



UMEÅ UNIVERSITET

Orchestrating Emerging Digital Ecosystems

Investigating the Establishment of an Open Data Platform in the Swedish Public Transport Industry

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Akademisk avhandling

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Abstract

Digital platforms are affecting most contemporary organizations as they mediate an increasing range and number of interactions in their ecosystems. While the discourse on digital platform ecosystems has gained in interest over the years, it often revolves around dominant global firms and how they utilize their control over governance and architecture configurations to exercise power in shaping trajectories. This dissertation seeks to provide insights into the processes through which new digital platforms ecosystems are established by identifying challenges in orchestrating emerging digital ecosystems and approaches through which these can be navigated. To this end, my research focused on the establishment of an open data platform in the public transport industry in Sweden.

My theoretical and empirical investigation provides three contributions to our understanding of orchestration of emerging digital ecosystems. The first contribution is the identification of key challenges in orchestrating an emerging ecosystem through a review of extant literature. The review suggests that challenges in orchestrating emerging ecosystems revolve around three goals: (1) attracting and generating network effects; (2) control and coordination; and (3) creating and capturing value. Thus, whether ecosystem establishment is successful or not depends in large part on how providers are able to address these challenges. The identification of challenges and remedies could be helpful for practitioners and scholars when assessing and diagnosing emerging ecosystems. However, I suggest that the different challenges and proposed solutions should not be treated as fixed and isolated guidelines in assessing ecosystems. Instead, providers should consider the challenges holistically in their ecosystem since there are interplays and interactions between their underlying socio-technical aspects. The second contribution is a conceptualization of the nature of orchestration in emerging digital ecosystems. I demonstrate that orchestration in an emerging ecosystem is inherently embroiled in a web of fragile power relationships among actors, unbounded participation, unbounded control, emergent outcomes, and persistent competing concerns. The third contribution of my thesis is the practical implications for how providers can approach orchestration and address challenges in emerging digital ecosystems. The fragile nature of emerging ecosystems suggests that orchestration is not limited to arm's length measures but also stands to benefit from social interactions and relationship-building among actors with distinctive interests and understanding of their own rights.

Keywords: Digital platform ecosystem, platform establishment, emerging ecosystems, orchestrating, control, coordination, generating network effects, creating value, capturing value, attracting users

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