel Agent	On-line, Phone info., kiosks
6. Waiting	Waiting Room, Station Facilities	Signage, On-line services
7. Boarding	Doors and Luggage Storage	Auto Doors, Dynamic signage
8. Riding	Seats, Meal Services	Info., Media, Comms
9. Arriving	Station Architecture	Signage
10. Continuing	Other form of transportation	–

source: [3]

Place

-the settings for the service delivery
-the environment needs to provide the space necessary to
perform the actions of the service
-it needs to tell the user cues for these actions such as signs, costumed menus or
displays

source: [5]

Products

-artifacts that facilitate interaction
-products populate the environment (place)
-they provide the potential for users´active participation

source: [5]

Processes

-the process describes "how" the service is ordered, created and delivered to the user
-processes can change subtle or radically within the service through different environments and over time
-often there are multiple pathways and therefore processes through a service experience
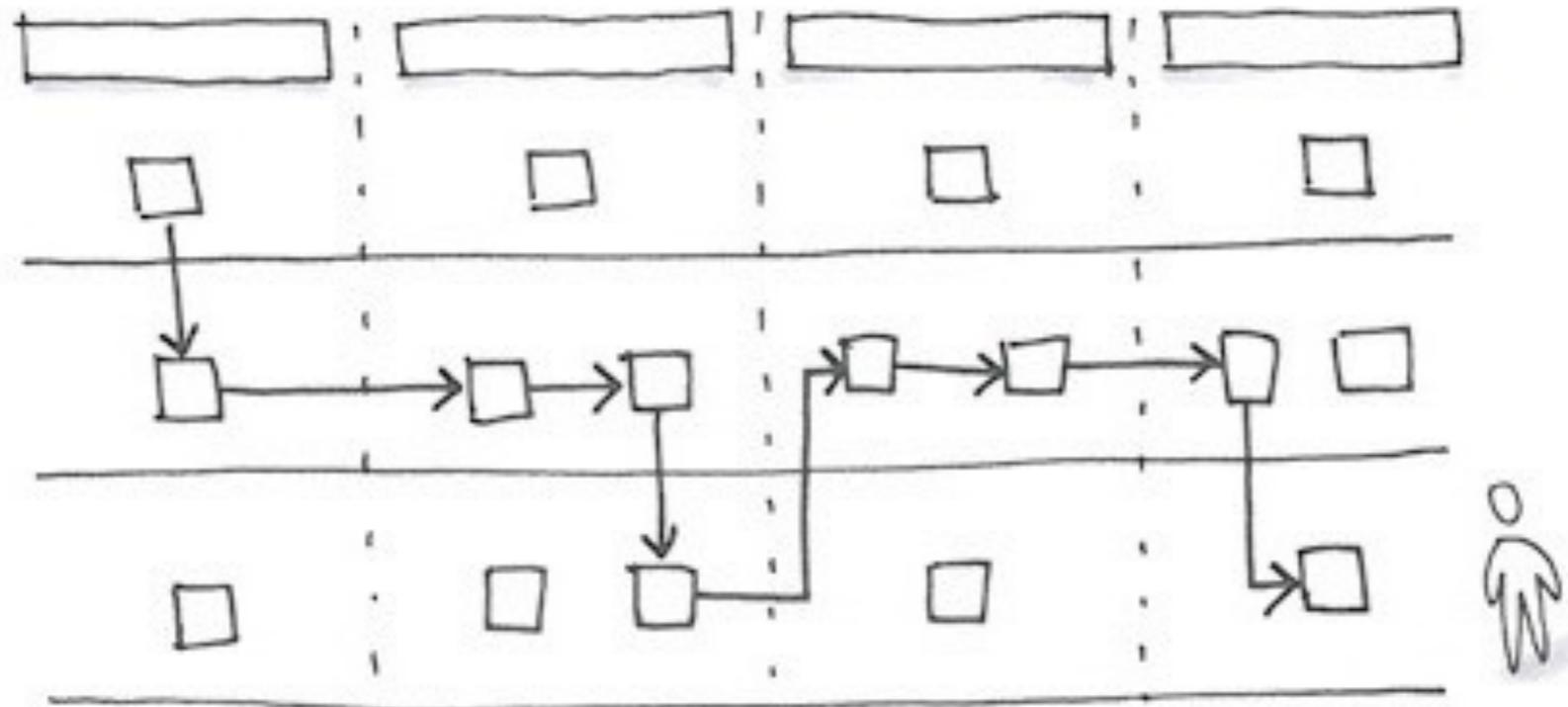
source: [5]

People

-through people services come alive, usually through complex choreography
-users and employees perform different parts of the service for achieving a particular result

source: [5]

Service Design....

-can lead to environmentally friendly solutions. (Car sharing service)
-can boost good business models: well designed and executed
services will increase sales and helping tying users to a specific brand

The introduction of new technology (sensors, smart-phones) makes
this discipline highly relevant for interaction designers as their
expertise involves bridging the gap between technology and people.

Applying interaction design techniques to service design can lead to
richer experiences.

Shelley Evenson

-teaches service and interaction design at
CMU, Pittsburgh
-Co-founder of seeSpace and chief experience
scientist for Scient

Service as design triangle

service provider

people (user)

brand relationship

meta design

service medium
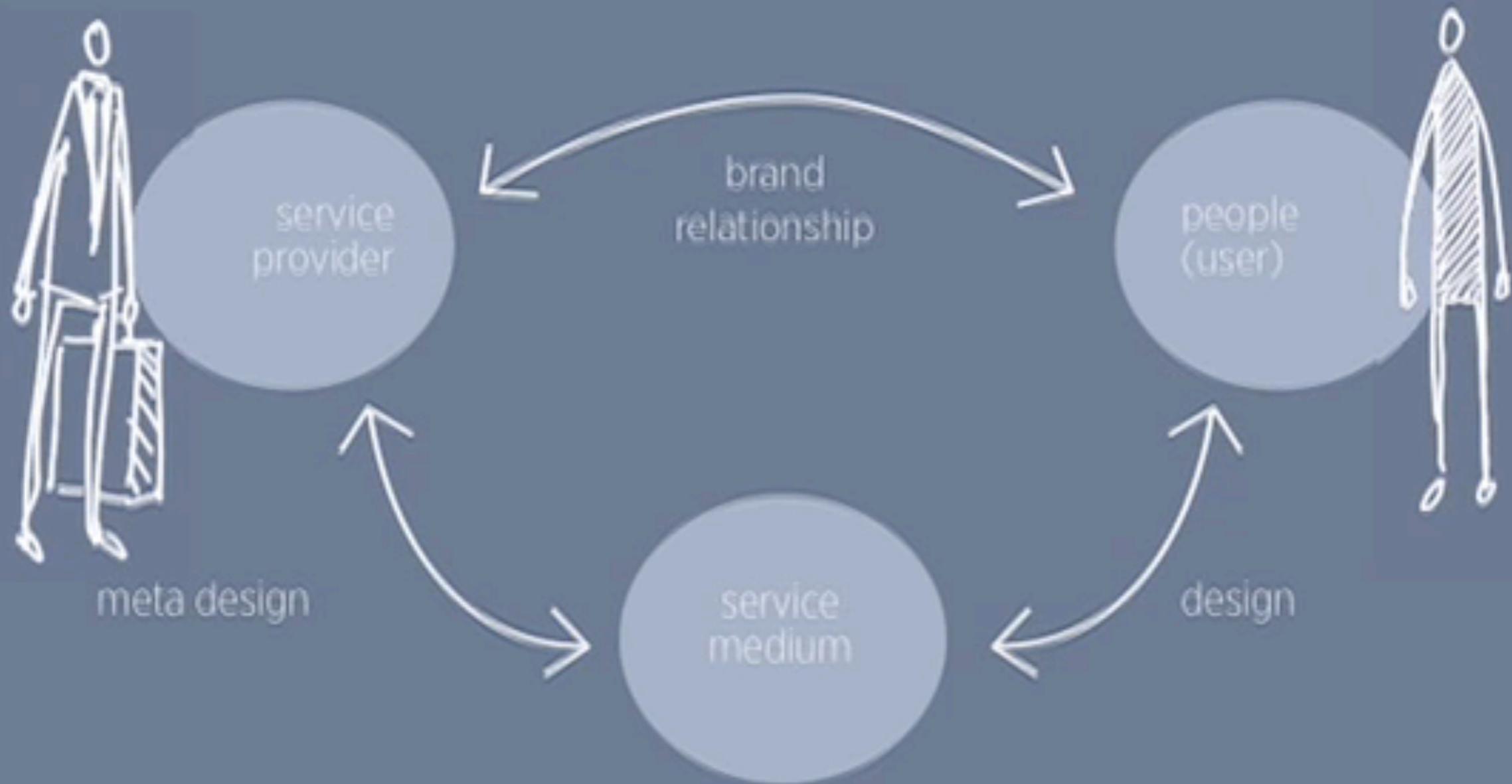
design

A 'service as design' triangle

interaction10

Service design can involve

person2person interaction = check in desk

person2machine interaction = self check in kiosk

machine2machine interaction = airport baggage system

Service as Design Triangle:

Service Provider

People (User)

brand relationship

Service Medium

meta design
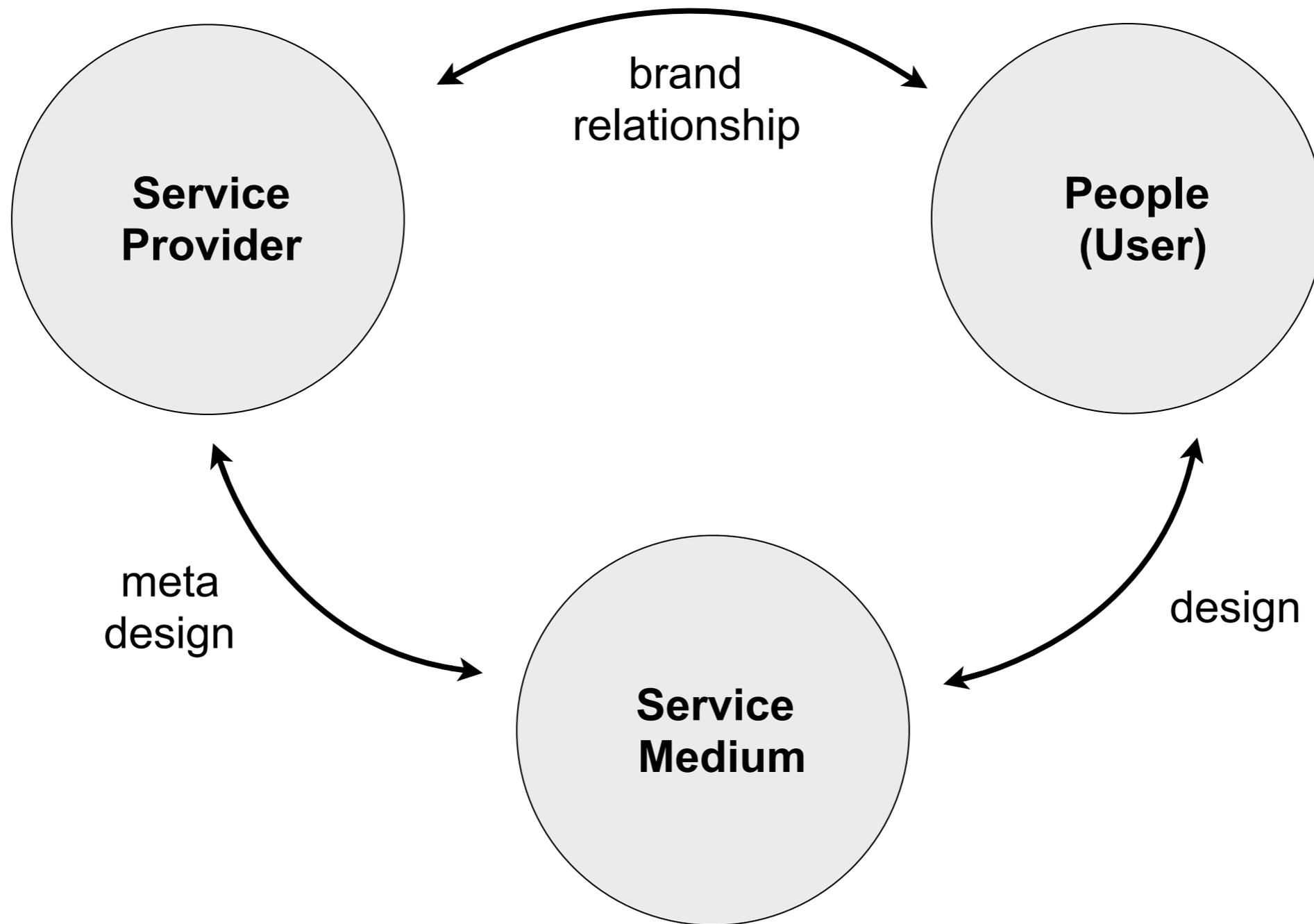
design

Service design addresses the functionality and form of the service medium. The aim is to ensure that service interfaces are **usable** and **useful**, **effective** and **efficient**, **desirable** and **differentiated** from the provider and the persons point of view.

after Birgit Mager

Prototyping services

-is different from prototyping products since services don't come alive until someone is using them
-involves creating scenarios based on the service moments and acting them out physically

Fran Samalionis

-is the service design lead at IDEO
-MA in ergonomics from UCL

source: [3]

Research → **Analysis** → **Concepts** → **Prototypes**

Validate Concepts

	subjects	truth	inspiration
traditional market research			(?)
empathic research			

source: [3]

source: [3]

Research → **Analysis** → **Concepts** → **Prototypes**

Validate Concepts

long term view

Dreamer | Pathfinder

low engagement ——————————— **high engagement**

Onlooker | Organizer

short term view

source: [3]

Research → **Analysis** → **Concepts** → **Prototypes**

Validate Concepts

source: [3]

Research → **Analysis** → **Blueprints**

Analysis → **Concepts** → **Prototypes**

Validate Concepts

Definition

In the British Standard for Service Design (BS 7000 -3, BS 7000 -10, BS EN ISO 9000), blueprinting is described as the mapping out of a service journey identifying the processes that constitute the service, isolating possible fail points and establishing the time frame for the journey.

We interpret this in a much broader sense. We look at it as an experience map which covers both the service elements as well as the product interactions.

source: [2]

What is an Experience Blueprint?

An experience blueprint is a diagrammatic representation of the user journey that maps processes, touch points, people and support activities involved in creating the experience.

It helps in visualising the correlation between the front stage (user end) and the back stage (provider end). It also helps to interconnect the tangible elements with intangible and deal with them more objectively.

source: [2]

History and Use

Blueprinting services was pioneered by G. Lynn Shostack, former VP of Citibank, in the 1980's as a way to plan the cost and revenue associated with operating a service.

Ever since it has been interpreted in many different ways and used by many leading design and management consultancies.

source: [2]

Front Stage

User Touch points

User Journey

Entry

Time

Exit

Provider Touch points
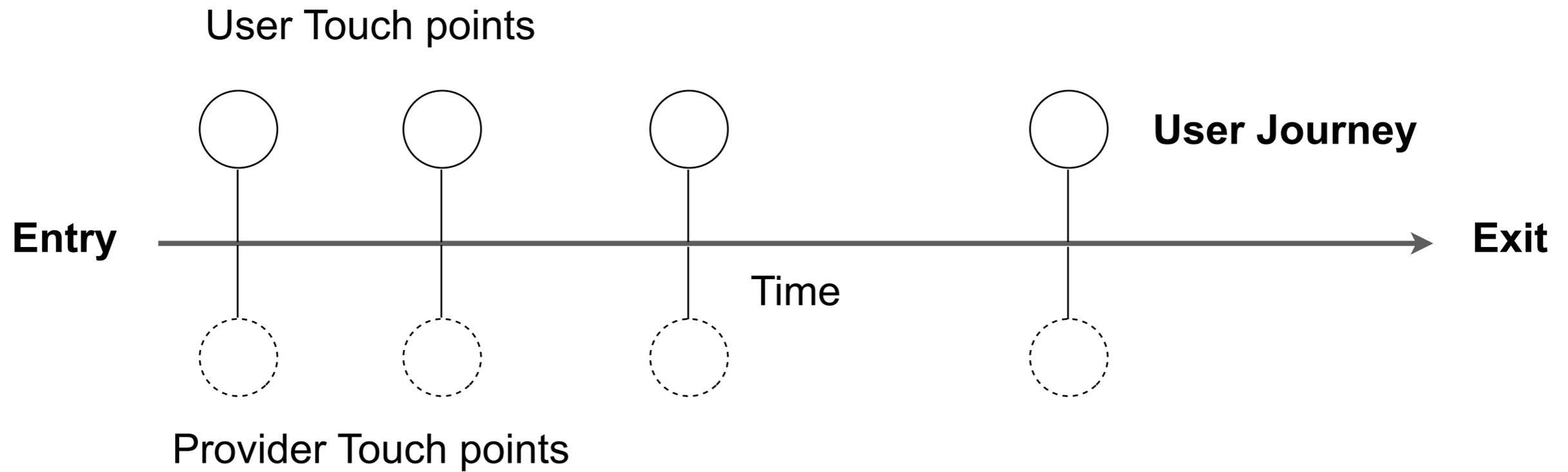
Support Processes

Back Stage

User Actions ――――――――――――――――――――

Line of interaction -
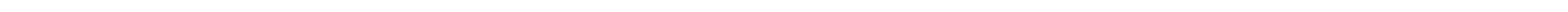
Touch Points ――――――――――――――――――――

Line of visibility -

Backstage activity ――――――――――――――――――

Line of internal interaction - - - - - - - - - - - - - - - -

Support process / Stake Holders ――――――――――――
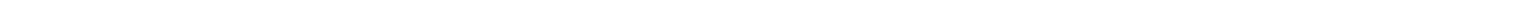
source: [2]

BLUEPRINT MAP

SCENARIOS:

USER ACTIONS:

ENTRY   USER JOURNEY   EXIT

TOUCHPOINTS:
POINTS OF INTERACTION

BACKSTAGE:
OPERATIONAL PROVIDERS

STAKEHOLDERS:

source: [2]
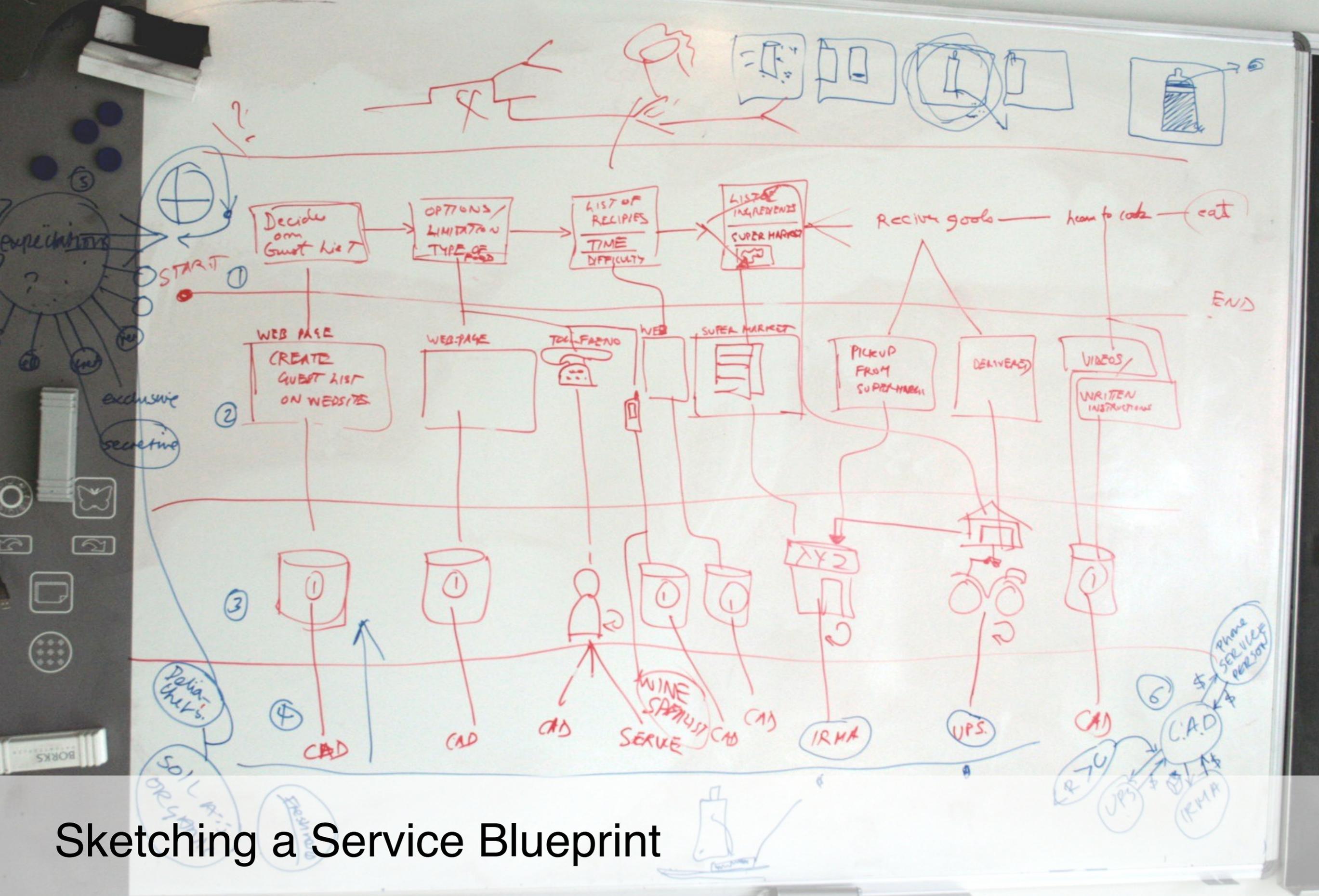
Sketching a Service Blueprint
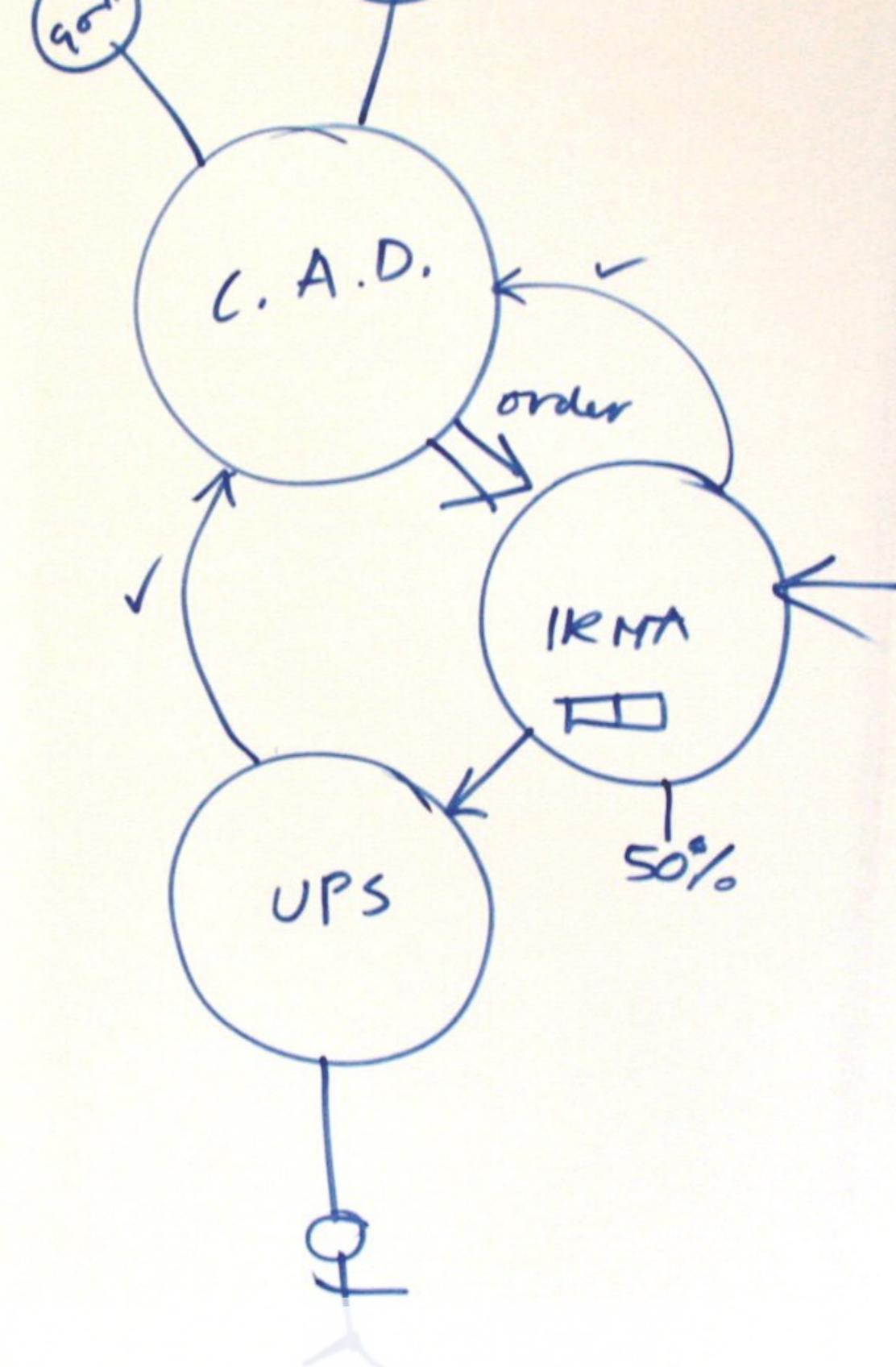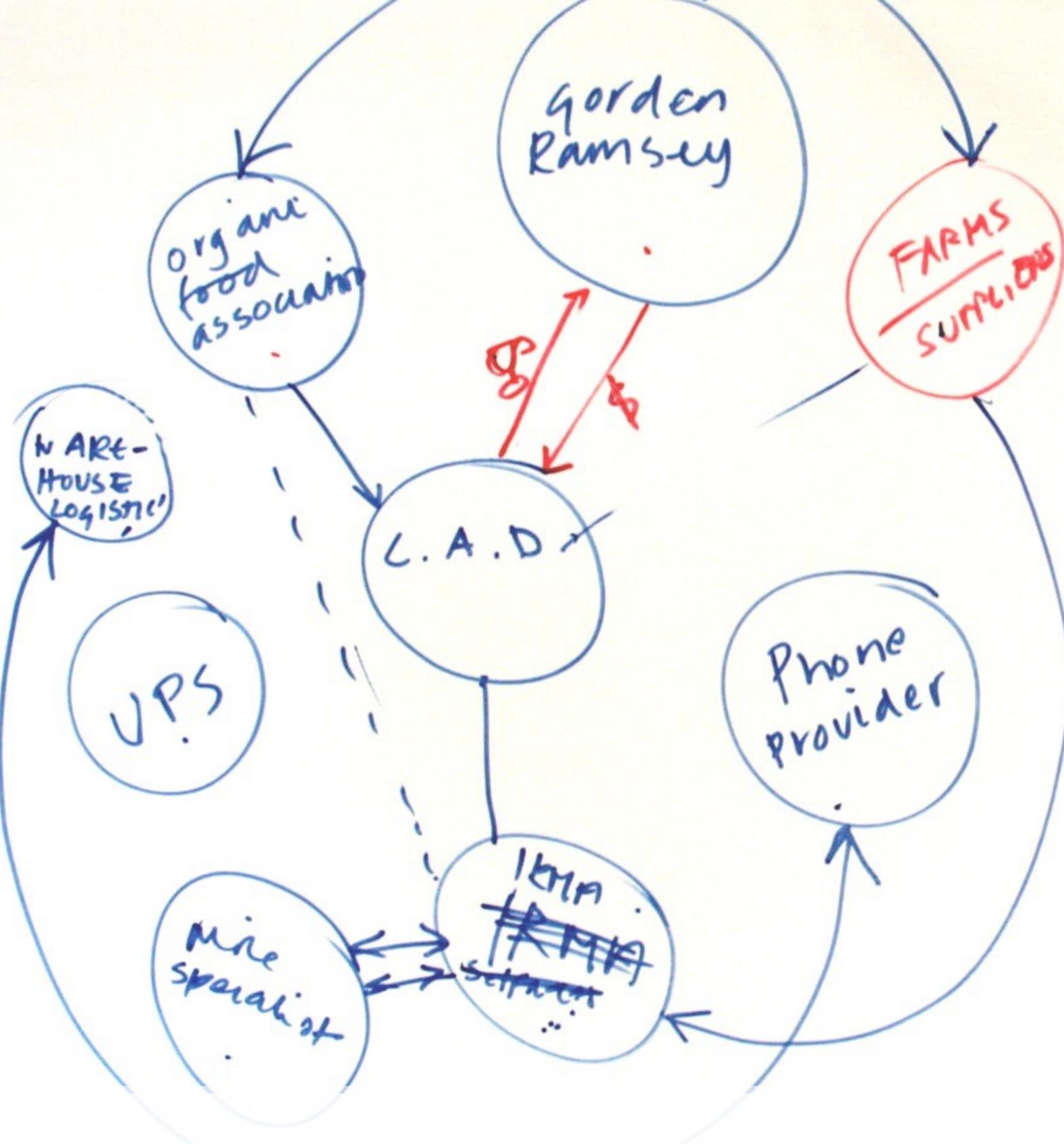
Sketching a Stakeholder Map

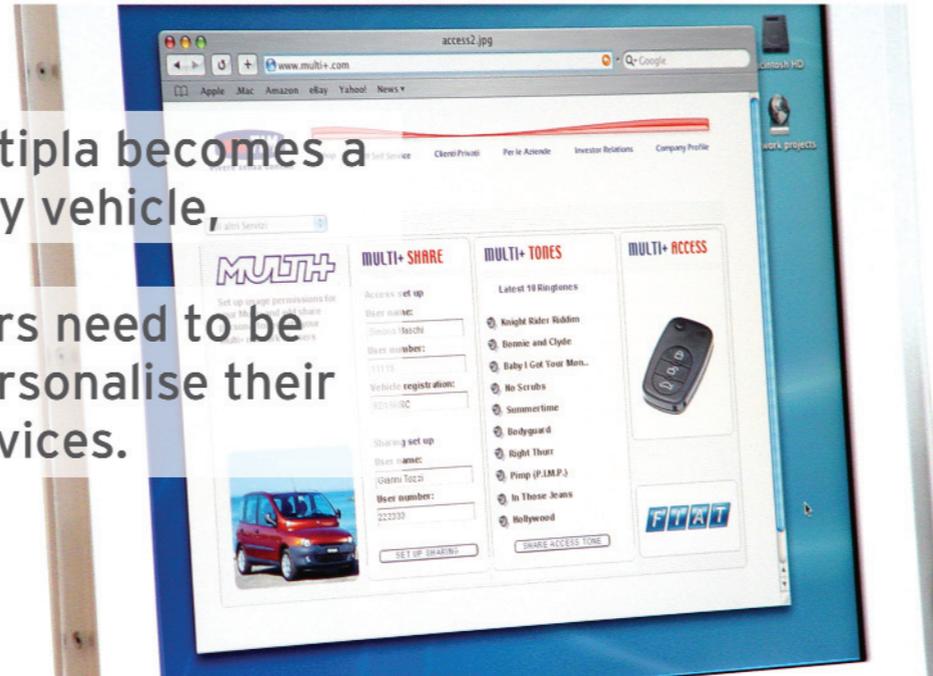# Example: Insights + Touch-points + Blueprints

source: [3]

4 Touchpoints: Multi+Access

IF the Multipla becomes a community vehicle,

THEN users need to be able to personalise their access devices.

5 Touchpoints: Multi+Rules

IF the Multipla is used as a service vehicle

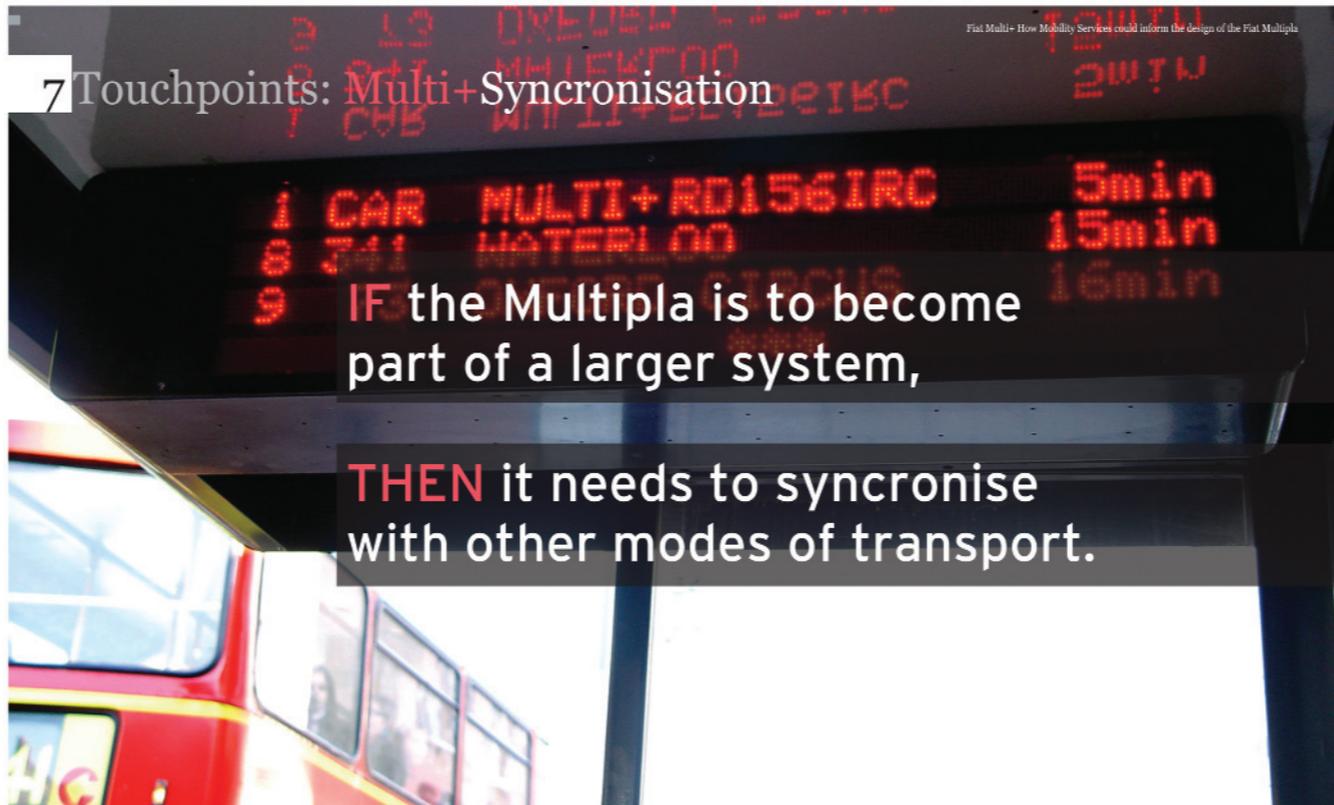**THEN** there needs to be a mechanism for recording rules.

6 Touchpoints: Multi+Time

IF the Multipla is shared by a community,

THEN they need some way to record who is using it and when.

7 Touchpoints: Multi+Syncronisation

IF the Multipla is to become part of a larger system,
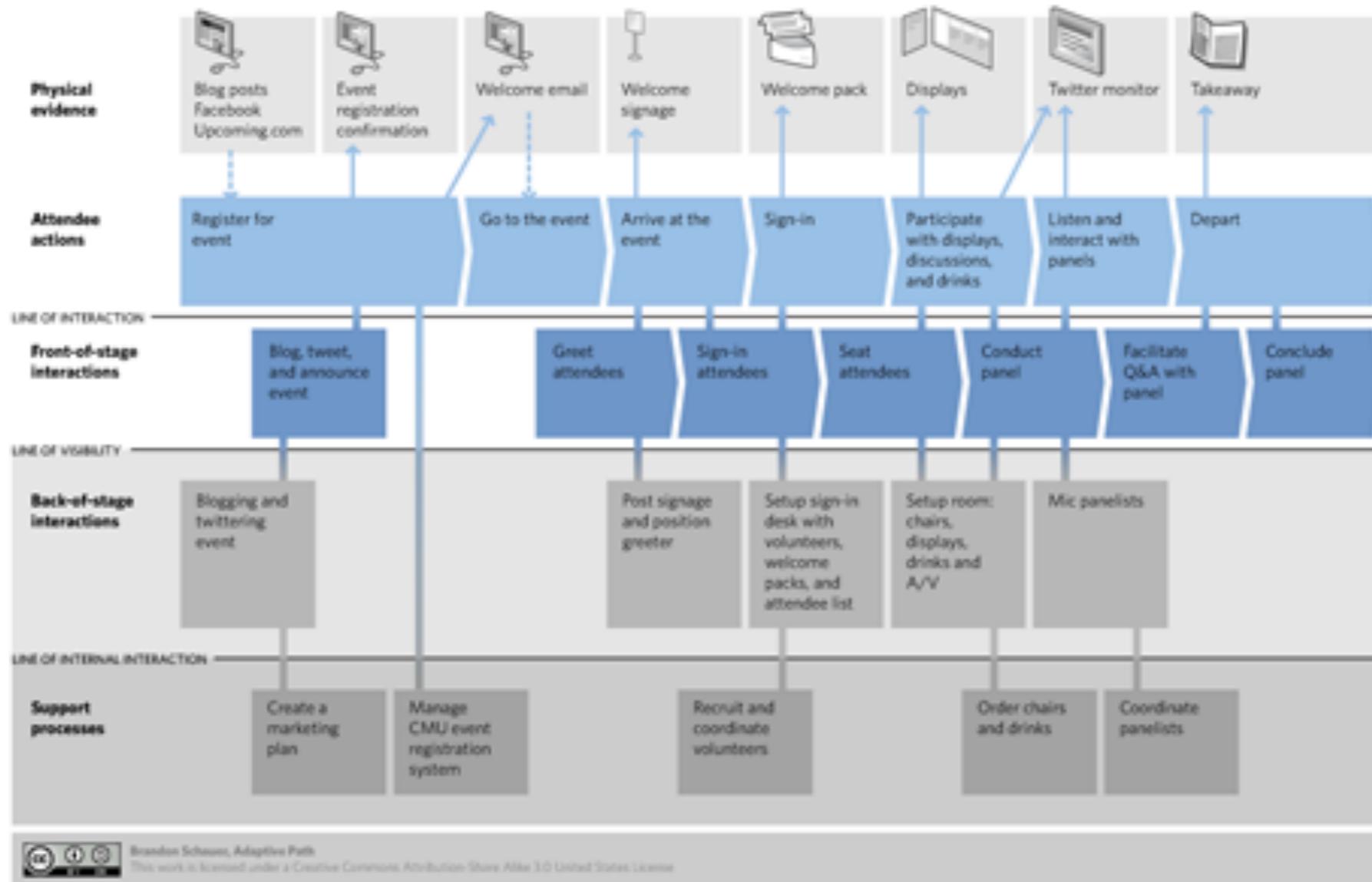
THEN it needs to syncronise with other modes of transport.
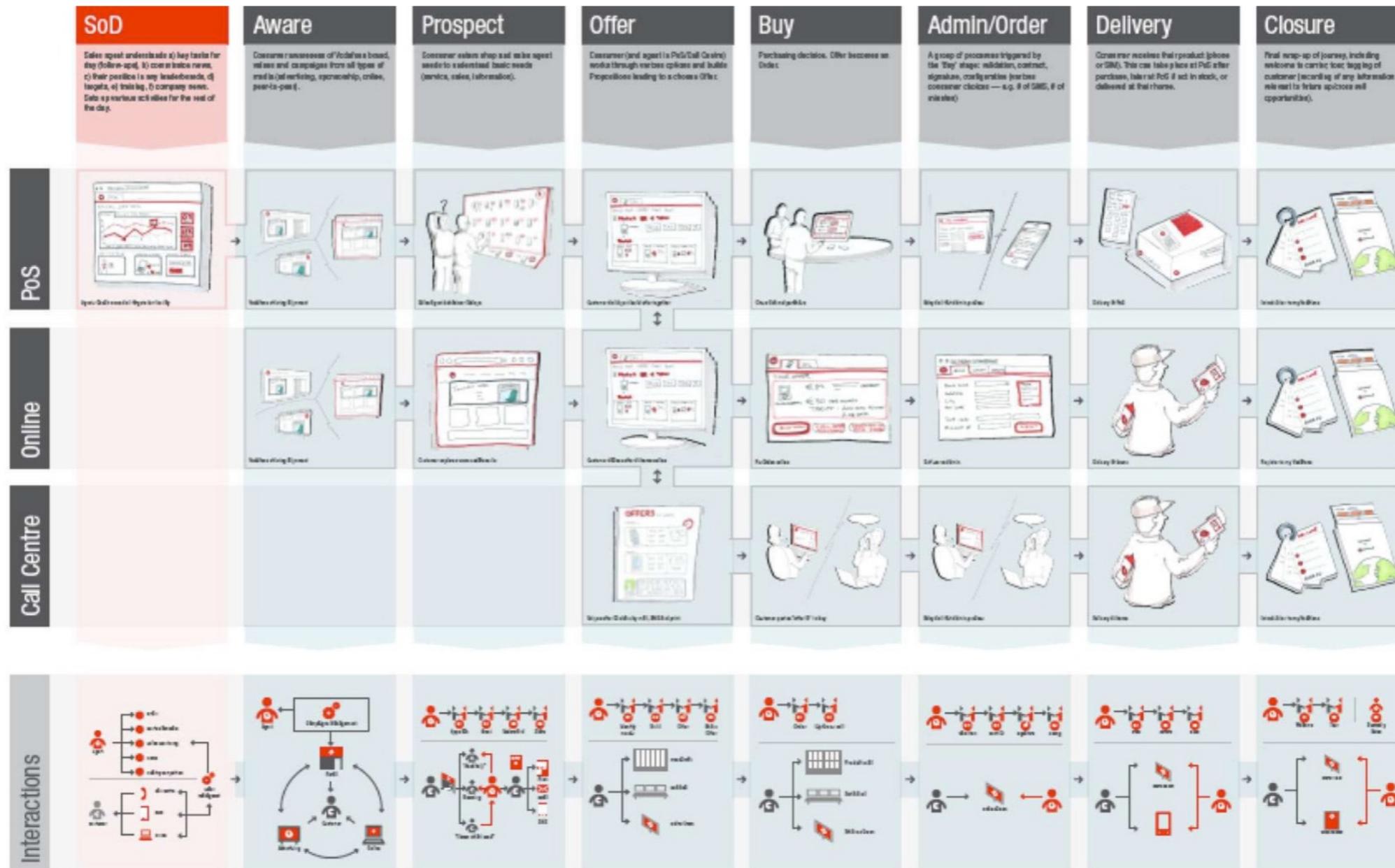
source: [3]

Service Blueprint for Seeing Tomorrow's Services Panel
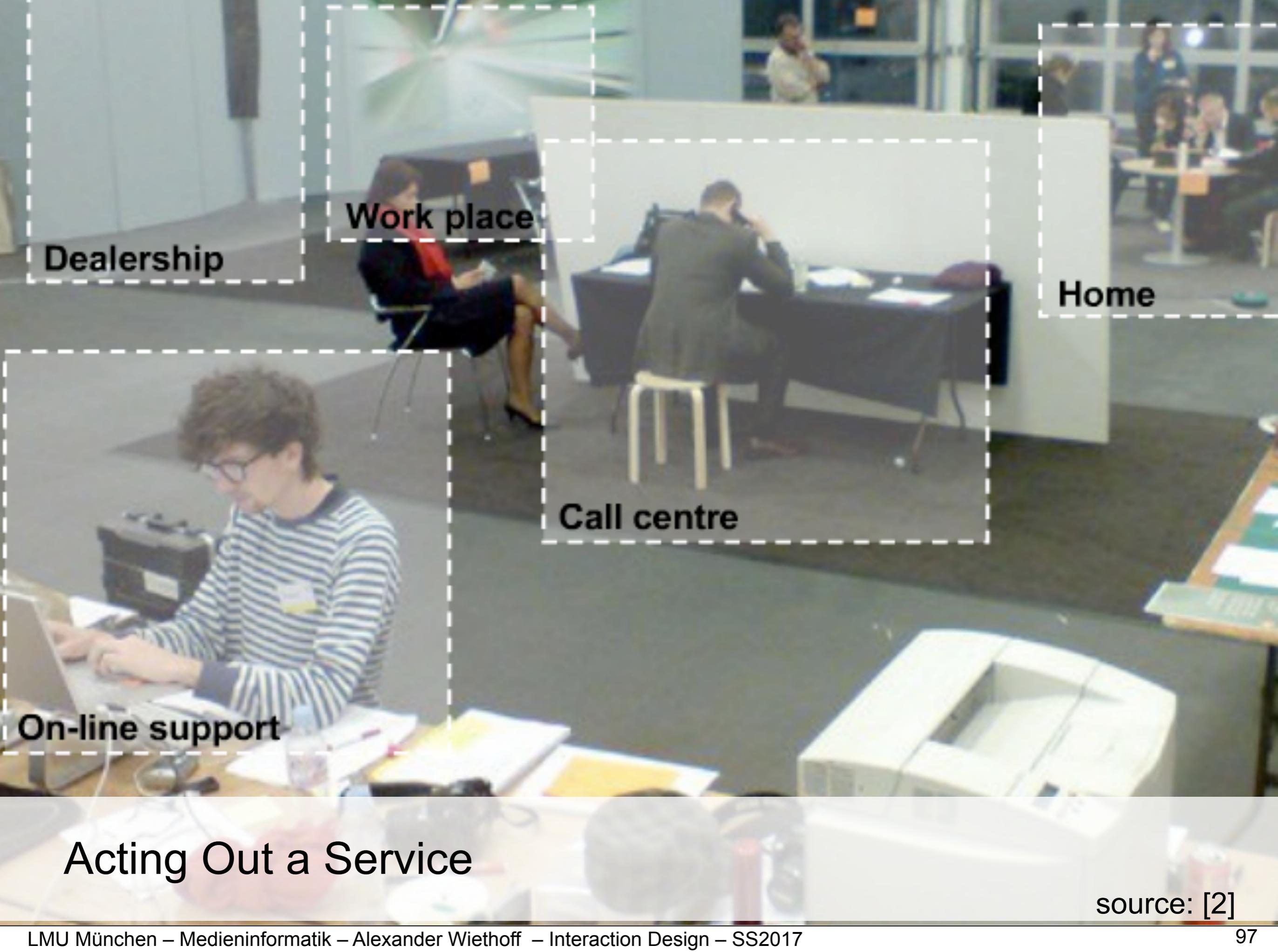
Refined Service Blueprint

The service blueprint enables organisations to see how channels must work together to enable a great service experience.

Refined Service Blueprint

source: http://www.livework.co.uk/

Touchpoint Prototype

Dealership

Work place

Home

Call centre

On-line support

Acting Out a Service

source: [2]

References (Books):

[1] Buxton, W. Sketching User Experiences, *Morgan Kaufmann 2007.*
[2] Copenhagen Institute of Interaction Design, *Service Design Workshop 2008.*
[3] Moggridge, B. Designing Interactions, *MIT Press, 2006.*
[4] Rogers, Y., Preece, J. & Sharp, H. Interaction Design, *Wiley & Sons 2011.*
[5] Saffer, D. Designing for Interaction, *New Riders 2009.*