User Experience Design I
(Interaction Design)

UX & Digital Service Design
Transition Lecture to the Practical Course UX3
Two fundamental questions...
What is a product?
What is a service?
What do they have in common?
???
Front Stage
SERVICE FIRST, PRODUCTS SECOND

Product-dominant logic
- 1950s

Transition
1950–2000+

Service-dominant logic
today & tomorrow

Quelle: SinnerSchrader
A new marketing logic.

The day before yesterday

Yesterday

Today

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

- Marketing built-in
- Beautiful & easy to use
- Data-driven
- Ubiquitous Touchpoints

Quelle: SinnerSchrader
Examples: New Business Models through Digital Service Design
Example: Transform Best-in-Class Products into a Service-based Offering

Bundles.nl uses Miele washing machines who are seen as the most reliable and long-lasting products in the market and add an IoT-enabled “Pay-per-Use” business model to make the best product in the market available to a wide range of audiences.
The app becomes the digital centre for the modern commercial kitchen. By networking the entirety of a kitchen’s equipment, resources and time can be efficiently planned and used in the day-to-day running of commercial kitchens.
100+ of alternative/additional Digital Service Solutions

The Welbilt product cosmos contains a wide range of different appliances for the professional kitchen. In order to create an homogenous appearance on the product overview pages, we have standardised and created a canon of the appliance illustrations.
What if someone is changing the game?
Through Digital Service Design ?
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
Designing technology enabled services is nothing new...
Telephone Service

http://3.bp.blogspot.com/_Tjn2n1CMss0/TTsJZ_GCTII/AAAAAAAAFXI/QvUK4TfntBY/s400/telephone_operators_springfield_il_.jpg
Service Design

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

A customer journey describes the way from an entry point to an exit point of a service

source: [http://www.livework.co.uk/](http://www.livework.co.uk/)
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)
Some Key-Characteristics of Service:

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.

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.

3. Co-created

Services aren’t made by the service provider alone; they require the involvement and engagement of the customers as well.

4. Flexible

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

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 (IoT, Sensors, AR, VR, etc.) makes this discipline highly relevant for UX/interaction designers/software engineers as their expertise involves bridging the gap between technology and people.

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

source: [5]
Service Design

https://www.youtube.com/watch?v=ojqN3tZqcew
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)
- Service Medium

Arrows indicate:
- Brand relationship
- 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 person's point of view.

after Birgit Mager
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
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]
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 blueprint which covers both the service elements as well as the product interactions.

source: [2]
Service Design Vocabulary Recap

- **Use Case** > A set of user actions that leads to a particular goal
- **Touchpoint** > Points of Interactions with a service
- **Front Stage** > Everything that is visible to the user
- **Back Stage** > Everything that is visible to the provider
- **Blueprint** > Visualisation of touchpoints and use cases
- **Stakeholder** > Internal or external service partner

source: [2]
Front Stage

User Touch points

Entry → Time → Exit

Provider Touch points

User Journey

Support Processes

Back Stage

source: [2]
Ideation: Sketching out Experience Blueprint(s)
FOODSENSE®

**USER ACTIONS**
- Reagieren auf Information zu Events
- Ofen mit zusätzlichen Produkten bestücken
- Werbung an digitale Werbeflächen in unmittelbarer Nähe senden (Guerilla-Kurzwerbe-Aktion/Promo-Aktionen)
- Sich über neue Events informieren
- Information erfassen (Endkunde)
- Vom Smartphone in den Shop leiten lassen (Endkunde)
- Mit Eintrittskarte Rabatt erhalten (Endkunde)
- Produkte verkaufen und über das Kassensystem registrieren
- Bargeldlos bezahlen (z.B. per Smartphone / NFC)
- Auswertung von Kosten und Nutzen der Kurzwerbe-Aktion mit Partnern
- Planung

**TOUCHPOINTS**
- Daten verarbeiten und Informationen bereitstellen
- Über erhöhte Nachfrage informieren
- Standortermittlung
- Ofen vorheizen (automatisch)
- Rezepte vorschlagen (passend zu Event / Saison / Tageszeit / Wetter)
- Werbetext generieren (passend zum Rezept / Backgut)
- Standortvorschläge digitaler City-Light-Poster
- Temporäre Werbung platzieren
- Neue Events anzeigen
- Daten verarbeiten
- Daten verarbeiten
- Abrechnung
- Daten verarbeiten
- Umsätze / Werbekosten vergleichen
- Daten verarbeiten und grafisch aufbereiten (Dashboard)
- Werbekosten („ABO Sekunden-Ad“) mit Partner abrechnen auf Grundlage der zusätzlich verkauften Produkte

**BACKSTAGE**
- EVENTIM
- STRÖER
- PAYPAL
- WETTER.DE
- MVV / ÖPNV
- APPLE / GOOGLE MAPS
- ORDERMAN / NCR
- SAP
- TELEKOM
- PAASPHERE
- BACKOFENHERSTELLER

**STAKEHOLDER**
- LMU München – Medieninformatik – Alexander Wiethoff – UX1
Acting Out a Service (Content of UX3)

source: [2]
References (Books):