

# e-Business Service design

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Thursday 8:15 - 12:00  
Room 237 (Internef)

## 1 Course Description

The importance of the service economy is widely recognized. New information technology, specially Internet, the social networks and web 2.0, have redefined the ways of conducting business, providing new e-services, new customer experiences, new work practices, and new business models competing in the global market place. This course provides the participants with an understanding of service design, mainly online-service design. The course integrates principles suggested by the design thinking, applied to business service design. The course introduces concepts, frameworks, and tools for designing new front stage services, back stage processes, and business models. Learning will be accomplished through lectures, research, case studies, and group co-design sessions.

## 2 Course Objectives

Upon completion this course, the participants will have a general understanding of the current state and trends in service design, and be aware of design processes and tools (scenario, storytelling, task analysis, hand-sketching, brainstorming and ideation, mind mapping, process modeling, cognitive walkthrough, and others).

More specifically, the participants will be able to use theses design techniques for

- designing services,
- re-engineering business processes, and
- co-creating business models for innovation.

The first part presents the front stage view of services, and explores techniques for designing services, analyzing the customer tasks, defining use cases and scenarios, prototyping e-services, and defining service quality. The second part deals with the back stage, and presents tools and models for re-engineering business processes and taking care of service productivity. The third part illustrates and examines the co-design of business models for improving innovation. This part also deals with service uncertainty and scenario planning.

### 3 Course Materials

Course materials are provided on the web site (<http://www.hec.unil.ch/yp/GTI>). Weekly reading materials will acquaint the participants with the topic to be covered in the upcoming class. Students are required to read all of them for the course. The assigned reading list is provided in the "Course Schedule" section of this syllabus.

#### Recommended text

Boland, R. and Collopy, F. (2004). *Managing as Designing*. Stanford Business Books: 289 p.

Moritz, S. (2005) *Service Design - Practical access to an evolving field*. lulu.com: 245 p.

### 4 Course Requirements

Class preparation, attendance and participation are vital to a productive and stimulating learning environment. Allow ample time to read and reflect on the assigned readings prior the class period. Further details on the objectives, contents, and the report structure will be presented during the course.

All the groups are requested to prepare an abstract, comments and questions on the assigned papers (at least 3 questions per paper), which have to be posted on the group web site (blog) no later than 6pm the day before a class session.

Student will conduct two group mini-projects for designing (a) a front stage service, and (b) a back stage business model, with one of its processes. The group blog and project will produce the three following sets of deliverables:

#### First Deliverables - Service (due October 23)

In this first mini-project, your objective is to design an online service, with the concept, some scenarios, the task analysis, a use case, a prototype, and the usability criterion.

#### Second Deliverables - Business model (due December 11)

In this mini-project, your main goal is twofold: (a) presenting the business model of a company, with the financial aspects, the value proposition and customer targets, the value configuration and partners, and the main capabilities, completed with an analysis of the business model, and (b) defining and assessing one of its processes.

Finally, there will be a three-hour written closed-book exam, which will consist of questions, essays, and exercises (same conditions for retake).

### 5 Grading Criteria

For grading purpose, activities will be issued based on the following scheme:

Participation	20%
Project	30%
Exam	50%

## 6 Course Schedule

DATE	TOPIC	READING
Sep. 18	Course introduction: managing as designing Service innovation and service design,	[Boland et al., 2008] [Moritz, 2005]

### 6.1 Business Service

The first part presents the front stage view of services, and explores techniques for designing services, analyzing the customer tasks, defining use cases and scenarios, prototyping e-services, and defining service quality.

DATE	TOPIC	READING
Sep. 25	Service system Concept and scenario	[Alter, 2008]
Oct. 2	Task analysis Use case	[Phalp et al., 2007]
Oct. 9	Service prototyping Hand-sketching	[Lim et al., 2008]
Oct. 16	Service quality/usability Cognitive walkthrough	[Kettinger and Lee, 1997]
Oct. 23	mid-term project	

### 6.2 Business process

The second part deals with the back stage, and presents tools and models for re-engineering business processes and taking care of service productivity.

DATE	TOPIC	READING
Oct. 30	Service blueprinting Visual storyboarding	[Bitner et al., 2008]
Nov. 6	Business process analysis Workflow modeling	[Basu and Kumar, 2002]
Nov.13	Service/process productivity What-if simulation	[Vergidis et al., 2008]

### 6.3 Business model

The third part illustrates and examines the co-design of business models for improving innovation. This part also deals with service uncertainty and scenario planning.

DATE	TOPIC	READING
Nov. 20	Business model SWOT	[Kim and Mauborgne, 2002]
Nov. 27	Value chain analysis Strategy map	[Kaplan and Norton, 2000]
Dec. 4	Service/business model innovation Mind mapping	[Chesbrough, 2007]
Dec. 11	Final project	
Dec. 18	Service uncertainty Scenario planning	[Miller and Waller, 2003]

## 7 Class policies

1. (*Classroom attendance and contribution*)  
Students are expected to attend all classes and group meetings; class participation grades will be significantly reduced for absences. Individual contributions to class sessions are very important and will be evaluated for the course grade.
2. (*Group project*)  
Collaboration within groups is encouraged for project work. However individual contribution in the project has to be specified for each member.
3. (*Plagiarism*)  
Copying work from the Internet or other sources without reference or acknowledgement is considered plagiarism, and subject to disciplinary action, as enforced by the University of Lausanne.
4. (*Language*)  
The course is given in French but the course material is in English. In addition, English-speaking students can ask their questions, and write exam and project paper in English.

## References

- [Alter, 2008] Alter, S. (2008). Service system fundamentals: Work system, value chain, and life cycle. *IBM Systems Journal*, 47(1):71–85.
- [Basu and Kumar, 2002] Basu, A. and Kumar, A. (2002). Research commentary: Workflow management issues in e-business. *Information Systems Research*, 13(1):1–14.
- [Bitner et al., 2008] Bitner, M., Ostrom, A., and Morgan, F. (2008). Service blueprinting: A practical technique for service innovation. *California Management Review*, 50(3):66–94.
- [Boland et al., 2008] Boland, R., Collopy, F., Lyytinen, K., and Yoo, Y. (2008). Managing as designing: Lessons for organization leaders from the design practice of frank o. gehry. *Design Issues*, 24(1):10–25.
- [Chesbrough, 2007] Chesbrough, H. (2007). Why companies should have open business models. *MIT Sloan Management Review*, Winter:22–28.

- [Kaplan and Norton, 2000] Kaplan, R. and Norton, D. (2000). Having trouble with your strategy? then map it. *Harvard Business Review*, 78(5):167–76.
- [Kettinger and Lee, 1997] Kettinger, W. and Lee, C. (1997). Pragmatic perspectives on the measurement of information systems service quality. *MIS Quarterly*, 21(2):223–240.
- [Kim and Mauborgne, 2002] Kim, C. and Mauborgne, R. (2002). Charting your company’s future. *Harvard Business Review*, 80(6):5–11.
- [Lim et al., 2008] Lim, Y., Stolterman, E., and Tenenberg, J. (2008). The anatomy of prototypes: Prototypes as filters, prototypes as manifestations of design ideas. *ACM Trans. on Computer-Human Interaction*, 15(2):7–27.
- [Miller and Waller, 2003] Miller, K. and Waller, G. (2003). Scenarios, real options and integrated risk management. *Long Range Planning*, pages 93–107.
- [Moritz, 2005] Moritz, S. (2005). *Service Design - Practical access to an evolving field*. lulu.com.
- [Phalp et al., 2007] Phalp, K., Vincent, J., and Cox, K. (2007). Assessing the quality of use case descriptions. *Software Quality Journal*, 15:69–97.
- [Vergidis et al., 2008] Vergidis, K., Turner, C., and Tiwari, A. (2008). Business process perspectives: Theoretical developments vs. real-world practice. *Int. J. Production Economics*, 114:91–104.

The students can access the *BCU* digital library (<http://dbserv1-bcu.unil.ch/dbbcu/cds/menu.php>), for consulting many useful databases (*ABI/Inform*, *Business Source Premier*, *ScienceDirect*, *Blackwell*, *Ingenta*, *Kluwer*, *JSTOR*, ...).