Platformization

Co-Designing Digital Platforms in Practice

ANNA SIGRÍÐUR ISLIND

AKADEMISK AVHANDLING

som med tillstånd av Forsknings– och forskarutbildningsnämnden
vid Högskolan Väst, för avläggande av doktorsexamen i Informatik med inriktning
mot arbetsintegrerat lärande,framläggs för offentlig granskning.

Fredagen den 31 augusti 2018 klockan 13:00–15:00 i Albertsalen, Högskolan Väst

Opponent: Benjamin David Eaton, Surrey Business School,
University of Surrey

Abstract

Digital platforms are slowly becoming an important part of both research and everyday work. However, much of the research focus has been on platforms that are already established. Little focus has been on platformization (i.e., design, development and use of platforms in the nascent phases) and the socio-technical aspects of designing platforms for specific practices or purposes, i.e., practice-based platforms. While it is truly important to understand technological aspects and market logics of platform efforts, it is also to understand how platforms become platforms, when designing them alongside end-users. This thesis contributes to the platform discussion with research that focuses both on the technological sides of building platforms while also unpacking the social aspects of the collaborative design situation (i.e., co-design) and development where end-users meet and later use the platforms. This thesis explores the research question: how can practice-based platforms be designed and developed? through a study of the design of platforms in care settings, one 2.5–year study within home care and one 2.5–year study within cancer rehabilitation where the end-users' practices involved in the co-design processes are caregivers and care recipients in both studies. This thesis thereby unpacks the platformization process through a roughly five–year longitudinal AR project, based on these two studies. With the help of the boundary literature, the design, development and use of platforms in the nascent phases of platformization is analysed in these two studies. Through a co-design effort in both studies, the practices that are going to use the platforms contribute to a) the design of which boundary resources (i.e., modules in terms of code blocks) will be developed within the platform; b) the design of the boundary object (i.e., working tools in terms of apps) that they are using together in consensus; and c) the design of a boundary practice in which they will later use the digital artifacts together. The end-users' practices had impact on the design of all layers of the platform through the co-design approach, including an influence on the boundary resources that were developed within the platform. The platforms also had impact on the practices, which designed new ways of interacting. The results thereby both show the impact of the end-users' practices (caregivers and care recipients, which are heterogeneous) on the platform design, as well as the impact of the platform on the design of their boundary practice. In this thesis, the design and development of the two platforms is thereby researched and the design of the platforms is validated by studying the use of the platforms as well. The main contribution of this thesis is a conceptualization of the platformization process where the key characteristics of designing such platforms with heavy user engagement are illustrated in a platformization model and in seven platformization principles.