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## All Change or Business as Usual? The Discursive Framing of Digitalized Smart Accessibility in Sweden

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### Abstract

In recent years, ideas related to digitalization have gained significance on the contemporary transport policy agenda. Based on discourse analysis of the digitalization agenda in Swedish transport policy, this paper investigates the ongoing formative phase of the emerging policy and planning area of digitalization and smart mobility. It examines and critically discusses the current discursive framing of digitalization in current transport policy and planning, and considers perspectives and meanings related to “smart” mobility and accessibility that are being established in strategic plans and policies for the Swedish transport sector. The empirical focus is on transport strategies and official reports developed at national level. The main findings indicate that digitalization is being framed as a rapid, unstoppable transformation process, which will lead to a range of positive outcomes such as reduced climate emissions, less congestion, improved accessibility, and a smoother and more resource-efficient transport system. According to the ideas and assumptions promoted in the current discourse, this transformation can only occur through stronger involvement of business enterprises. This governing strategy, or lack of governing strategy, makes it unclear how transport policy objectives are balanced against market and innovation interests. It also risks delegating the transition to sustainable mobility to less formalized and less transparent policy arenas that operate in parallel to, and partly outside, established planning and strategy-making processes.

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## 1. Introduction

In recent years, ideas of “smart” mobility and accessibility comprising e.g., intelligent infrastructure, integrated mobility services, automation and connected vehicles, digital platform technology, a shift towards usership instead of ownership of vehicles and new ways to provide accessibility with less travel have become important on the transport policy agenda (Lyons 2016, Marsden & Reardon (eds) 2018). Ideas of opportunities related to the digitalization of the transport sector are currently influential among politicians, policymakers, and planners with key responsibility for developing the transport system. From various sources, thoughts are presented about the possibilities that will follow from these ongoing developments (Marsden & Reardon 2018, Docherty 2018, Pangbourne et al. 2018). There are also experiments and other types of initiatives being carried out in cities and regions around the world, aimed at developing and demonstrating future mobility solutions (Jittrapirom et al. 2017, Smith et al. 2017).

This study was motivated by an interest in the contemporary shaping of the transport policy agenda, where new ideas regarding the opportunities of digitalization have gained significant traction. Recent works have identified a range of critical governance dimensions of the ongoing transition to “smart” mobility. One example is Docherty (2018) who discusses the key role of the state in ensuring that the transition leads to the creation and enhancement of public value and quality of life. In the same spirit, Pangbourne et al. (2018) stress the importance of generating deeper insights into the interests of private actors and the ability of public actors to regulate the ongoing developments. Several studies have warned that there is a risk that an “enabling” state, i.e. a state who leaves the main power to market actors (see Docherty 2018), may lead to a future with more difficulties to reach long term sustainability goals (ibid., c.f. Pangbourne et al. 2018, Lyons 2016). Other works discuss the need for more developed perspectives on how to balance the roles and interests of state, market and civil society and safeguard inclusivity and democracy (Hopkins & Schwanen 2018).

In this study, we have taken the emerging field of critical governance studies related to “smart” mobility as our main point of departure. Whereas existing works have already shown the importance of further exploring roles, relations and the power dynamics among distinct actors, we want to highlight the discursive framing of this policy area. The ideas and interpretations about transport-related problems and possible solutions that are being launched and consolidated today will have major impacts on transport policy for decades to come. As demonstrated by Stone et al. (2018) in their analysis of perceptions of automatic vehicles among Australian planners, there are already many implicit assumptions that frame this emerging policy area. We argue that it is important to critically reflect upon these assumptions. Analyzing the discursive formation of this policy area is therefore a critical task for researchers today.

In our work, we view the emerging discussion on digitalized “smart” accessibility and mobility as an ongoing struggle between different framings of the “problems” of the contemporary transport system, and between different ideas concerning a possible and desirable trajectory for the future. Some of the emerging ideas are clearly focused on disruptive innovation, i.e., creating something fundamentally different from the transport system we have today (see e.g., Markides 2006). Other ideas are more conventional, focusing on digitalization as a way to improve and upgrade individual mobility and accessibility, but without challenging the fundamental structures and social relations embedded in the established transport system.

The aim of this study is thus to examine and critically discuss the ongoing discursive framing of digitalization in contemporary transport policy and planning, specifically focusing on individual travel. The study is empirically focused on this policy agenda in Sweden, a country where there is currently extensive development and innovation work in the field of smart mobility. In particular, we explored the different perspectives and meanings related to “smart” mobility and accessibility that are being formulated and established in strategic plans and policies by major public actors within the Swedish transport sector.

Specifically, we aimed to answer the following questions:

- What are the central assumptions about digitalization and its role in transformation of the transport sector?
- What problems is digitalization intended to solve in the transport sector? In what way, for whom, and with what expected long-term consequences?
- What actors are positioned as key actors in the transformation process?

## 2. An emerging research field on smart mobility and accessibility

### 2.1. Mobility and accessibility

Mobility and accessibility are two of the most critical concepts in ongoing research and policy related to sustainable transport. In brief terms, *mobility* refers to the act or idea of moving, and to the cultural, experiential, and identity-related dimensions of moving (Cresswell 2006). *Accessibility*, on the other hand, shifts the focus from moving, or traveling, to the ability to access desired services, activities, and functions – with or without travel involved and without a bias to any specific mode of travel (Curtis 2008).

### 2.2. Sustainable and smart

In research and policy over the past decade, there has been increasing emphasis on the term *sustainable mobility* (Banister 2008). This concept, which has explicit ambitions to influence policy and planning in the field, clarifies the need for substantial transformation of the prevailing transport and mobility system if long-term sustainability goals are to be achieved. As noted by Banister (2008), achieving sustainable mobility involves, among other things, dedicated work on a substantial modal shift, a reduction in trip length per capita, and overall greater efficiency in the transport system. Other researchers emphasize the need to understand the complex structural/spatial, social, and cultural conditions for achieving sustainable mobility (Frändberg & Vilhelmson 2010).

In recent years, the discussion on sustainable mobility has been expanded to include ideas related to digitalization and smartness. As noted in previous works, the idea of “smart” is often not very clearly defined, but it brings a sense of new opportunities and progress in relation to societal ambitions for a more resource-efficient and sustainable transport system (Lyons 2016).

### 2.3. Accomplishing a smart transition

Our analysis contributes to the emerging literature on smart mobility and accessibility, where increasing numbers of studies within the sustainability transitions research field are examining aspects related to planning and governance (see e.g., Hodson et al. 2016). In previous works within the sustainability transitions research there is a strong focus on the importance of specific innovations, developed in so-called “niches”. According to the multi-level perspective (MLP), promising solutions (innovations) developed in protected spaces (niches) have great potential to contribute to a more radical and fundamental societal transition, if they can change specific regimes and more general, contextual landscape conditions (Avelino & Rotmans 2009). This reproduces a specific understanding of how radical societal change happens.

Transition research has been criticized for not taking sufficient account of specific conditions in different places and different fields of practice (Shove and Walker, 2007). Consequently, several recent contributions have focused more strongly on context-specific conditions that frame sustainability transitions (Temenos et al. 2017, Isaksson & Heikkinen 2018). Schwanen (2015) points out that, even if a specific innovation is successful in one setting, it might not have the same effect in other contexts. His case study of two British cities that have been comparably successful in achieving a modal shift shows that the impact of new mobility innovations depends on other mobility solutions in the same geographical area, power relations between different actors, planning ideals, and the shape of urban space and the surrounding environment. Other studies emphasize the importance of going beyond the focus on niches and paying more attention to regimes (i.e., “dominant” configurations of actors, structures, and practices) and landscape dimensions (i.e., more slowly changing factors like socio-economic conditions and overall thought structures) (e.g., Naess & Vogel 2012). It is argued that it is on the regime and landscape levels that the basic conditions for possible transitions are set (Avelino & Rotmans 2009, Naess & Vogel 2012).

The notion of “smart mobility” tend to generate positive images of future outcomes. At the same time, however, there is increasing awareness that many different potential smart mobility futures exist (Docherty et al. 2017, Gössling et al. 2018). This raises a need for public actors to step forward and steer the transition process so that both economic, environmental and social objectives can be satisfied (Docherty et al. 2017). In the present study, we applied a critical

perspective to the emerging literature on management and steering of smart mobility by exploring the ongoing framing of the policy agenda.

### 3. Method, material and analytical framework

The study is based upon discourse analysis of how the digitalization agenda is framed in the Swedish transport policy context. Sweden is an interesting case to explore for many reasons, for instance its high ambitions regarding ICT for sustainable development (Kramers 2014) and its history of radical and innovative approaches for sustainable transport – the schemes for congestion charging in Stockholm and Gothenburg being two well-known examples (Hysing & Isaksson 2015). However, Sweden is also a country with a powerful vehicle-producing sector (Falkemark 2006) and competing understandings of sustainable transport and mobility (Essebo 2013, Henriksson 2014). Experience has shown that radical policy measures often translate to more conventional practices (Isaksson & Richardson 2009).

Our analytical approach is inspired by Foucauldian discourse analysis (Foucault 1976). We regard discourse as a set of concepts, categories, and ideas – a way of talking about something that produces a particular version of how things are and “through which meaning is given to social and physical phenomena” (Hajer & Versteeg 2005, p. 175). According to the Foucauldian approach, norms and power relations are discursively produced, and social change is shaped by competition between differing discourses or “systems of meaning” (Sharp & Richardson 2001, p. 196).

Discourses are produced and manifested in policy rhetoric, institutional structures, practices, and events (ibid.). For Foucault, the relationship between knowledge and power is an essential dimension of discourse. This imply discursively produced “truths”, which makes certain actions possible (and others impossible) in different areas of policy. Thus, identifying how “truths” about a phenomenon are discursively produced is an essential part of discourse analysis (Foucault 1976).

In the present work, we use the concept of discursive storylines to lay bare the ideas upon which the emerging digitalization discourse is built, specifically connected to the policy area of individual transport and mobility. Hajer (1995) suggests that discourses consist of *storylines*, i.e., condensed narratives that allow a coherent line of understanding of a subject. Such storylines can consist of metaphors, analogies, or emotive appeals. They help to reduce the complexity of an issue or problem, and can be used as “tropes”, providing stakeholders with arguments for their lines of action. They also provide a narrative for joint action. Vigar (2002, p. 25) uses the concept of storylines for “disentangling policy discourses”, where identifying storylines helps identify the substantive content of discussions arising in policy arenas.

Empirically, the present work was based on transport strategies, official reports, and proposals for new regulations produced by actors at the national policy level. Moreover, we included collaborative roadmaps and white papers on initiatives aimed at bringing together actors intended to drive the digitalization process forward in Sweden. All documents analyzed have been produced in the past 1-3 years and are chosen to capture the emerging field of policy related to digitalization and transport. They are all written in Swedish and translations of excerpts etc. has been made by the authors (Table 1).

Table 1. Documents studied in the present discourse analysis

Title	Organization (publishing org. in bold)	Year	Document type	No. of pages
Strategic Plan for Transition to a Fossil-Free Transport System	<b>Swedish Energy Agency (SEA)</b> ; Swe. Environmental Protection Agency; National Board of Housing, Building and Planning; Transport Analysis; The Swe. Transport Agency; Swe. Transport Administration	2017	Strategy	64
Strategic Direction Decision Basis for Transport Infrastructure Planning for the Period 2018-2029	<b>Swedish Transport Administration (STA)</b>	2015	Strategy	121
Proposal for National Plan for the Transport System 2018-2029	<b>STA</b>	2017	Plan	270

Possibilities of Digitalization – Memo to National Plan for the Transport System 2018-2029	<b>STA</b>	2017	Plan appendix	40
Research and Innovation – Memo to National Plan for the Transport System 2018-2029	<b>STA</b>	2017	Plan appendix	28
The Road to Self-Driving Vehicles – Tests and Demonstrations	<b>Swedish Government</b>	2016	State Public Report	168
Taxi and ride sharing today, tomorrow and the day after tomorrow	<b>Swedish Government</b>	2016	State Public Report	485
Sharing Economy – On the Terms of the Users	<b>Swedish Government</b>	2017	State Public Report	343
From Value Chain to Value Cycle – How Sweden Gets a More Circular Economy	<b>Swedish Government</b>	2017	State Public Report	371
For sustainable digital transformation in Sweden – a Digital Strategy	<b>Ministry of Enterprise and Innovation</b>	2017	Strategy	39
Fact sheets and status reports on The Government Partnership Program for the Next Generation’s Travel and Transport (NGTT), 2016-2018	<b>Ministry of Enterprise and Innovation</b>	2016-2018	Fact sheets (1); status reports (4)	~ 10
Combined Mobility as a Service in Sweden. Roadmap	Written by representatives for KTH Royal Institute of Technology, Chalmers University of Technology, RISE Viktoria, Samtrafiken and Region Västra Götaland, commissioned by NGTT / <b>Ministry of Enterprise and Innovation</b>	2017	“Roadmap” / White paper	22
Swedish Mobility Program – White Paper	<b>Samtrafiken</b>	2017	“Roadmap”/ White paper	44

The documents all relate to policy in the sense that they describe and/or prescribe the development of digitalization in relation to the transport sector. However, they are different in terms of intent and authors. While some documents are written by civil servants from public authorities’ others are written by researchers with a special commission from the Swedish government. One document is produced by Samtrafiken, which is a partnership organization owned jointly by public transport authorities and transport operators. Some of the documents are based on several years of investigation while others have been produced quite rapidly. This means that some of the documents are based on evidence, investigations and previous research while other are based more broadly on visions, ideas and describe ongoing discussions, results from workshops etc. The discursive approach adopted in the paper imply that it is not on what grounds the statements or the reasoning are built on that is of interest for the analysis, but rather which discursive “truths” that are produced as a whole.

The analysis, which was jointly performed by the authors, was carried out in three steps. First, we divided the material between us for a close reading where we individually identified ideas, concepts and statements in the different documents. In the next round, we compiled the results from the first round of reading, and conducted a joint aggregated analysis on these, which led to identification of key themes recurring throughout the material. In the last step, we returned to the empirical material and re-read it in the light of these themes, to identify the implicit ideas that constitute key organizing principles of the discourse (i.e., the storylines). To ensure reliability, each step was introduced with a seminar where we thoroughly discussed 1) the analytical framework and aim of the analysis and formulated a joint “code scheme” for the analysis, 2) the result from the first close reading and 3) the re-reading of the material. During the seminars we discussed the general impression, our initial ideas and presented the material with page-referenced quotes for each other. In this way, a coherent analysis with inter-coder reliability was carried out.

## 4. Central themes

### 4.1. A transformation is underway

One of the most prominent themes in the policy documents relates to the idea of ongoing transformation. With reference to global trends such as digitalization, automation, urbanization, and the sharing economy, the texts imply that a change in the transport sector is already underway. A report on a public investigation initiated by the government regarding autonomous vehicles states that “The development is very rapid, and the use of digital services is increasing. Sweden is at the forefront of exploiting the potential of digitization.” (Swedish Government 2016, p. 32) Another example is the white paper on The Swedish Mobility Program, which states that “Automation, digitalization, and urbanization are driving a transformation of the entire global automotive industry, and thus the transport industry, into something new” (Samtrafik 2017, p. 3).

The transformation is framed as rapid, strong, and unstoppable. The overall impression is that this is only the beginning, and that more will follow (Swedish Government 2016, Samtrafik 2017, Ministry of Enterprise and Innovation 2017). As stated in one of the documents, there is now a choice to either “reactively follow what’s happening and adapt to it /.../ or actively study the development and, as far as possible, create our own future.” (Samtrafik 2017, p. 3).

### 4.2. A promise of a smooth, resource-efficient, and sustainable transport system

Altogether, the documents convey pronounced optimism and portray digitalization as leading to a thorough and comprehensive transformation of the transport system, based upon new “smart” services for mobility and accessibility. Ultimately, it is assumed, digitalization will bring a smoother and more resource-efficient transport system with reduced climate emissions, less congestion, and improved accessibility. As an example, the Swedish Transport Administration’s (STA) plan for development of national transport infrastructure for the next 12 years states that:

Digitalization means new possibilities and challenges for the transport system and for society. It considers completely new ways of using the transport system, but also new ways of solving today’s tasks. (STA 2015, p 10; cf. Swedish Government 2017a)

These formulations create the impression that the process is revolutionary but cannot yet be fully grasped. The texts refer explicitly to a range of problems with the current transport system. One of the most prominent of these problems is the current level of private car use, where new mobility services are expected to challenge the dominant role of individual car travel (Swedish Government 2016, 2017a). The current transport system is referred to as inefficient and unsustainable due to its dependence on fossil fuels, but also because it represents such an “inefficient” system in terms of capacity and use of space and energy:

The average car is used only a fraction of the time and, furthermore, has very low energy efficiency. Roads, intersections, and parking occupy a large share of the most valuable land in our cities and the production of cars requires considerable amounts of material and energy. (Swedish Government 2017a, p. 199)

Other documents state that it would be positive in terms of social, economic, and ecological sustainability if the proportion of privately owned cars were to decrease. Digitalization, in combination with new ways of sharing, is framed as a key means of achieving a shift to a more resource-efficient and sustainable transport system (see e.g., Ministry of Enterprise and Innovation 2017b, Samtrafik 2017). The benefit for the individual will be a wider supply of mobility services. One example is the government inquiry *The Road to Self-Driving Vehicles*, where it is stated:

Within the transport sector, new technology means that the possibilities to jointly plan and travel together are simplified, which has contributed to an increase in services such as car pooling by individuals. Thereby, a greater and more varied supply of car travel emerges. (Swedish Government 2016, p. 33)

The positive framing of “smart” mobility and accessibility services means that potential problems with the ongoing development are discursively marginalized. The term “risk” appears in several of the documents, but there is a lack of in-depth reasoning on this matter. The type of risk that is most in focus concerns data security and integrity, which is discussed and identified as an issue that needs more investigation in the national infrastructure investment plan proposal (STA 2015, STA 2017), as well as in the newly developed national Digital Strategy (Ministry of Enterprise and Innovation 2017) and in the report on taxi and ride sharing (Swedish Government, 2016a). Other potential risks relate to unintended consequences such as rebound effects that might eventually lead to increased traffic and urban sprawl. Rebound effects are mentioned in the government report on self-driving vehicles (Swedish Government 2016) and in the strategic plan for transition of the transport system (STA 2017), but only very briefly and in a way that assumes that these risks will be easily managed. However, the report on taxi and ride sharing emphasize the need for measures that limit car use as a way to handle rebound effects (Swedish Government 2016a, p. 308).

#### *4.3. A change driven by innovation involving the public sector, industry, and academia*

The empirical material also conveys ideas about the way in which digitalization of the transport system will be realized in practice. There is a strong belief in the role of innovation, demonstration projects, and pilots for enacting a more rapid transition. In this context, collaboration appears as a key feature. The Swedish Government Partnership Program for the Next Generation’s Travel and Transport is a concrete illustration. This program is based upon a model of triple helix collaboration, where representatives from public authorities, academia, and industry are given the task of launching activities that can support transformation. The industry's experience of innovation is often emphasized as being of key importance. For instance, it is stated that:

*.../ we need the innovation capacity of the business sector to find necessary solutions and ways forward. Through collaboration between public actors, businesses and university, college and institutes, we gain more out of the investments that are made. (Ministry of Enterprise and Innovation, 2017, p. 1)*

Similar views emerge in the Swedish Transport Agency’s writings on the possibilities of digitization, focusing on the importance of continued research and development (R&D) work in collaboration between STA and partners from the academy and industry. The reasoning builds on an assumption of consensus and common interests among the parties. One illustration is from the R&D section of the national plan for the transport system, where emphasis is given to the need for “[...] joint targets and shared maps regarding how the objectives should be reached” (STA 2017, p. 91).

#### *4.4. Public actors must adapt*

The public sector is also framed as important for the ongoing transformation of the transport sector, but in a different way. On the one hand, it is emphasized that the public sector should take a “proactive role in driving the development” (STA 2017, p. 92). On the other hand, the material gives the impression that public sector actors should take a more supportive position and facilitate innovative initiatives that are expected to be developed by entrepreneurs and enterprises. It is stressed that current collaborations and networks within the transport sector will have to be complemented with new constellations involving completely new actors. As an example, the national plan for transport infrastructure sets out that digital road infrastructure complementing the physical may be constructed and operated by new actors (STA 2017).

In some of the documents, particular attention is paid to the regional public transport authorities, which currently have a strong position due to their formal responsibility for shaping the system through strategic planning of the public transport network and decisions on the level of publicly procured public transport. The regional public transport authorities also decide on ticket prices and manage ticket sales of subsidized transport services. In several of the documents we scrutinized, their position is portrayed as problematic, as it is considered to hamper the potential of digitalization, not least the vision of rapid emergence and the creation of new combined mobility services. The Swedish Mobility Program highlights the importance of regional public transport authorities taking the step to make their offer available for others, which among other things means allowing resale of their tickets by third parties, a step referred

to as “a prerequisite for market development” (Samtrafikens 2017, p 30). The public transport authorities have however so far retained control of ticket sales. This is not very surprising: ticket sales and pricing constitute a key part of their business. In practice, it is one of a few issues that they presently control themselves.

#### 4.5. From traveler to customer

The need for a change also applies to citizens in general. Even though there is relatively little explicit reasoning about travelers, some clear ideas and assumptions can be discerned. For example, the Swedish mobility program describes the possibility:

...to satisfy, by pressing a button on the phone, one’s need for travel or transport with a variety of services such as public transport, pool cars, taxi, bicycle, joint travel and sharing services, and new logistics services. (Samtrafikens 2017, p. 4)

The formulation is based upon, and reproduces, an image of the traveler as a person who is connected, has a smartphone and has a wide range of services to choose from. Furthermore, travelers are assumed to be capable and willing to plan their travel more or less on the go, which indicates that they are not bound to any regular routine, but free to adjust to what is appropriate for the specific day and hour. This perception of the user is closely connected to the paradigm of “the rational man”, widely used in mainstream transport planning (c.f. Levy, 2013).

The intention of these statements is probably to convince the reader that there will be no need to own a car in the future. But it also indicates that the user will consume services instead of products. Thereby, it is the traveler as a customer that is of interest if the transition to sustainability should be realized as suggested. This is for example expressed in the report on circular economy:

The purpose of creating criteria that distinguish car pools from car hire services is to stimulate the type of rental services that provide companies and the public with the most flexible availability of cars without having to own it. (the Swedish government 2017a, p. 211).

The image of the traveler as a consumer that acts to maximize her utilities is all-encompassing. However, the report on sharing economy offers an alternative understanding. An explicit aim of the report is to from a user perspective describe why people share services and how sharing can be facilitated. Here, one typical user is described:

[...] A frequent user of the GoMore transport service says that "the social is very important". You support others, it's not just about money, but much about the social bit. It's fun to offer support. After all, you meet strangers, and you have the chance to become good friends. (Swedish Government 2017, p. 130)

Similar reasoning can be found in the report on taxi and ride sharing, which suggest that ride sharing should continue to be considered a non-commercial service and have positive effects on social aspects on sustainability, as well as ecological and economical. aspects Also, in this report ride sharing is put forward as important for rural areas as an alternative for people who lacks driving license or a car (Swedish Government 2016a, p. 296). In the other studied documents, users are typically understood as not only car drivers but also car owners living in metropolitan areas.

Altogether, the smart app plays an important role as a mediator, as it will visualize and customize the different travel choices users can make, through showing where there are available (shared) cars or the nearest bus stops and timetables in real time. The smart app is more than a symbol of digitalization – it is the actual embodiment of the promise of digitalization as the “game changer” in the quest for a future smart and sustainable mobility regime.

## 5. Four storylines that shape the smart accessibility discourse

The themes identified above are key parts of the emerging policy agenda about digitalized and “smart” mobility and accessibility. In this section, we present the storylines that we found these themes to be built upon and shaped by,

i.e., the underlying principles and generative narratives that serve to give meaning and create coherent line of understanding.

### 5.1. Technology determines transport developments

The first storyline that we have identified is the *technology determinist* approach that permeate most of the reasoning in the policy documents. Almost all the studied documents frame the new technical possibilities as an unstoppable force which will undoubtedly transform the transport system. This is not surprising, because we already see clear signs of such a development – but it has not taken place by itself. Instead, the developments so far are linked to specific projects and initiatives driven by private or public actors. What is striking is the great confidence that technology will solve things for the best and the lack of reflections regarding the role and responsibility of public authorities to not only “enable” the development but also ensure that it supports the realization of overall policy goals. That users are thought to adopt the new mobility services solely because they exist (see above) is an expression of the determinist storyline.

### 5.2 Mobility as a market object

*Marketization* is another storyline that gives logic and meaning to the ideas of digitalized “smart” mobility and accessibility. The discursive framing conveys a strong belief in innovation and entrepreneurship as driving forces for attaining opportunities of digitalization. This emerges clearly in e.g., the triple helix arrangements and the focus on private innovation capability. Through the marketization storyline, certain actors are understood to be more suited to drive the ongoing transformation. As shown in our empirical analysis, it is taken as self-evident that market-driven initiatives are best suited to lead the transition, while the public sector should take a back-seat position, adapt to the expected development but also actively enable and support it – for instance by giving up some of its current key responsibilities. The marketization storyline can give organizations with individual economic interests an advantageous position over organizations working for the public good.

In line with the marketization storyline, citizens are framed as consumer subjects who can, at least on a discursive level, easily be steered through developments of smart apps and the provision of new mobility services. This framing constructs users as passive and reflects a common lack of knowledge about the complexities of everyday mobility for which transport planners have been criticized. Mobility is always interlinked with individual restrictions, lack of capabilities and resources (Temenos et al. 2017).

### 5.3. Consensus and collaboration

The third storyline relates to a strong belief in joint ideas and interests, enabling *consensus*. Collaboration as a governing mode is a well-known theme within public transport research (see e.g. Paulsson et al. 2016). In the policy documents, the collaborative ideal underlies recurring assumptions that all stakeholders and actors share similar interests, one example being the expectation on public actors to relinquish their current commitments and open up for e.g., third-party sales. As mentioned above, this has proven to be a challenging proposal for the public transport authorities, but in the documents it is never referred to as something that would be difficult. Instead, it is described as an opportunity and a crucial step forwards, for the benefit of all. The strong belief that commercial carpools offer the best solution for replacing privately owned vehicles is another example of an issue that could give rise to conflicts but is not questioned.

### 5.4. Mobility as usual

In policy-oriented research on sustainable mobility, it is regarded as common knowledge that, in order to realize a transition to a sustainable transport system, three different sets of changes must occur: transport must become more energy-efficient, there must be a modal shift from individual car use to sustainable modes of transport, and overall travel volumes must be reduced (Banister, 2008). However, reduced travel as a way of stimulating disruptive

innovation of the current transport system is seldom referred to explicitly as a possible or even desirable objective in policy documents in focus. An outcome of the current framing of the ideas of new “smart” mobility is that it will enhance accessibility, but not limit mobility. Instead of opening up a narrative of fundamental change, there is discursive closure around ideas which serves to promote and reproduce a conventional approach to mobility and accessibility. As noted in previous research, the role of government/policy is then to cater for the imagined user’s expectations of continued high mobility based on high speed and individual flexibility (Essebo 2013).

## 6. Concluding discussion

Our exploration of the emerging policy area on digitalized “smart” mobility and accessibility in Sweden has led to several insights. When it comes to the overall framing of this policy area, that there is a sense of ongoing change and transition of the transport system, and it is assumed that it will lead to positive outcomes. The policy documents express a confidence in technology and market developments, while the role of public actors is framed as supporting and enabling initiatives from private industry. There is a belief that the transition to “smart” mobility will benefit everyone.

In practice however, the optimistic and consensus-oriented framing of this emerging policy area conceals a range of difficult issues. As stated in previous research, digitalized and “smart” mobility and accessibility may lead to a wide variety of consequences depending on how it happens. There is a chance that it will support a more sustainable transport system – but only under very special circumstances (Docherty 2018, Pangbourne et al 2018, Reardon & Marsden 2018). Therefore, it is worrying to note that the current policy debate contains very few reflections about risks and challenges related to the ongoing development. There are no elaborated arguments regarding what the “smart” technology is aimed at, in specific terms, in different geographical settings, for different groups in society, nor how it affects the possibility to accomplish long term goals of sustainable development. There is no in-depth reasoning about the need for the public sector to take the lead for the sake of the public good.

As we see it, there is a chance that the ongoing transition to digitalized and “smart” accessibility will lead to positive outcomes in terms of sustainable accessibility. However, as emphasized by Marsten & Reardon (eds) (2018), this will not happen by itself. There are many issues that need to be addressed to realize that vision, and there is a need for in-depth knowledge on how specific mobility services work for various types of users in various socio-spatial and cultural settings. There is also a need to know more about what this implies from a land-use planning perspective. And what about the equity dimensions - who are the winners and losers and how should equity problems be managed? According to what rationale should platforms be designed if they shall support the realization of overall policy aims? What role should public actors have in governing the development? There is a lack of explicit discussion on these, and other political issues. Similar to Hopkins & Schwanen (2018) we conclude that what we see coming through in the policy documents is a “post-political” policy agenda in which key political conflicts are hidden. With reference to Mouffe (2005), who emphasizes conflict and opposition as vital parts of democracy, we argue that there is a need to develop the policy discussion so that conflicts and difficulties comes out more clearly. Instead of the current framing around ideas of consensus, win-win, technology determinism and marketization, we see the need for an increased sensitivity to, and developed reflection on political matters. If not, there is a risk that the framing of this emerging policy area will lead to a further consolidation of the power relations that has shaped transport policy during the post-war era, with a strong focus on the transport industry – now accompanied by the ICT industry. The themes and storylines identified support a transport system based on a high, or even growing, degree of individual mobility and an increased influence of industry and business enterprises. At the same time, the role of public actors in steering development is undefined. This governing strategy, or lack of governing strategy, makes it unclear how transport policy objectives are balanced against market and innovation interests. It also leaves the transition to sustainable mobility to less formalized and transparent policy arenas that exist in parallel to, and partly outside, established planning and strategy-making processes.

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