Uber for Public School Buses and Limits to Sharing: Perceived possibilities and challenges to use sharing platforms in municipal service delivery

Ann Jansson and Karin Skill

The self-archived postprint version of this conference paper is available at Linköping University Institutional Repository (DiVA):
http://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-182959

N.B.: When citing this work, cite the original publication.

Original publication available at:
https://doi.org/10.1145/3494193.3494319

Copyright: Association for Computing Machinery (ACM)
http://www.acm.org/
This is the author's version of the work. It is posted here for your personal use. Not for redistribution.
Uber for Public School Buses and Limits to Sharing
Perceived possibilities and challenges to use sharing platforms in municipal service delivery

Ann Jansson*  
Karin Skill*  
Political Science, Department of Management and Engineering, Linköping University, Sweden  
ann.jansson@liu.se  
Thematic Studies, Linköping University  
Karin.skill@liu.se  

ABSTRACT

*Sharing limited resources via digital platforms is an attractive sustainability solution that has been suggested as an innovation. However, when applying digital solutions in the public sector there are sometimes challenges. The aim is to explore the opportunities and challenges involved in using digital sharing platforms in Swedish municipalities to deliver welfare services regarding public transport and school buses. We apply institutional logics as an analytical approach to understand the perceived use of sharing platforms to deliver welfare services. Interviews and workshops with municipal staff and politicians are analyzed. The results show both opportunities and challenges in connection with using digital platforms to share limited resources.

CCS CONCEPTS

- Information systems;  
- Data management systems;

KEYWORDS

sharing platforms, public sector, sharing economy, institutional logics

ACM Reference Format:

1 INTRODUCTION

Digital tools are acknowledged in several of the Sustainable Development Goals for implementing smart cities and regions, and in sharing economies. Innovation regarding sharing economies implies identifying underutilized goods and services, maximizing resource use, and bringing supply and demand together [1]. Digital solutions have been identified as being important to deliver welfare services municipalities are obliged to provide by law, and for increased sustainability [2]. Despite the promises offered by digital platforms in terms of sharing limited resources, they have occasionally been deemed illegal since they are said to intrude on municipal competence. In other cases, municipalities have attempted to develop their own digital solutions to make them comply with regulations, but sometimes at very high costs. Using existing platforms thus seems to be a good option in order to achieve the sustainability goals in the public sector. School bus rides could be combined with other journeys, and could be shared with other citizens that the municipality has a responsibility to care for, like elderly or disabled residents. The idea of using Uber to coordinate and organize school buses would have sharing limited resources as its main objective. This is a good idea in theory, but how is it perceived in practice, in a small municipality? Our aim is to explore the opportunities and challenges of using digital platforms to share limited public resources in Swedish municipalities through a case study.

Swedish municipalities and regions are the main actors involved in organizing and delivering welfare. Their resources are often limited. Discussions about how to share limited resources and govern the commons have been part of political debates for centuries [3]. The proposal, which we allude to in our title, on limits to growth [4] is just one, and there is a wide diversity of institutional arrangements to govern common resources. To engage with the innovative coordination of resources with technologies we use institutional logics [5]. It is useful to explore how a phenomenon, such as an app, that is developed in one institutional context (an organization or a firm) and for an imagined user is understood in another. Recognizing different logics can help us to grasp how municipalities can harness the opportunities of digital solutions when delivering welfare services to their residents. Institutional logics “represent frames of reference that condition actors’ choices for sensemaking, the vocabulary they use to motivate action” [5]. A mobility solution may be motivated as sustainable and green and/or by a state logic, where municipalities must fulfil public democratic values throughout the delivery of services to those residents who are entitled to them, with redistribution for the community good, and procurement [5]. Market actors like Uber belong to a private logic, where users are customers [6] and are not limited by administrative borders. A multiplicity of institutional logics can be challenging for collaborations [7] and therefore relevant when exploring governance and collaborations for using established platforms to connect users and providers for organizing school buses and mobility in the public sector. In the state logic, the municipality is responsible for delivering services to residents only, while the market logic wants as many customers as possible for a sustainable business model. Regardless of its size, a municipality must provide public services

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than the author(s) must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from permissions@acm.org.

ICEGOV 2021, October 06–08, 2021, Athens, Greece  
© 2021 Copyright held by the owner/author(s). Publication rights licensed to ACM.  
ACM ISBN 978-1-4503-9011-8/21/10...$15.00  
https://doi.org/10.1145/3494193.3494319
We have identified three areas that influence the perceived opportunities and challenges surrounding the use of sharing platforms in the municipality, where different logics come together: a sense of community commitment, jurisdictional and administrative areas, and competence regarding both digital and juridical areas. Collaboration and coordination among different stakeholders (public, private, civic) are core in governance [9], as is the sense of community where the public and private logics coexist and even support each other. The studied municipality is known for its many organizations where residents come together to solve problems and share resources in different ways, both online and offline. Many officials know the residents personally, and even know the surroundings where the school children live. In distinction to many other small municipalities there is an entrepreneurial spirit among politicians regarding digital infrastructure. In this context, the interviewees were eager to be creative to meet the requirements of the state logic of welfare service delivery, while also being innovative and harnessing digitalization emanating from the market logic of sharing limited municipal resources. Although actors in the studied municipality have used Facebook to coordinate customers for local food markets, the municipality has not used sharing platforms in its regular delivery of welfare services, such as school buses. The interviewees described using sharing platforms in municipal activities as a novelty, and as an innovation. This is related to the possibility of copying and pasting a solution that has been developed for one context and then transferred to another. The municipality has a low population density, and few people use public transport due to the infrequent services. Coordinating mobility through a digital platform could also increase flexibility.

Digital competence among citizens and staff is central for inclusion, and the informants view a lack of competence as a challenge when using digital platforms for sharing. For example, not everyone has an electronic ID or a smartphone to use the apps. Covid-19 has presented an opportunity, since it has opened many people’s eyes to the potential of digital solutions, and many people have learned to use new digital platforms. However, the municipality has also had to organize more public transport and school buses to comply with the restrictions, and has been unable to coordinate transport services for users like school children and the elderly that the municipality is responsible for.

The interviewees have identified a variety of strengths and weaknesses regarding the ability to apply and test digital solutions in the municipality. The small size of the municipality has been raised as a strength, as well as a weakness. The limited market and the vast geographical area are weaknesses for sharing platforms, while many people know each other and there is social control. One frequently mentioned threat was laws regarding what a municipality can and cannot do, and this is also pointed out clearly in studies of state logic [6]. A lack of juridical competence among staff is a core challenge for the innovation required when interpreting laws, as is a lack of digital competence. A lack of control of drivers, privacy, and extensive responsibility for children’s welfare during transportation to and from school have been highlighted as challenging when trying to coordinate school trips with digital sharing platforms, as have GDPR, the Swedish Transport Administration’s regulations, and procurement laws. Optimizing the mobility of school children is thereby different from coordinating adult users and service providers. Questions about practical dilemmas were also raised, such as how the taxation of the new services would work, insurance, how to organize payments, and how privacy should be handled. In the same vein, it was brought to our attention that the interviewees felt they lacked juridical competence regarding interpreting laws about novel digital solutions like sharing platforms. The challenges involved in applying sharing platforms for delivering welfare services to residents in Swedish municipalities seem connected to the core of the state logic: democratic participation, responsibilities, trust, and restricted use for residents within the administrative borders, which can be challenged by the market logic.
3 CONCLUSIONS/FURTHER WORK

In this research, we explore possibilities for using digital platforms to share limited resources while maintaining the welfare mission that municipalities have for governing public funds. Many of the challenges mentioned revolve around laws surrounding municipalities and their obligations, but also the matter of privacy, as well as collaborations between private and public actors. Different institutional logics handle mobility and digital solutions differently. Digital platforms for mobility are not a universal fix. Municipalities with dispersed and small populations must also be studied, and sharing platforms may not be as useful for school children as for distributing packages. One important lesson is that a digital solution must be used for an identified local problem, and not just to show digital maturity. More research where Sweden is compared with other Nordic countries in which similar solutions are explored, but where there are different regulations for public transport, could be useful. Research could also explore the limits of sharing further, for example by comparing different countries in relation to digital sharing platforms for organizing public transport, like school buses. Another important issue is the possibility to copy and paste solutions developed in cities to rural areas. This further connects to the ambition of Agenda 2030 to ‘leave no one behind’, which is central in the state logic. There is a plethora of opportunities in terms of where the research and concrete experimentation can go and what can be accomplished regarding mobility, sharing resources and efficiency in municipalities. The question of how digitalization and sharing platforms affect and influence the search for better, safer, and more efficient welfare services will be important to study further.

ACKNOWLEDGMENTS

We are grateful for the funding received from the Kamprad Family Foundation for 2020-2023 for this research.

REFERENCES