School of Mechanical Engineering

Course Code: BTME3056 Course Name: Product Design

Design of Services and Customer Experience

Design of Services and Customer Experience

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Design of Services

- Innovation in goods versus services
 - Application of PD process
 - Key differences
- Service experience cycle
 - Sequence of customer experience and service delivery
 - Process flows
- Zipcar example
 - Development process, experience cycle, flows
- Exercise
 - Innovation in service experiences
- Product-Service systems
 - Combinations and transformations

Goods and Services

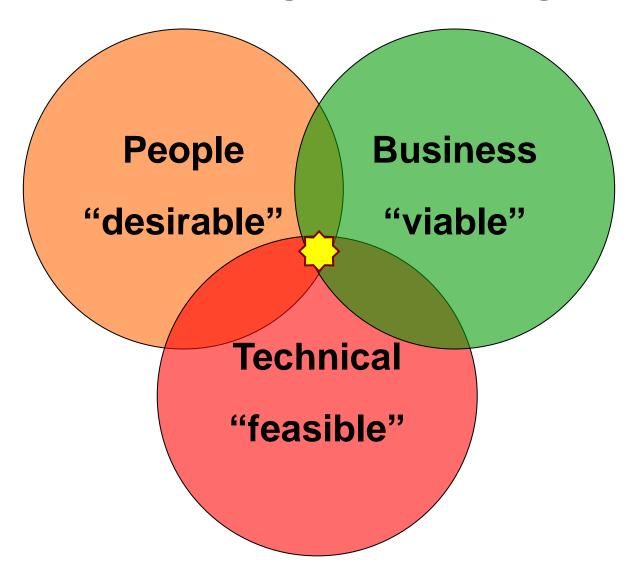
Goods

- Generally tangible products
- Production and consumption may occur at different times
- Producer is generally not involved with customer during usage

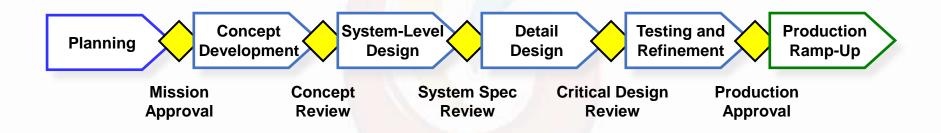
Services

- Often intangible products
- Production and consumption may occur simultaneously
- Service provider may be involved throughout the service experience

Three Design Challenges



Generic Product Development Process



What elements of the PD process apply to development of services?

How do they apply differently to services?

Bank of America Service Innovations

Customer Needs for Convenient Savings

- Make it easy to save money
- I don't want to change my spending



Select

Select a deal online.

Shop

Shop and pay with your debit or credit card.

Earn

Cash back automatically credited to your account.

Keep the Change.TM

Save automatically with everyday purchases.

Register your debit card to:

Round up your purchase to the nearest dollar

Transfer the difference from your checking to savings

HARIELA URE

Track your savings online



Service Development Example

The Bank of America Innovation and Development Team

<u>Mission</u>: The mission of the Innovation and Development Team is to explore, develop and test a higher standard of customer-focused innovations that will help position Bank of America as the world's most admired company.

Where we test innovations: Nationwide, a number of innovations are currently being tested - or will be tested - in areas throughout the franchise, including California, the Northwest, Arizona, Florida, Chicago and Atlantic North. Our test headquarters are in Atlanta, where rapid-cycle tests take place at 30 facilities.

Where our innovations come from:

1) Internal

- Associates
- Business segments and support partners
- Quality and Productivity groups

2) External

- Customers
- Vendors
- Non-financial industry best practices

3) Innovation and Development Team

- Ideation sessions
- Research and exploration



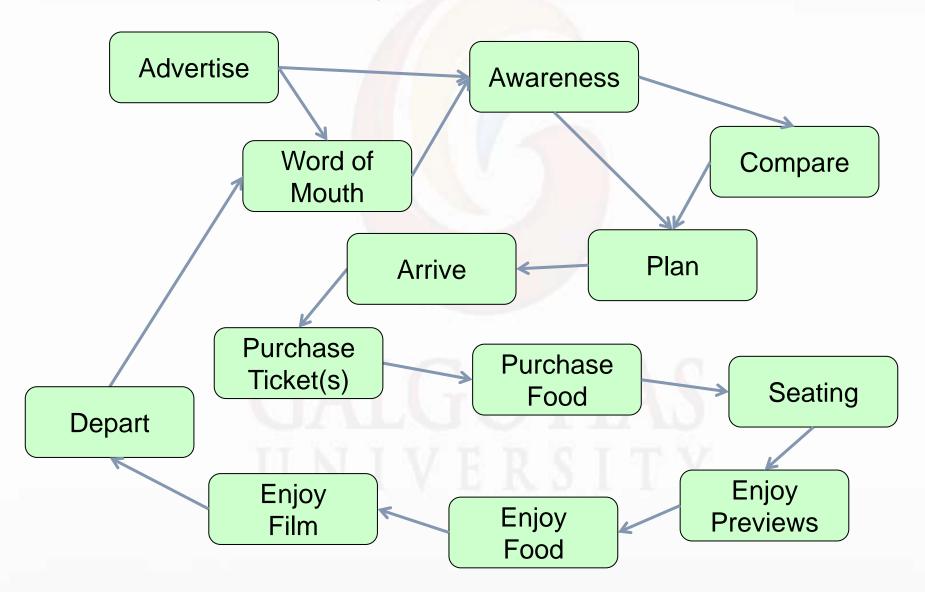


Ref: "R&D Comes to Services: Bank of America's Pathbreaking Experiments", Stefan Thomke, *Harvard Business Review*, April 2003

Service Experience Cycle



Service Experience Cycle: Movie Theatre Example







Pay

Invoice

Apply for Membership Receive Smart Card



Description	Time	Calculation	Amount
Hours: 6pm to 10pm	Aug 30th, 6pm to 10pm	4.00 @ \$12.75	\$51.00
Sales tax for ON: 8%	Aug 30th, 6pm to 10pm		\$4.08
Goods & Services Tax: 6%	Aug 30th, 6pm to 10pm		\$3.06
Total			\$58.14*

Access Reservation System

Browse Vehicles

Zipcar Service Experience Cycle

Reserve Vehicle



NO PARKING
RESERVED FOR ZIPCARS
AVAILABLE BY THE HOUR OF DAY

Return Vehicle

Review

Trip

Find Vehicle

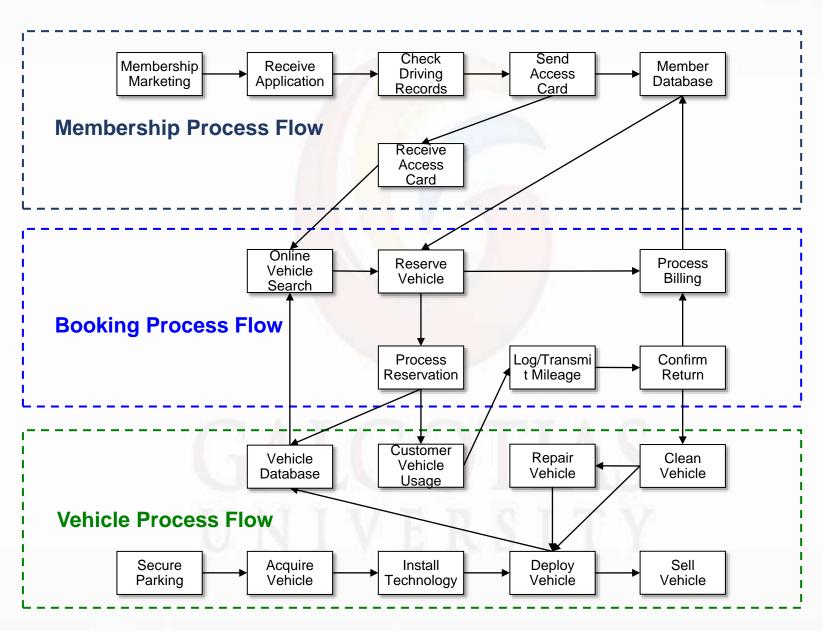


Enjoy Driving Unlock Vehicle





Zipcar Process Flows



Group Exercise: Customer Experience Cycle

- Work in groups of 2 or 3.
- Map out the customer experience as a process flow (or cycle) for one of the following services.

Vacation travel Automobile purchase Grocery shopping

Draw a diagram to explain the process.

• Identifyseveral opportunities for wind vation. Coffee shop

College education Pizza restaurant Dental care

Product-Service Systems

Bundling of product and service



Designing a service as a product















References

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- 2. Stephen C. Armstrong (2005), Engineering and Product development Management— The Holostic Approach, Cambridge University Press, ISBN: 978-0-521-01774-9.
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- 4. Anoop Desai, Anil Mital and Anand Subramanian (2007), Product Development: A Structured Approach to Consumer Product Development, Design, and Manufacture, 1st Edition, Butterworth-Heinemann, ISBN: 978-0-750-68309-8.

Thank you

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