Designing “Service Systems”

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Is “Service” a Homonym?

<table>
<thead>
<tr>
<th>Personal Service</th>
<th>Self-Service</th>
<th>Web Service</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Personal Service" /></td>
<td><img src="image2" alt="Self-Service" /></td>
<td><img src="image3" alt="Web Service" /></td>
</tr>
</tbody>
</table>

If these are all “services,” are there any design concepts and methods apply to all of them?
Service Design Patterns

- Adjusting the absolute and relative amount of interpersonal, physical, and informational interaction
- Adjusting the line of visibility
- Choosing a point of view
- Scoping the service system and the size of the “touchpoint windows”
Service Design Contexts

- Front stage – the continuum from “Personal service” to “Self-service”
- Back-stage intensive
- Multiple devices
- Multiple channels
- Location-based

Each design context emphasizes different goals and constraints and has characteristic design methods
Deconstructing Front Stage “Service” (Apte & Mason)

Service encounters can include:

- Interpersonal interaction
- Physical interactions
- Information processing and interchange
... Technology changes these proportions

- Person-to-person, technology-enhanced P2P, and self-service form a continuum
- Information can augment interpersonal and physical interactions
- And can also replace them
Telepresence & Telerobotics
Front Stage and Back Stage

Front Stage: where interactions with service customer / consumer happen

Back Stage: produces information and “stuff” needed by front stage

Placement of “line of visibility” is a design parameter
The McDonalds Experience

Front Stage

Back Stage
Gourmet Restaurant Experience

Front Stage

Back Stage
Benihana Experience

Front Stage

Back Stage
Point of View

Designate some actor or service as the focal / primary consumer or customer

Typically the end of value chain or information flow, or where “users” are

Often arbitrary, and other actors or services could be alternative POVs
Who is the Service Customer?

In a teaching hospital

No, I am.

I am.
In a Cooking School?

Back Stage

Front Stage
Multichannel Service System

Physical Store

Virtual Store
Multidevice Service Systems
Location-Based / Context-Aware Services

Location-based Service

View your Facebook® friends’ latest Loopt posts if they’re sharing with Facebook® Connect

- Add as Loopt friend for live location
- Call Heather
- Text Heather
- View Facebook® profile

Context-aware Service

Notifications when your Facebook® friends get Loopt in!

Information & Service Design
Service System Scope

- Design techniques for person-to-person services typically describe the service from the perspective of the customer and emphasize the “touch points”
- But the scope extends before and after these touch points
- The scope is more complex with multiple channels, multiple devices, or location-based services
- Complex service experiences are paths that traverse through multiple service systems
  - Yahoo…Googlemaps…511…BART…Muni…511…OpenTable…Yelp…OpenTable…Twitter…511
Time is a primary dimension of scope but not the only one.

Service System Scope

Front Stage

Back Stage

Touch Point “Window”

- Time

+ Time
The Restaurant Experience

Service Scope

Primary Producer
Supply Chain
Delivery
The Stage

Touchpoints
The Massage Experience

Touchpoint
The Amazon Experience

The Stage Warehouse Wrapping / Distribution Stage Again

Touchpoint Service Scope Touchpoint
A Methodology?

• “Service system” is too broad for a prescriptive design methodology
• Iterative scoping (and defining the POV in) the service system determines relative importance of each context
• Choose a portfolio of appropriate design methods for the combination of contexts
Portfolio of Methods

Front stage emphasis
- Ethnography
- Survey
- Persona
- Usability Testing
- Story / Scenario
- Stakeholder
- Blueprinting
- Use Case
- Prototyping
- Iteration

Back stage emphasis
- Sequence Diagrams
- Model-based Integration
- Data Modeling
- Document Analysis