Introduction to Service Design for UX Designers

Virpi Roto
School of Arts, Design and Architecture, Aalto University, Espoo, Finland
virpi.roto@aalto.fi

Val Mitchell, Stuart Cockbill
School of Design and Creative Arts, Loughborough University, Loughborough, UK,
v.a.mitchell@lboro.ac.uk
s.cockbill@lboro.ac.uk

Jung-Joo Lee
School of Design and Environment, National University of Singapore, Singapore
jjlee@nus.edu.sg

Effie L-C Law
School of Informatics, University of Leicester, Leicester, UK
lcl9@leicester.ac.uk

John Zimmerman
Human-Computer Interaction Institute, Carnegie Mellon University, Pittsburgh, PA
johnz@cs.cmu.edu

ABSTRACT
We are witnessing the work of user experience (UX) designers expanding beyond single digital products towards designing customer journeys through several service touchpoints and channels. Greater understanding of the service design approach and the interplay between service design and UX design is needed by UX researchers and practitioners in order to address this challenge. This course provides a theoretical introduction to service design and practical activities that help attendees understand the principles of service design and apply key methods within their work. It is targeted at UX design practitioners, teachers, and researchers, and those interested in systemic approaches to design.

CCS CONCEPTS
• Human-centered computing → Interaction design; Interaction design process and methods.

KEYWORDS
Service Design, User Experience Design, User Experience

1 INTRODUCTION
In the past three decades, we have been witnessing a worldwide shift from a focus on product development to a focus on service delivery. The most profitable companies are now creating service offerings, known as “systems of interlinking services” [3]. Many companies are experiencing servitization, where digital services are added to existing products; others are experiencing productization, where physical products are added to service offerings [2]. The resulting product service ecologies are more complex, systemic, and data-driven than anything we have designed before [1, 5], leading to UX designers and researchers facing a range of inter-related challenges including:

- Understanding and conceptualizing non-digital services in a digital form, such as the augmentation of taxicab services with on-demand ride share platforms.
- Delivering end to end experiences across parallel physical and digital touchpoints including, for example for the retail sector: advertising, branding, browsing of goods, payments, deliveries and returns, and backstage digitalization.
- Co-designing with diverse stakeholders as business and design converge, and evaluation of success broadens beyond usability.
- Navigating and defining roles where terminology is fluid and ambiguous at the interaction of Service Design and UX.

Service Design (SD) is a holistic approach used to orchestrate the whole service journey considering customers, service providers and other relevant stakeholders. For user experience (UX) designers, who have often focused on the user interface design of a digital application, this service design perspective introduces new questions:

1. What does service design mean in practice?
2. What is the role and scope of UX design in a multi-stakeholder service design project?
3. Who is responsible for the user experience of the whole service journey?
4. How can UX and service designers best work together?

There is little research at the intersection of SD and UX design, and the research communities of these two areas are surprisingly separate. This course aims to encourage researchers to tackle the above questions that are now highly topical in industry.

The first edition of the course was run at NordiCHI’20 conference [4]. In 2021, CHI conference calls for ‘making waves and combining strengths’ for greater infusion of the strengths of different people, different areas and different perspectives on the challenges and opportunities in HCI. This CHI’21 course will provide an understanding of how the methods and tools of SD can be used to provide
a wider perspective on designing experiences beyond the user and particularly around designing services with data.

2 LEARNING OUTCOMES
As this course addresses both practitioners and researchers, we have designed the content to fulfill the needs of both. After this course, the practitioner attendees will be able to:

1. Work together with service designers through a better understanding of SD history, scope, process, and basic terminology.
2. Organize UX work to fit within a SD project by understanding the relation of UXD and SD and the possible roles of UX designers in SD projects.

The UX researcher attendees will be able to:

1. Conceptualize the relation between UXD and SD through a better understanding of SD history, scope, process, and basic terminology.
2. Identify topical research questions to tackle key challenges in the ongoing transformation of UX design towards more holistic service design and systemic thinking.

3 INTENDED AUDIENCE

The course is intended primarily for UX design practitioners, teachers, researchers, and students, and secondarily for attendees with an interest in systemic approaches to design.

As this is an introductory course, the participants are not expected to have any prior knowledge of service design. Basic understanding of UX design and user centric design processes will be helpful to understand the similarities and differences between SD and UX design.

4 CONTENT

Opening and introductions (10min)

The course starts with introductions to the instructors and the course objectives. Depending on the number of the participants, participants may introduce themselves as well.

History and the emergence of SD (10 min)

A short history of Service Design is presented to communicate the big picture. This covers concepts such as servitization and product-service systems. The contextual factors that have led to the emergence of SD are presented including the accelerating need for digitalization of existing service touchpoints, backstage digitalization, and the multiple channel options for each touchpoint. An introduction to SD theory will be provided including understanding of the nature of services, co-creation of services and how they are represented and constructed within a human centered design process.

Practical Session, the basics of SD part I (55min)

The first practical session will introduce core processes, methods and tools including stakeholder maps, customer journey mapping and service blueprinting, each supported by case study examples and exercises in small groups. SD terminology will be introduced on the way.

Practical Session, the basics of SD part II (40min)

Session 2 continues with the service design process, as described in the previous item.

Interplay of SD and UXD (15min)

Different scenarios of the interplay of SD and UX design throughout a design project will be presented, including typical project outcomes. The groups will discuss the appeal and relevance of the scenarios to their own situation.

Conclusions, Q&A, and Reflection (20min)

We summarize the key messages of the course and let the participants ask remaining questions. Finally, we will discuss the key take-aways with the participants.

4.1 Practical Work

The course consists of presentations by each of the instructors and exercises in small groups. Prepared templates and case study materials will be used to structure a series of activities to populate a stakeholder map and design a service blueprint for a customer journey pre-defined by the organizers. Examples of the groupwork outcomes will be presented back to the group with opportunity for reflection and discussion.

In addition to asking the instructors directly, the participants can post questions and vote for others’ questions to be responded via an online tool, e.g., Sli.do. This tool will be available also after the course and the instructors will use it to respond to as many questions as possible. Materials and content will be designed to be resilient to a shift to remote delivery if needed, for example through use of bespoke online mapping tools such as those provided by UXPRESSIA https://uxpressia.com

5 INSTRUCTOR BACKGROUND

Virpi Roto is Professor of Practice in Experience Design in Aalto University, Finland. She studies experience design in the intersection of UX and service design. Her methodological research aims to provide techniques for practitioners to improve user experiences. She was the responsible instructor of the first edition of this course at NordiCHI’20. She was also the lead organizer of NordiCHI’16, CHI’18, and Nordes’19 workshops on the relation of UX and service design.

Val Mitchell is Programme Director of the UX Design MA at Loughborough University. Her research focusses on the development of transdisciplinary tools and methods for UX and SD and she has been a co-organizer of workshops at CHI2013 and UBICOMP14. She is currently on secondment with the Service Design agency Snook.

Stuart Cockbill specializes in teaching service design as part of the UX Design MA at Loughborough University. His research uses co-design processes to incorporate personal data within the design of future technologies and services.

Jung-Joo Lee is a Deputy Head of Research and Assistant Professor in Division of Industrial Design, National University of Singapore, and a Director of Service Design Lab Singapore. Her research investigates roles of service design in organizational transformation and public-sector innovation. She was a co-organizer of workshops at CHI’15, CHI’18, and Nordes’19.

Effie Law is a full Professor in HCI, specialising in usability and UX methodologies. She was a co-organizer of NordiCHI’16, CHI’18 and Nordes’19 workshops on the relation between UX and Service
Design. She was an instructor for the course on UX evaluation at CHI. John Zimmerman is the Tang Family Professor of AI and HCI at Carnegie Mellon University’s HCI Institute. His research investigates human-AI interaction. He teaches courses on UX design, service design, lean startup, and on the design of AI products and services.

5.1 Sample Publications by the Instructors

- Virpi Roto, Jung-Joo Lee, Tuuli Mattelmäki and John Zimmerman. 2018, April. Experience Design meets Service Design: Method Clash or Marriage? In Extended Abstracts of CHI’18 (p. W26).
- Alison Prendiville, Ian Gwilt, and Val Mitchell. 2017. Making sense of data through service design – opportunities and reflections. Designing for Service: Key Issues and New Directions. 225-236.
- Stuart A. Cockbill, Andrew May, and Val Mitchell. 2019. The assessment of meaningful outcomes from co-design: a case study from the energy sector. She Ji: The Journal of Design, Economics, and Innovation. 5, 3:188-208.
- Jodi Forlizzi & John Zimmerman. 2013. Promoting Service Design as a Core Practice in Interaction Design. Proceedings of IASDR’13.
- Jung-Joo Lee. 2020. Service design and blind mice, ACM Interactions, 27 (2), 20-21

6 RESOURCES

- The web site for the course to share relevant information and materials: blogs.aalto.fi/chisdcourse.
- Service Design chapter by John Zimmerman and Jodi Forlizzi in the Encyclopedia of Human-Computer Interaction, 2nd Ed.
- Our previous workshops on UX and SD: CHI’18 blogs.aalto.fi/xsd, Nordes’19 blogs.aalto.fi/sxd.

ACKNOWLEDGMENTS

We thank Professors Jodi Forlizzi and Tuuli Mattelmäki for research collaboration that made the preparation of this course possible. This work was partly supported by Business Finland, grant 81/31/2020.

REFERENCES

[1] Jodi Forlizzi. 2018. The product ecology: Understanding social product use and supporting design culture. International Journal of design 2, 1.
[2] Luna Leoni. 2015. Servitization and Productization: two faces of the same coin? In Conference RESER.
[3] Enio Manzini. 2014. Making things happen: Social innovation and design. Design Issues, 30, 1:57-66.
[4] Virpi Roto, Val Mitchell, Stuart Cockbill, Jodi Forlizzi, Jung-Joo Lee, and Effie Law. 2020. Introduction to Service Design for UX Designers. NordicCHI ’20: Proceedings of the 11th Nordic Conference on Human-Computer Interaction: Shaping Experiences, Shaping Society. October 2020, Article No.: 140, pp 1–3.
[5] Daniela Sangiorgi, & Prendiville, A. (Eds.). 2017. Designing for Service: key issues and new directions. Bloomsbury Publishing.