Bridging the "Front Stage" and "Back Stage" in Service System Design

SSME @ HICSS: 8 January 2008

Robert J. Glushko
University of California, Berkeley

glushko@ischool.berkeley.edu

Plan for Today's Talk

Rethinking Traditional Concepts in Service Design

From "Service Design" to "Service System Design"

Bridging the Front Stage and Back Stage Mindsets

The Traditional View of Services

Traditional concepts of service management and design emphasize person to person interactions

This approach focuses on the "touch points" or "encounters" where the service is delivered to the customer

It emphasizes non-technological principles like empowering the employee, knowing the customer

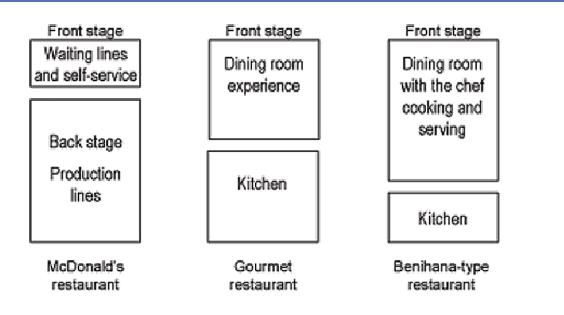
It de-emphasizes activities or processes that are invisible to the customer

The Front Stage / Back Stage Distinction

A focus on the service encounter implies a sharp distinction between the interactions between the customer and provider that are part of the service encounter and other activities that precede it to make it possible:

- The front stage
 represents the interaction the customer or service consumer has with the
 service
- The back stage
 is the part of the service value chain that the service consumer can't see

Different "Lines of Visibility" -- Front / Back Stage Boundaries in Restaurants



Radical Claims Start Here

All of the concepts I've just mentioned need to be substantially rethought

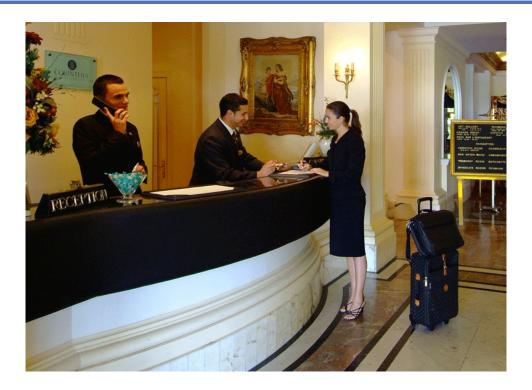
The "moment of truth" reveals service quality, but rarely determines it

Front stage / back stage is not an architectural distinction

It is just a point of view and bounded scope in a service system

And it embodies some design biases that cause problems in service system design

The Hotel Service Encounter



What's the Quality of this Service Encounter?

HOTEL RECEPTION EMPLOYEE: Welcome, Dr. Glushko, it is good to see you again. We know you like room 321, the corner room with the bridge view, so we've reserved it for you. And last fall when you were here you had us get some baseball game tickets because the Red Sox were in town, and it just happens that they're playing again tomorrow night so we got some good seats for you.

CUSTOMER: Thanks.

What's the Quality of this Service Encounter?

HOTEL RECEPTION EMPLOYEE: Last name?

CUSTOMER: Glushko

HOTEL RECEPTION EMPLOYEE: You're in room 321. Here's your key.

CUSTOMER: Thanks.

Simplistic View of Service Quality

High

INTENSITY
OF SERVICE
INTERACTION

(Process and People)

Ritz Carlton

Marriott

Residence Inn

Motel 6

Low

An Intense but Low Quality Encounter

HOTEL RECEPTION EMPLOYEE: Your name, sir?

CUSTOMER: Glushko

HOTEL RECEPTION EMPLOYEE: I'm sorry, sir. We have no reservation under that name, and we're completely booked tonight. CUSTOMER: That's ridiculous. Here's my web confirmation page. HOTEL RECEPTION EMPLOYEE: I'm sorry, sir. We have no reservation for you. We are profoundly sorry. Why don't you wait in the lounge while we call one of our partner hotels and get a room for you... CUSTOMER: This is completely incompetent. I'm tired... HOTEL RECEPTION EMPLOYEE: I'm sorry, sir. We will pay for your room tonight at our partner hotel or give you a voucher for a free night here on your next stay.

Self-Service Hotel Check-In



What's the Quality of this Service Encounter?

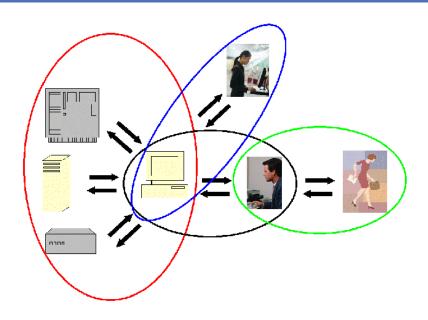
AUTOMATED CHECK-IN SERVICE: Please insert your credit card

CUSTOMER: (Inserts credit card)

AUTOMATED CHECK-IN SERVICE: (issues digital key card) Room

321. Here's your key.

The Four Service Encounters in the Hotel Service System



We Might Focus on How These Differ...

Employee to Customer Service

B2C / Self-Service

Intra-enterprise / Business to Employee Services

Inter-enterprise / B2B / "Web Services"

Or Focus on What They Have in Common:

There are service producers and service consumers

Each service provider has an interface through which the service consumer interacts to request or obtain the service

Value or quality is created/co-created by the interactions and interchanges between the provider and consumer

Quality in the Hotel Check-In Service System

There may be a "moment of truth" at the time of check-in when the quality of the service experience becomes apparent to the customer, but that quality is enabled or constrained by all of the service encounters

...even though many of these encounters don't involve or are invisible to the customer, and some of them are even invisible to the hotel employees

So we need to take a comprehensive and "end-to-end" view of how a service is defined and delivered

Service Encounters are Information Exchanges

For many services, especially those with a significant technology / information component, the information exchanged through the service interface is the primary determinant of the value received or experienced by or co-created with the service consumer

Treating ALL service encounters abstractly as information exchanges highlights the inputs and outputs and the choreography with which the provider and consumer exchange information to initiate and deliver the service

This perspective de-emphasizes the obvious differences between person-to-person services and computational or automated ones

From "Service" to "Service Systems"

This unifying abstraction of service encounters as information exchanges gets us to the SERVICE SYSTEM as the appropriate framework or perspective for understanding how services work

It also makes it much easier to consider alternative service system designs:

- replacing or augmenting a person-to-person service with self-service
- substituting one service provider for another in the same role (e.g, through outsourcing)
- eliminating a person-to-person interaction with automation

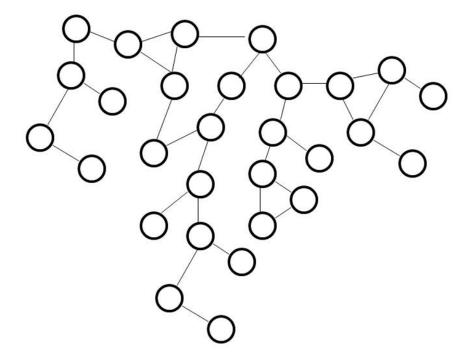
"Service System" Definition (Glushko)

A set of interconnected provider-consumer relationships and the flow of information through them

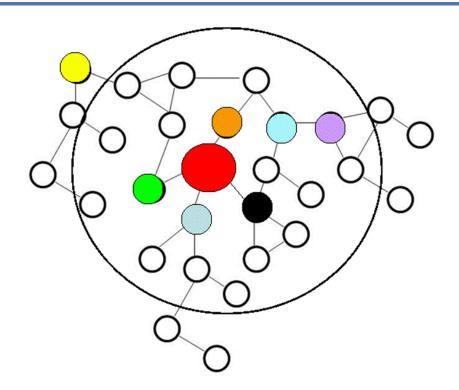
A set of related services can define a SERVICE CHAIN or SERVICE NETWORK or VALUE CHAIN

Designating the last consumer in a service chain as the POINT OF VIEW establishes a perspective or context in the service system

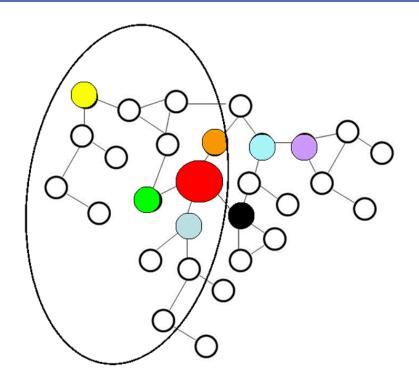
Visualizing a Service System



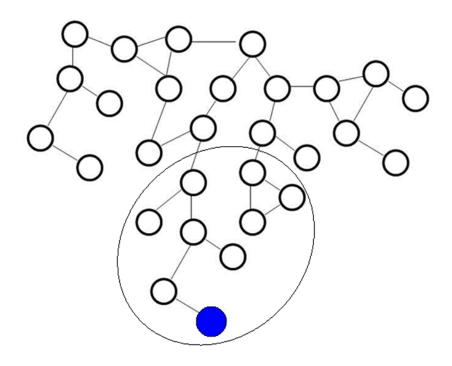
A Point of View in a Service System



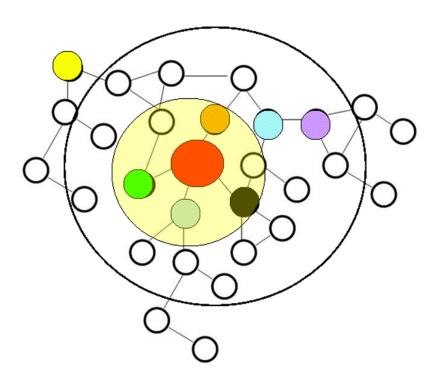
Same POV with a Different Scope



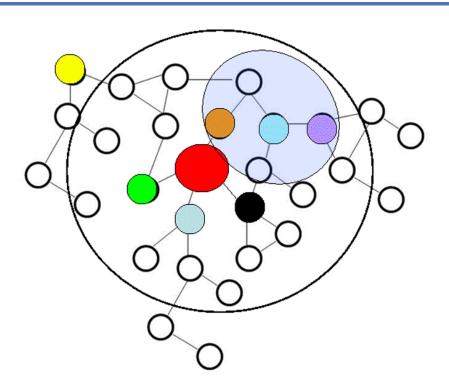
Different POV



Visualizing the Front and Back Stages



Front and Back Stages with Different POV



Front Stage and Back Stage Inversion

KITCHEN



Front Stage for the Cooks Back Stage for the Customers

DINING ROOM



Front Stage for the Customers Back Stage for the Cooks

Bridging the Front Stage and Back Stage in Service Design

Front stage / back stage is not an architectural distinction

It is just a point of view and bounded scope in a service system

And it embodies some design biases that cause problems in service system design

But if we design the service system as a whole rather than as front stage + back stage, we can overcome these problems

Contrasting Design Goals

- Front Stage Designers
- Back Stage Designers

- Usability
- Responsiveness
- Flexibility /Customization /Uniqueness
- Transparency
- Enjoyment

- Efficiency / Productivity
- Robustness
- Standardization / Reuse
- Scaleability

Resolving the Tension: Bridging the Back Stage and Front Stage

The tensions between the back stage front stage are not intrinsic and unavoidable; they are just a consequence of too narrow a design perspective

"Merging the mindsets" with multidisciplinary design teams is an obvious and necessary correction, but it is not sufficient

We need a methodology for designing service systems that cuts through these mindsets

Design the Service System!

Create information flow and process models that span both the back and front stages, and exploit design patterns when appropriate

Implement "model-based user interfaces"

Design services to be modular and configurable

- ... to enable them to be easily substituted for
- ... to enable them to be easily made visible or invisible to other parts of the service system

Information Flow and Process Models that Span the Service System

We have many useful modeling methods and frameworks for designing service systems: supply chains, marketplaces, demand management, queuing theory, etc.

Many of these can be used to ensure some level of service quality by balancing capacity and demand in a coarse or aggregate manner

Other modeling approaches (e.g. data mining, business intelligence, intelligent dispatch) can shape service quality or experience for specific customers (e.g., personalization systems, customer selection for service)

But many service systems that we want to analyze are so complex that we need to rely on more qualitative approaches

Who "Drives the Model" as a Service System Design Choice

The same model can often be driven or exploited by either the service provider or the service consumer; this is a design choice in the service system

- Use a user profile for a recommender system (provider driven) or to drive a consumer agent
- A "Service Level Agreement" can be defined in either provider or consumer terms
- What is the relationship between "actors in use cases" (back stage mindset) and "personas" (front stage mindset)?

Where Does the Information Required for Personalization Come From?

From the consumer:

- · Surveys and forms
- Transactional records
- Behavioral records, navigation history

From data brokers, using keys obtained from the consumer

From other consumers who are similar to the target consumer

Asking a Personalization Design Question in a "Service System Way"

Is it more intense to ask the customer questions at the front desk, or to fill out a self-service form?

It is more intense to ask the customer to complete one complicated form or several simple ones over time?

Instead of asking at the front desk or requiring the customer to fill out the form, can we use information we already have (from previous encounters, from other contexts, from aggregated business intelligence) to make it unnecessary to collect information from the customer?

Summary

Traditional concepts in service design -- the moment of truth, the front stage / back stage distinction -- don't always help us understand today's more information-intensive and multichannel service systems

We need a methodology for designing service systems that takes a more horizontal or "end-to-end" view

The idea that all services can be viewed abstractly as information exchanges is a key part of this new approach