NAVIGATING THE FUTURE OF CAR SHARING

How anticipation shaped the strategic development of MyWheels as a niche platform

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Abstract

This thesis investigates how anticipation has shaped the development of the Dutch car-sharing platform MyWheels and its responses to regime pressures within the broader transition towards sustainable mobility. This research focuses on the internal development of a platform over time and how it strategically adapts to a changing environment. Central to this analysis is the concept of anticipation: the way in which actors use expectations about the future to guide decisions in the present. Using an innovation biography approach, the historical trajectory of MyWheels is reconstructed from its grassroots origins in 1993 to its current role as one of the largest car-sharing platforms in the Netherlands. The analysis draws on document analysis of 44 news articles and semi-structured interviews with four platform employees. The development of MyWheels is examined through the lens of the multi-level perspective (MLP) and anticipation theory, with particular attention to two distinct modes of anticipation: anticipation for the future (AfF) and anticipation for emergence (AfE). The findings show that MyWheels' evolution cannot be explained as linear adaptation, but as a dynamic interplay between anticipation for the future and anticipation for emergence. Early peer-to-peer sharing reflected community-based experimentation and adaptive responses to emergent opportunities, while the introduction of smartwheels and centralization signaled more structured, future-oriented planning for growth and reliability. The shift to a for-profit structure and partnerships with municipalities and technology actors illustrated how long-term strategies opened pathways for institutional alignment and innovation. At the same time, the later reintroduction of local circles and city managers demonstrated the continuing importance of emergent, adaptive approaches to maintain legitimacy and user engagement. By tracing how anticipation for the future and anticipation for emergence shaped these strategic responses, the thesis demonstrates that anticipation is not static but changes in function as niche actors scale and professionalize. This analysis advances anticipation research by offering one of the first empirical studies to show how different anticipatory logics co-exist and interact within an organizational trajectory. This way it strengthens anticipation research by moving beyond abstract definitions and showing how anticipation can be studied as an evolving and open concept.

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Chapter 1: Introduction

Transportation has a significant impact on environmental sustainability, relying on large infrastructure while being one of the fastest-growing economic sectors and a major contributor to air pollution (Guo et al., 2020). Currently, the transportation sector is responsible for 13% of global greenhouse gas (GHG) emissions and 23% of total energy-related emissions (Mohareb & Felix, 2017). In the European Union alone, transport warrants nearly 30% of total GHG emissions.

In 2007, the European Union emphasized the need for a cultural shift in mobility to reduce reliance on private motorized transport and to encourage more sustainable forms of transportation (European Commission, 2007). The need for such cultural change recognizes that infrastructure and policy changes alone do not suffice; altering societal habits and attitudes towards mobility can be seen as crucial for achieving long-term environmental and social benefits. That means moving away from the culturally ingrained preference towards private vehicles (Cattaneo et al., 2022).

One demand-side solution that has the potential to reshape urban mobility, is shared mobility (Arbeláez Vélez, 2022). Shared mobility allows users to rent or share vehicles such as cars, bikes or scooters for short periods of time, reducing reliance on private ownership (Machado et al., 2018). Among these, car sharing is named as a pivotal strategy for decreasing the number of cars per capita and with that lowering emissions and improving urban sustainability (Vătămănescu et al., 2024). While carpooling and sharing cars among friends, family and neighbors have existed for decades, digital platforms have enabled new and bigger models of shared transport, including business-to-consumer and peer-to-peer car sharing. (Arbeláez Vélez, 2022).

Cattaneo et al. (2022) evaluated urban mobility solutions and found that sharing-based hybrid solutions such as car sharing, offer the most environmentally sustainable, practical and desirable outcomes. However, environmental concerns are not the only driver behind the rise of shared mobility. Some argue that market-mediated access models are gaining popularity due to broader technological and economic shifts (Bardhi & Eckhardt, 2012). The growth of aforementioned digital platforms, like Greenwheels and MyWheels in car sharing, has facilitated a transition towards access-based consumption, where goods and services are increasingly shared rather than owned (Frenken & Schor, 2017). Many advocates and sharing organizations emphasize sustainability as a core aspect of their vision and operations, as well as how it can foster social connections through digital platforms and encourage entrepreneurship (Botsman and Rogers, 2011).

1.1 Research problem statement

As much as the sharing economy is praised for its sustainability and as an alternative to individual ownership, the concept has also gained a lot of criticism (Heinrichs, 2013). Felson and Spaeth (1978) described sharing as a communal and peer-to-peer interaction between family and friends, that was namely done because of

functional interdependencies. Over time, this type of collective utility expanded beyond close social networks to a broader market. Instead of being rooted in social bonds, interdependencies are now mediated by intermediary firms that facilitate transactions between peers (Schor, 2016). As a result, sharing has shifted from a localized social routine to a business-driven model where companies develop new peer-to-peer access systems, creating a triadic structure in which consumers access goods or services from peers through an intermediary. This commercialization of the sharing economy has sparked an ongoing debate about its true nature and impact (Lagendijk & Wiering, 2024).

Bardhi & Eckhardt (2012) for example argue that the concept of sharing now primarily revolves around profit-driven business models that maximize consumer access and efficiency, which ultimately results in it serving more economic than environmental or social goals. This may stimulate higher levels of consumption and emissions by encouraging more frequent use of shared goods (Pouri, 2021). In the case of car sharing, this paradox is particularly evident. While car sharing may reduce private vehicle ownership and emissions under certain conditions, it can also lead to an increase in the number of kilometers a car travels and greater reliance of users on cars than on public transport (Nijland & Van Meerkerk, 2017; Baptista et al., 2014). However, despite these contradictions, car sharing continues to grow. New platforms are emerging and existing ones are still expanding their fleets, user bases and partnerships. The European shared mobility market is projected to keep growing steadily over the next decade, driven by digitalization, urbanization and shifting consumer preferences (PwC, 2019). In the Netherlands, the leading car-sharing platforms is MyWheels, a platform with more than 2500 cars throughout the country (The Sharing Group, 2022).

As mentioned, much of the current debate focuses on the outcomes of car sharing (Baptista et al., 2014; Arbeláez Vélez, 2024; Nijland & van Meerkerk, 2017). However, fewer studies have examined the internal evolution of these platforms: how they learn, adapt and make decisions in response to changing conditions (Bocken et al., 2019). As platforms operate within complex and often resistant systems dominated by private car ownership and regulation in favor of that, their ability to scale sustainably may depend not only on external factors, but also on how they anticipate and respond to both constraints and opportunities (Meelen, Frenken & Hobrink, 2019). This thesis therefore focuses on the development of the Dutch car sharing platform MyWheels. Rather than assessing whether car sharing is good or bad, this research investigates how a platform like MyWheels navigates its complex environment, how it adapts and repositions itself and what this reveals about the potential for car sharing to grow as a sustainable alternative in urban mobility.

1.2 Research aim and research question(s)

This research aims to understand how the car-sharing platform MyWheels has developed over time and how anticipation has influenced its responses to regime pressures from the broader mobility system. By tracing key shifts in MyWheels' developmental journey, this thesis explores how different forms of anticipation have

shaped its path and what this means for its potential to grow and contribute to a more sustainable form of urban mobility. The research question guiding this research is therefore:

"How has anticipation shaped MyWheels' strategic responses to regime pressures over time and how have these responses influenced its development as a niche innovation in sustainable mobility transitions?"

- **SQ 1:** *How has MyWheels evolved since its founding and what major shifts and pivots have marked its development over time?*
- **SQ 2:** *What regime pressures have influenced MyWheels and how have they shaped its development?*
- **SQ 3:** *How are different types of anticipation reflected in MyWheels' strategies and how have they influenced its responses to regime pressures?*

1.3 Societal and scientific relevance

1.3.1 Societal relevance

Despite the promise of car sharing being a sustainable alternative to private car ownership, its societal impact remains limited (Nijland & Van Meerkerk, 2017). This dominance of the private car is not only due to a lack of options or user interest, but a result of institutional and policy misalignments that constrain the development and integration of car-sharing initiatives (Docherty, Marsden & Anable, 2018). As a result, platforms often shift from socially motivated, community-based initiatives towards commercially oriented services as a response to a lack of structural support and coherent regulation (Fraanje & Spaargaren, 2019).

This thesis contributes to a better understanding of this mismatch between the potential of shared mobility and the reality of the environments it operates in. Additionally, it underscores the importance of reflexive and adaptive governance in sustainability transitions, a perspective that has been widely advocated but insufficiently implemented (Docherty et al., 2018). Exposing how niche innovations evolve under real-world pressures can support more deliberate and effective policy interventions (Schot & Steinmueller, 2018). This research provides such exposure, making it relevant for policymakers aiming to create conditions for mobility innovations that serve the public interest and their sustainability goals.

1.3.2 Scientific relevance

Scientifically, this thesis contributes to the growing body of literature that critically examines the transformative potential of shared mobility within sustainability transitions (Rabbit & Ghosh, 2016; Baptista et al., 2014; Nijland & Van Meerkerk, 2017). In recent years, many studies have explored the environmental and behavioral outcomes of car sharing, including its impact on car ownership, travel behavior and overall emissions (Bardhi & Eckhardt, 2012; Frenken & Schor, 2016; Pouri, 2021; Botsman & Rogers, 2010). In addition, others have raised concerns about the corporatization of (car) sharing platforms and the risk that

profit motives may degrade their sustainability (Martin, 2016; Frenken, 2017; Lagendijk & Wiering, 2024). While these insights show us the possible promises and pitfalls of the sharing economy, a lot of the literature remains focused on the outcomes of sharing instead of the process of platformization itself. As a result, the internal dynamics of car-sharing platforms, specifically how they make decisions or adjust strategies in response to external influences, remain underexplored (Fraanje & Spaargaren, 2019; Bocken et al, 2019). This thesis addresses that gap by offering an actor-oriented analysis of MyWheels development. In particular, it contributes to a growing interest in how niche actors evolve in response to regime dynamics, not just through technological innovation, but also through organizational shifts (Meelen, Frenken & Hobrink, 2019).

This is done methodologically, through an innovation biography, which traces the historical trajectory of MyWheels from its grassroots phase until now (Keaney et al., 2018). This approach enables a detailed reconstruction of how the platform evolved over time as it zooms in on key events, strategies and collaborations. At its core, the innovation biography highlights how knowledge moves through time and space and influences the development of MyWheels within its own context (Butzin & Widmaier, 2016). This fits with calls in transition studies for more attention to agency, temporality and strategic navigation (Quay, 2010). In addition, this research also contributes to sustainability transition studies by introducing the lens of anticipation. Anticipation, as conceptualized by Miller and Sandford (2019) and Scarano (2024), refers to how actors 'use the future' to guide action in the present through planning and adaptive sensemaking. While anticipation has been discussed in futures literacy, its application to niche actor development in socio-technical transitions remains limited. By linking anticipation to the multi-level perspective theory of Geels (2002), this thesis offers a novel conceptual integration that can help explain how actors within a niche respond to regime pressures over time.

1.4 Thesis Structure

In the next chapter, a literature review will be presented and the theoretical framework for the research will be conducted. It begins by positioning the thesis within existing research on the sharing economy, platform governance and sustainability transitions. Additionally, all relevant concepts will be operationalized in order for them to be applied to the theoretical framework of the multi-level perspective and anticipation. These frameworks help to build the basis to analyze how the car sharing platform MyWheels navigates regime dynamics and future uncertainty. The third chapter outlines the methodology, including the research design, data collection methods and analytical approach. Chapter four presents the innovation biography, where the development of MyWheels from its founding until now (2025) is set out, this chapter answers the first subquestion. Chapter five contains the results and empirical findings, structured around the two remaining subquestions. The last chapter concludes with the answer to the main research questions, which is followed by a discussion of key insights, theoretical contributions and implications for future research.

Chapter 2: Literature review and theoretical framework

This chapter establishes the theoretical foundation for this research on car sharing, focusing on its alignment with environmental sustainability. First, it critically reviews relevant academic literature and policy contexts related to car sharing. Next, it introduces the multi-level perspective (MLP). Additionally, the theoretical framework of anticipation will be discussed, with a clear distinction between anticipation for the future (AfF) and anticipation for emergence (AfE). By introducing and explaining the theoretical framework of this thesis, its theoretical relevance to the research question will become clear. Finally, this chapter will operationalize key theoretical concepts, outlining the analytical framework that will guide the study's methodology and analysis.

2.1 Critical review of academic literature and policy context

2.1.1 Conceptualizing the sharing economy

In order to understand the impact of the sharing economy and shared mobility on the environment, it is important to understand what the sharing economy is and in what realm of the sharing economy car sharing lies. The sharing economy, often framed as a sustainable alternative to traditional ownership models, has also been widely debated in academic literature (Acquier, Daudigeos & Pinkse, 2017; Pouri, 2021; Frenken & Schor, 2017; Lagendijk & Wiering, 2024). While the term *sharing* suggests collaborative and non-market transactions, many sharing platforms have evolved and now operate under market-driven models. This results in a fragmentation in the field: What is shared? Who is sharing? How is sharing organized? (Frenken & Schor, 2017).

Acquier, Daudigeos and Pinkse (2017) present an overview of various narrow and broad definitions of the sharing economy, highlighting its inherently contested and expansive nature. Navigating between these two extremes is essential to effectively map diverse perspectives. This is achieved through the development of a framework comprising three core dimensions: the access economy, the platform economy and the community-based economy (see figure 1). Each core represents a distinct logic and set of promises, but also paradoxes and challenges.

The access-based economy focuses on resource optimization by facilitating temporary access instead of ownership. It is based on the idea that people do not need to own goods to benefit from their utility, they just need access (Bardhi & Eckhardt, 2012). Within the access economy, fits the definition that Frenken and Schor (2017) operationalized for the sharing economy: *"consumers granting each other temporary access to under-utilized physical assets ("idle capacity"), possibly for money"* (p. 4-5). However, Lagendijk & Wiering argue that the utilization of idle capacity represents only one aspect of the broader sharing phenomenon, as the collaborative and sharing economies also include the shared use of goods and services offered by businesses, not just peer-to-peer exchanges.

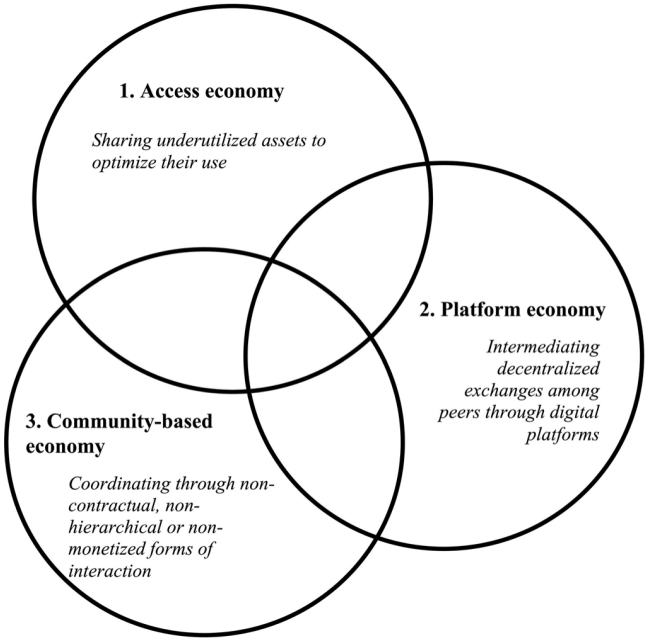
Main challenges for the access economy are moral hazard and Jevons' paradox. Moral hazard happens because of the lack of identification of users with the shared product, weak community based social control and negative reciprocity in cases of misbehavior (Acquier, Daudigeos & Pinkse, 2017). Jevons' paradox states that increasing the efficiency of resource use often leads to higher overall consumption of that resource rather than a reduction, as cost savings and increased accessibility might drive greater demand (Alcott, 2005).

The platform economy refers to economic activities facilitated by digital platforms. These platforms enable private individuals to 'post' their products and/or services and connect them to possible users (Sundararajan, 2016). By ensuring convenient and efficient transactions, platforms help build trust between owners and users through mechanisms like peer reviews, verification systems and secure payment structures (Frenken & Schor, 2017). However, while early collaborative consumption models were largely community-driven, the rise of digitalization and platform-based business models has fundamentally transformed the nature of these exchanges (Schor, 2016). As platforms scaled up, their original promise of decentralization and user empowerment has increasingly clashed with the profit-driven motives of platform owners. Many digital platforms now operate with corporate governance structures, prioritizing profitability over sustainability (Lagendijk & Wiering, 2024). This creates a fundamental paradox, while platforms promote market disruption by enabling alternative consumption models, they simultaneously scale up and centralize control, leading to the rise of technological giants like Airbnb and Uber. These companies leverage their position to extract the majority of value generated by independent workers and users, creating power imbalances and economic injustices (Martin, 2016).

The community-based economy is built on non-contractual, non-hierarchical and non-monetized exchanges (Benkler, 2004). It emphasizes trust, reciprocity and social bonds rather than market-driven transactions. Challenges for the community-based economy lie in its limited potential to scale up, as they rely on strong local trust networks and expanding beyond these small communities might dilate trust and participation (Acquier, Daudigeos & Pinkse, 2017). Communal models frequently end up delegating sharing applications to for-profit companies, with digitalization playing a key role in this shift. As technology advances, sharing practices have increasingly been integrated into high-tech businesses, introducing commercial elements into transactions that were originally non-profit (Lagendijk & Wiering, 2024).

Figure 1

Three organizing cores of the sharing economy



Note. From 'Promises and paradoxes of the sharing economy: An organizing framework,' by Acquier, Daudigeos and Pinkse (2017). *Technological Forecasting and Social Change*, *125*, 1–10. https://doi.org/10.1016/j.techfore.2017.07.006

2.1.2 Car-sharing services as access-platforms

Drawing on Acquier, Daudigeos and Pinkse (2017) their operationalization of the sharing economy, car sharing services can be described as access-platforms, meaning they draw from both the access economy as well as the platform economy. In other words, car-sharing services enable users to access vehicles without ownership, enhancing the utilization of underutilized assets, while relying on digital intermediation to coordinate users (Bokolo, 2024). Theoretically, such platforms align with sustainability goals by reducing private car ownership, optimizing resource use and lowering urban congestion (Shaheen & Cohen, 2018). Additionally, car sharing platforms usually also promote their business as being sustainable (Sarasini & Langeland, 2017). However, as previously described, these aspirations are, especially when scaling up, all difficult to fulfill (Bokolo, 2024). There are various challenges for access-platforms to overcome in order for them to align with the aforementioned sustainability ambitions of car sharing.

Two challenges that are evident in sustainable consumption generally revolve around Jevons' paradox and moral hazard (Acquier et al., 2017). Jevons' paradox underlines how the expansion of the sharing economy has increased resource efficiency, but at the same time has also led to increased access which in turn can drive higher overall consumption (Schor, 2016). Moral hazard indicates that product care is notably lower for

items utilized through sharing or access-based services compared to those that are personally owned (Ackermann & Tunn, 2024).

Noting these challenges, Pouri (2021) offers a more structured framework for analyzing the sustainability effects of shared consumption. In line with Acquier et al. (2017) Pouri emphasizes that while digital sharing platforms can indeed promote resource efficiency, they may also generate rebound effects and unintended shifts in consumption patterns. To move beyond the binary claims of sustainability, she proposes assessing not only the type of resource being shared, but also how its shared use affects wider consumer behavior. Her analysis outlines eight different effects, both positive and negative, that help highlight the nuanced and often contradictory impact of access-based sharing on sustainability. These eight effects are defined in table 1.

Table 1

The eight effects of access-based platforms on resource consumption

Effect	Definition
Direct optimization effect	Sharing increases efficiency by maximizing resource use, reducing idle capacity and underutilization
Cross-activity optimization effect	Sharing results in the optimization of the production of another resource
Induction effect	Sharing results in the consumption of another resource connected to it
Direct substitution effect	Sharing replaces a similar service or resource within the same service system
Indirect substitution effect	Sharing replaces other service systems
Direct rebound effect	Sharing leads to increased demand within the same service system
Indirect rebound effect	Sharing leads to increased demand outside the same service system
Degradation effect	Intensified utilization of shared resources leads to faster degradation

Note. Adapted from 'Eight impacts of the digital sharing economy on resource consumption,' by Pouri, M. (2021). *Resources Conservation and Recycling*, *168*. https://doi.org/10.1016/j.resconrec.2021.105434

In addition to access-based sharing platforms their influence on resource consumption and thus sustainability outcomes, these platforms also reveal a deeper structural tension between decentralized ideals and commercial imperatives. While the sharing economy initially emphasized the use of underutilized assets, many platforms have since evolved into scalable, profit driven business models that extend beyond idle capacity. This commercialization may introduce new forms of market-driven consumption that further complicate the ecological potential of sharing (Lagendijk & Wiering, 2024). In *The collaborative and sharing economy: underlying trends, values and tensions,* Lagendijk & Wiering (2024) highlight this issue by explaining

how platform technology, initially enabling decentralized access, has paradoxically resulted in market concentration and corporate control, shifting the sharing economy further from its original collaborative ideals.

Martin's (2015) analysis of the sharing economy's competing framings aligns closely with the dilemma outlined by Lagendijk & Wiering (2024). Martin highlights a fundamental tension between advocates who view the sharing economy as a pathway to decentralization and sustainability and critics who argue that it reinforces corporate control and neoliberal capitalism. This contradiction is evident in the shift of access-based models like car sharing from peer-to-peer exchanges to corporate-dominated platforms. Lagendijk & Wiering (2024) further elaborate on this paradox by showing how platform technology, initially intended to optimize idle capacity and democratize access, has instead led to market concentration and economic inequalities. Their findings support Martin (2015) his argument that while sharing platforms claim to disrupt traditional markets, they often centralize power and extract value from users. Both analyses emphasize how digitalization and scalability have transformed the sharing economy's original vision, turning collaborative practices into profit-driven models that prioritize growth over sustainability. This shift underlines a critical challenge: while the sharing economy promotes alternative consumption models, it simultaneously strengthens corporate dominance, making it difficult to achieve the decentralized, equitable system envisioned by its early advocates.

These tensions raise important questions about how car-sharing platforms evolve under systemic pressures when commercial imperatives and sustainable ideals pull in different directions. In the case of car-sharing, the challenge lies in navigating the institutional and market pressures of the dominant mobility regime while retaining or reinterpreting the values on which such initiatives were founded. The literature suggests that this navigation is not purely reactive. Platforms act with agency, making strategic choices that reflect both the constraints they face and their visions of possible futures.

2.2 Theoretical Framework

In order to address the challenges of sustainable consumption and the tension between decentralization and economic opportunity, a theoretical framework is necessary to understand how car-sharing can align with sustainability goals despite these systemic contradictions. The following section therefore introduces two key theoretical perspectives. The first one being the multi-level perspective on socio-technical transitions, which is used to identify the regime structures that have shaped and challenged niche innovations like car sharing and, in this case specifically the platform MyWheels, in its development. The second perspective is the concept of anticipation, which offers tools to understand how MyWheels responds to these pressures. These frameworks together enable a process-oriented analysis of how MyWheels' strategies have evolved

over time and how they relate to its potential to scale and contribute to sustainable mobility and other societal challenges.

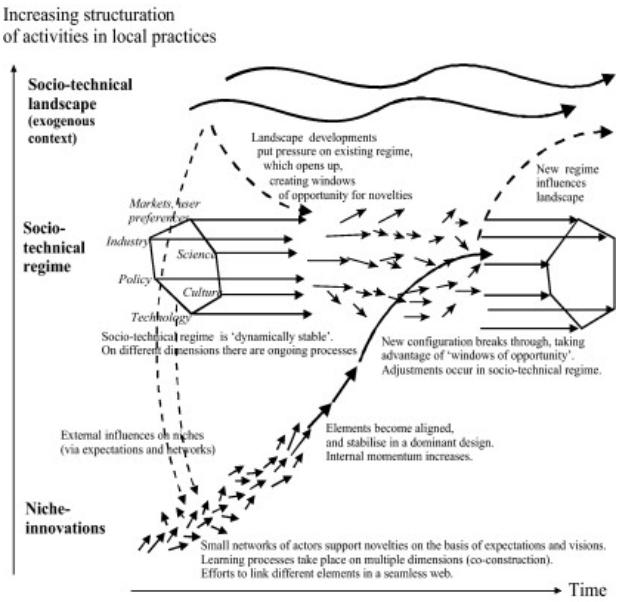
2.2.1 The Multi-level perspective

Over the past two decades, the field of socio-technical and sustainability transitions research has evolved to explore how societies and economies undergo and can be guided towards transformation (Scoones et al., 2020). A key focus has been understanding the processes of transformative change that enable societies to transition towards sustainability (Martin, 2016). Among the most prominent and widely applied theoretical frameworks in transition research is the multi-level perspective (MLP), which provides a structured approach to analyzing these complex changes (Geels, 2002).

The MLP conceptualizes societal transformations as the result of interactions between different socio-technical structures (Geels & Schot, 2007). It assumes that radical innovations, such as car sharing, emerge in niches where pioneering actors and networks develop new ideas outside the mainstream. However, these innovations often struggle to break through because the dominant socio-technical regime, consisting of market structures, user preferences, infrastructure, culture, science and institutional rules, remains stabilized by already existing norms and systems. These regimes are further embedded within a broader landscape of macro trends and external pressures, such as societal values and climate change. However, while these landscape-level factors cannot be directly influenced in the short term, they can exert pressure on the existing regime. This inherently leads to their destabilization, which in turn creates windows of opportunity, allowing niche innovations to gain momentum and potentially reshape the dominant system (Geels, 2002).

Figure 2

The multi-level perspective on sustainability transitions



Note. From "The multi-level perspective on sustainability transitions: Responses to seven criticisms," by Geels (2011). *Environmental Innovation and Societal Transitions*, *1*(1), 24–40. https://doi.org/10.1016/j.eist.2011.02.002

The MLP framework distinguishes three interconnected levels of transition (Geels, 2002). At the micro level, niche innovations evolve through experimentation, learning processes and increasing support from influential actors. At the meso level, landscape pressures push the dominant regime towards change. At the same time, at the macro level regime destabilization weakens the existing system, making space for new innovations to emerge (Geels & Schot, 2007). When these processes align, new innovations can break into mainstream markets, challenging and competing with the established regime (as displayed in figure 2).

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The multi-level perspective and the case of car sharing

Car sharing can be seen as a niche that is situated within and shaped by the institutionalized automobility regime of private car ownership (Schawnen, Banister & Anable, 2011). The development of car sharing from grassroot initiative towards a more formalized niche over the past years, highlights how niche initiatives must continuously navigate, adapt to and also challenge the dominant structures in order to gain traction and influence broader system change (Seyfang & Smith, 2007). The multi-level perspective enables this thesis to trace how the evolution of the car-sharing platform MyWheels has been shaped by both enabling and constraining structures at different levels and to examine how the platform itself acts within these structures to influence its transition trajectory.

The central research aim of this thesis is to explore how anticipation has shaped MyWheels' responses to evolving regime conditions. While the MLP primarily focuses on how actors evolve together over time, the typology of transition pathways brings in a more dynamic perspective on the roles of individual actors and their ability to shape change (Geels & Schot, 2007). It recognizes that actors do not merely react to pressures, but may also anticipate changes, reorient strategies and reposition themselves to influence outcomes (Geels et al., 2016). This connects the MLP to anticipation theory, which helps investigate not only how MyWheels is positioned as a niche and how it interacts with the socio-technical regime, but also how the platform interprets and acts upon the regime's pressures to attain systemic change.

2.2.2 Anticipation theory

As noted above, the multi-level perspective provides insight into how MyWheels is positioned within the broader mobility regime and how it responds to its structural pressures. However, to fully understand the platform's strategic responses, particularly how it interprets and prepares for the future, a complementary framework is needed. Anticipation theory offers such a perspective by focusing on how actors engage with the future as part of their decision-making processes in the present (Miller & Sandford, 2019).

Anticipation refers to the capacity to imagine, interpret and act upon possible futures. Unlike prediction, which seeks to reduce uncertainty, anticipation embraces this ambiguity by recognizing that the future is inherently open and shaped by the expectations and actions of the present. Meaning that anticipatory behavior uses assumptions about the future to make decisions in the present (Poli, 2017). Human anticipation functions across three interconnected levels: the unconscious, subconscious and conscious levels. At the unconscious level, anticipatory systems operate biologically, which means these processes are guided at the organismic, ecological and evolutionary scales. As these mechanisms operate unconsciously, they are always present within human anticipation and decision making. Subconscious anticipation includes intuitive and instinctive responses, as well as emotional reactions such as fear and joy but also unspoken assumptions that shape perception and behavior. Conscious anticipation, by contrast, is rooted in rational thought and includes deliberate practices like forecasting (doing predictions) and foresight (scenario building). Together, these mechanisms reflect a continuous interaction between rationality, intuition, imagination and biology; making anticipation a deeply integrated aspect of how humans engage with the future (Scarano, 2024).

In his book *Regenerative Dialogues for Sustainable Futures,* Scarano (2024) argues that, unlike what is often believed or promoted, rational foresight alone does not guarantee timely and transformative action, but effective anticipation depends on both conscious and subconscious mechanisms. To navigate uncertain and complex futures, we must regenerate our anticipatory capacities by reconnecting the conscious and subconscious dimensions. This broader understanding of anticipation is exemplified by the contrasting conceptions of anticipation for the future (AfF) and anticipation for emergence (AfE). These modes or strategies shape how individuals and organizations relate to the future (Miller & Sandford, 2019).

Anticipation for the future is a structured, goal-oriented and instrumental form of anticipation, in which actors steer action based on desired and expected outcomes. This mode of anticipation typically draws on conscious and rational capacities, such as forecasting, scenario planning and policy design and is often institutionalized in frameworks like the Sustainable Development Goals (SDGs) (Miller & Sandford, 2019). Scarano (2024) links anticipation for the future to so-called *blueprint utopias*: visions of the future that are

predefined and require mostly linear, strategic implementation. While this form of anticipation provides clear direction, it may also limit flexibility and suppress alternative futures. The focus on stability and control can reduce openness to emerging possibilities, especially when new information or shifting conditions challenge the original vision. This can result in a form of strategic lock-in, in which commitment to one imagined future limits the capacity to adapt when conditions shift (Poli, 2017).

Anticipation for emergence on the other hand is more open-ended and grounded in the capacity to remain responsive to novelty, improvisation and temporality. Rather than setting fixed goals, AfE values imagination, intuition and dialogue and is rooted more in subconscious or relational forms of anticipation. These dimensions enable actors to perceive weak signals, explore alternative perspectives and adapt to evolving conditions without being bound by a rigid pathway. The future is not perceived as a destination, but as an open space for possibility to use uncertainty as a resource for creativity and adaptation (Scarano, 2024). Anticipation for emergence is deemed as essential to developing futures literacy, as it enables individuals and organizations to use the future not merely to plan, but to question assumptions and open new trajectories (Miller & Sandford, 2019).

Anticipation and the case of car sharing

Anticipation is central to this thesis because it offers a way to understand how MyWheels actively engages with the future while responding to pressures from the dominant regime. In the context of sustainability transitions, decisions are shaped not only by existing structures, but also by how actors imagine and prepare for possible futures (Fischer & Newig, 2016). Anticipation makes this future oriented dimension of agency visible and allows the exploration of how platforms like MyWheels interpret uncertainty, respond to emerging trends and position themselves strategically over time (Muiderman et al., 2020). In addition, anticipation compliments the multi-level perspective by offering a more actor-centered lens. While the MLP situates MyWheels as a niche innovation within the broader automobility regime to trace its potential pathway towards regime shift and scaling, anticipation provides a more detailed, process-oriented analysis of how the organization has evolved over time and how it envisions and enacts change from within a dynamic transition landscape (Geels & Schot, 2007; Scarano, 2024).

2.3 The conceptual framework

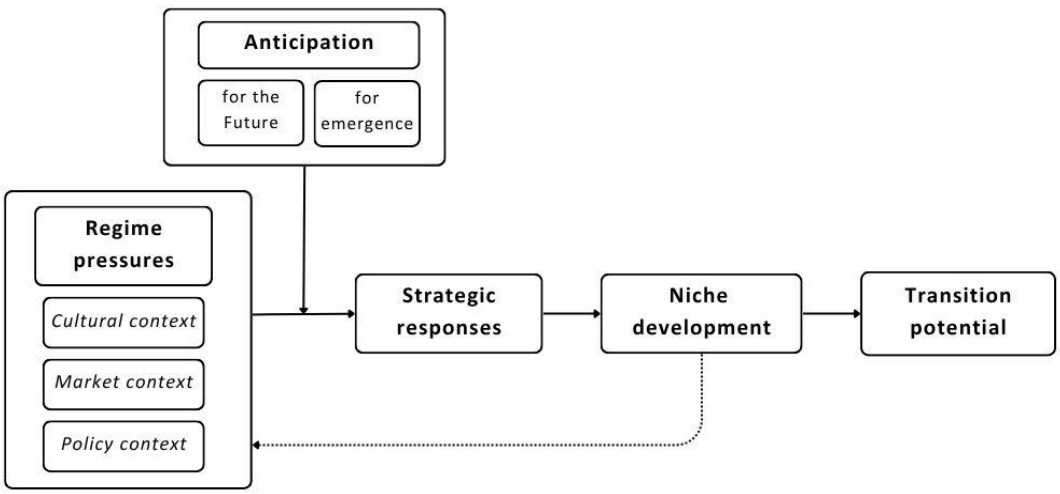
Building on the theoretical foundations outlined above, this section presents the conceptual framework (figure 3) that guides the analysis of MyWheels' development and transition potential. By integrating insights from the multi-level perspective and anticipation theory, the framework focuses on how different forms of anticipation interact with regime pressures to influence niche development over time. This structure enables a systematic exploration of how MyWheels' strategies and trajectory reflect their possible transition to sustainable mobility.

Regime pressures are positioned as the independent variable, as they represent the external structures that shape the strategic environment in which MyWheels operates. The pressures stem from the dominant socio-technical regime and are categorized into three interrelated dimensions: the policy, market and cultural context. These regime elements form the relatively stable but evolving backdrop against which niche actors like MyWheels must position themselves. In transitions research, regime pressures are often seen as triggers for niche innovations to adapt, resist or innovate and thus they serve as a starting point in tracing how and why certain strategies are pursued (Geels & Schot, 2007).

Anticipation serves as the moderating variable, with a visualized distinction between anticipation for the future and anticipation for emergence. Drawing on this distinction, the framework allows for an analysis of both long-term planning and more adaptive situated forms of forward-looking action. Through these anticipatory modes, strategic responses are formed that guide how MyWheels navigates and adapts to pressures from the policy, market and cultural context. These strategic responses in turn shape the development of the niche. Niche development encompasses change in MyWheels' organizational model and scaling strategies over time. The extent to which the niche is able to grow, stabilize and align with broader societal goals eventually informs its transition potential, the dependent variable in this research.

The dotted line from niche development back to regime pressures captures the temporal and recursive nature of the framework. As the niche develops, it not only responds to regime pressures but also begins to exert pressure back on the regime This reflects the dynamic and co-evolutionary relationship between niche and regime, where over time, a sufficiently developed niche may begin to challenge and reshape dominant regime structures (Geels & Schot, 2007).

Figure 3
The conceptual framework of this research



Through this conceptual framework, this thesis will explore how anticipation for the future and anticipation for emergence shape MyWheels' strategic responses to regime pressures and influence its development and transition potential within the broader shift towards sustainable mobility. The further operationalization of the most relevant concepts for this research can be found in appendix A.

Chapter 3: Methodology

In this chapter, I will discuss the research philosophy and strategy guiding this study, outlining the theoretical approach and rationale behind the chosen methods. Additionally, I will explain the research methods, data collection and data analysis techniques employed to examine the alignment of car sharing with sustainability goals. Lastly the validity and reliability of the research will be discussed.

3.1 Research philosophy

The research philosophy is an essential part of the methodology, as it defines how knowledge is perceived and constructed, which guides the choice of research design, methods and analysis (Moon & Blackman, 2014). A well-defined ontology and epistemology ensure that the chosen methods align with the nature of reality and the way knowledge is acquired, enhancing the study's validity and coherence (Guba & Lincoln, 1994).

Ontologically, this research follows a bounded relativist approach. This approach acknowledges that there are individual interpretations of car-sharing which are shaped by its users, company strategies and policymakers. However, these interpretations are not entirely isolated; they are most likely grouped within certain user communities for example (Moon & Blackman, 2014). Guba & Lincoln (1994) emphasize that while reality is constructed, it is also shaped by social interactions and institutional contexts rather than being purely individual. Epistemologically, this research follows a constructivist approach, emphasizing that knowledge is socially constructed through human experiences and interactions (Guba & Lincoln, 1994). Within constructivism, reality is not objective or fixed but rather shaped by individual perceptions, beliefs, and social contexts (Moon & Blackman, 2014). For MyWheels, constructivism is relevant because sustainability is a socially constructed concept, influenced by how users engage with the platform, how policymakers frame car-sharing regulations, and how MyWheels markets its environmental impact. Understanding whether MyWheels truly contributes to sustainability requires analyzing user perceptions, governance structures, and platform strategies, rather than assuming a single objective definition of sustainability.

3.2 Research design and research strategy

3.2.1 Research design

This research aims to understand how car-sharing initiatives navigate the transition from niche innovation to regime actor. Central to this research is the role of anticipation strategies, particularly anticipation for the future and anticipation for emergence. Anticipation for the future involves forward-looking planning that is based on imagined developments, anticipation for emergence refers to more adaptive, real-time responses to sudden shifts and regime pressures (Scarano, 2024).

In order to do so, this thesis adopts a single-case study design, with Dutch car-sharing platform 'MyWheels' as the central case. A case study is an in-depth exploration of a single example within its real-world context, particularly useful when the boundaries between the case and its environment are blurred (Yin, 2003). Rather than aiming for broad generalizations, case studies are intended to gain a deeper understanding of how and why certain processes unfold in specific contexts (Flyvbjerg, 2006). This makes them well suited to studying complex social and institutional dynamics, where context, timing and actor interactions matter (Van Thiel, 2014).

The primary case of observation in this research is the car-sharing platform MyWheels. This case was selected for several reasons. First, it represents a mature but still niche innovation within the Dutch mobility landscape (Nijland & van Meerkerk, 2017). As it is one of the leading car-sharing platforms in the Netherlands, it provides a relevant example for exploring how alternative mobility initiatives seek to embed themselves within the dominant socio-technical regime (The Sharing Group, 2022). Secondly, MyWheels is embedded in a wide network of relationships with municipalities and private partners and in addition also has a diverse user group. This actor diversity provides an opportunity to examine how the platform anticipates and responds to pressures and expectations from different regime levels, such as policy shifts, infrastructural issues and changing user norms. These interactions offer a rich context for studying how strategic decisions are shaped not only internally but also through ongoing negotiation with external actors and systems (Geels, 2011). Lastly, this case offers a high level of access and immersion. Through an internship at the organization, I was physically present at the office, which enabled me to observe internal dynamics, (in)formal interactions and day-to-day decision-making processes from close by. This proximity allowed me to develop a deeper understanding of how their strategies are formed, discussed and revised in practice. This embeddedness adds valuable depth to the research and strengthens the credibility of the empirical insights.

To ensure the reliability and validity of the findings, several strategies are applied. First, a triangulated research design is used, consisting of interviews and document analysis. These methods provide multiple perspectives on key events and the decision-making processes at MyWheels. This strengthens the internal validity of the analysis by cross-verifying findings (Van Thiel, 2014). While close involvement with the organization offers deep insight, it also poses risks of subjectivity. This is acknowledged through critical reflection on the researcher's positionality and by continuously comparing internal interpretation with external data and theory. In doing so, the study aims to balance immersion with analytical distance.

3.2.2 Research strategy

To fully make use of the in-depth and context sensitive potential of this case study design, this thesis adopts the innovation biography (IB) as its main research strategy. This approach enables a structured reconstruction of MyWheels' development over time by examining how key decisions, actor interactions and strategic shifts unfold within their broader institutional and societal context (Butzin & Widmaier, 2016). By

doing so, it can give insight into how anticipatory strategies have shaped MyWheels' trajectory within the Dutch mobility system. The following section outlines what an innovation biography entails, how it aligns with the theoretical framework introduced earlier and how it is applied in this research.

An innovation biography is a process-oriented and actor-centered approach that reconstructs the narrative and development of an innovation over time, from conception to implementation (Keaney et al., 2018). It focuses on how knowledge, divisions, actor configurations and contextual dynamics interact to shape the innovation's trajectory (Butzin & Widmaier, 2016). Rather than treating innovation as a linear or purely technological process, the innovation biography acknowledges the non-linear and iterative nature of change processes (Kleverbeck & Terstriep, 2017). This is particularly relevant in contexts like sustainable mobility, where actors must constantly adapt to evolving policy frameworks, market dynamics and societal expectations (Quay, 2010). At its core, the innovation biography aims to show how knowledge moves through time and space by highlighting key events, collaborations and the broader context that influences how an innovation develops (Keaney et al., 2018).

The innovation biography approach aligns well with transition theory, particularly the multi-level perspective from Geels (2002). The MLP conceptualizes socio-technical transitions as interactions between three levels: niches, regimes and the overall landscape (Geels & Schot, 2007). By tracing the development of MyWheels over time and through its engagement with different actors and institutions, the innovation biography enables an analysis of how the platform interacts with and attempts to influence or align with regime structures, as well as how it responds to landscape developments. Additionally, the innovation biography also compliments the theoretical foundation of anticipation within transition contexts. Through the biography, key moments can not only be identified and structured under either anticipation for emergence or anticipation for the future to see how actors use the future to guide their actions but also analyzed to see how they might have influenced decision-making and timing of actions by MyWheels (Miller & Sandford, 2019).

The innovation biography of MyWheels will be constructed from its founding in 1993 until now. This full-time span allows for a comprehensive analysis of the platform's trajectory, from its grassroot beginning to its current role as an established platform, and provides the temporal structure needed to explore how key decisions, strategies, problems and shifts have evolved over time and might relate to one another (Keaney et al., 2018). This will be done using a mixed-methods approach that combines narrative and semi-structured interviews and document analysis. The combination of these methods enables triangulation across multiple data sources and actor perspectives, thereby strengthening the validity of the findings (Kleverbeck & Terstriep, 2017). To ensure a detailed and accurate reconstruction of the innovation's trajectory, data

collection will follow a multi-step process that allows for both chronological mapping and thematic analysis of the key decisions, strategies, problems and shifts over time (Keaney et al., 2018).

3.3 Research methods, data collection and data analysis

This section outlines the methodological approach used to construct the innovation biography of MyWheels. It describes the data sources and collection methods, including interviews and document analysis. In addition, it will also explain how these were combined to ensure depth and reliability. Finally, it details the process through which these findings will be analyzed.

3.3.1 Document analysis

This thesis employs document analysis as part of its mixed-methods approach to construct the innovation biography of MyWheels, examine the regime-level dynamics that shape its development and uncover how anticipation has shaped its strategic responses. Document analysis is a qualitative research method used to interpret written material to uncover meaning and to develop, understand and gain empirical knowledge of a phenomenon in its context (Finfgeld-Connett, 2014). It is seen as a valuable method when seeking to reconstruct institutional progression, actor relationships and policy dynamics over time. All documents are treated as secondary data, as they were not produced for the purpose of this research but nonetheless provide valuable insights into MyWheels' institutional and historical developments (Van Thiel, 2014).

The document analysis serves three central objectives. First, it supports the construction of the innovation biography of MyWheels by tracing key events, actor interactions and strategic decisions over time (subquestion 1). Secondly, it facilitates the identification and interpretation of regime pressures that have influenced the platform's trajectory within the broader mobility transition (subquestion 2). Lastly, it contributes to uncovering the anticipation strategies deployed by MyWheels across different phases of its development. These aims align with the study's theoretical framework, where the multi-level perspective is combined with anticipation. Additionally, the document analysis also contributes to the egocentric network analysis by providing empirical material on MyWheels' organizational relationships and partnerships. This approach follows Keaney et al. (2018), who emphasize the value of triangulating document sources to map innovation dynamics and actor-constellations over time.

Data sources and selection

The document analysis predominantly draws on news articles and media coverage. In addition, also one peer-reviewed academic article and one report from the *Kennisinstituut voor Mobiliteitsbeleid (KiM)* were analyzed. News articles were chosen as the primary data source because they offer a consistent representation of how MyWheels has developed over time. In addition, they can also serve as a way to reflect on institutional relationships and public sentiment (Jensen, 2021).

The press coverage for constructing the innovation biography was gathered through keyword-based searches in the database of *Nexis Uni*, using *AutoHuurSaam*, *Wheels4All* and *MyWheels* as search terms. The documents were then filtered to Dutch only and organized chronologically (old to new). The documents were selected using purposive sampling, aimed at identifying material that offered rich, relevant information about key developments, actor interactions and possible discourses in the history of MyWheels (Palinkas et al., 2015). Articles were initially screened based on their title. If this title suggested relevance to the development of MyWheels, the abstract or introductory paragraph was reviewed. All articles that appeared relevant were read in full. In total 44 news articles were selected for analysis. A complete overview of all analyzed articles can be found in appendix C.

To systematically analyze the selected articles, a theory-driven qualitative content analysis was employed (Van Thiel, 2014). First, initial coding categories were developed based on the operationalization that was developed for this thesis, focusing on *regime pressures* and *anticipation*. For regime pressures, the categories *policy*, *market* and *cultural* were leading, these categories were based on the multi-level perspective theory by Geels and relate to the contexts within regime pressures. These were further specified into more specific codes, such as *institutional support* or *infrastructural issues*, that are derived from possible constraining or enabling factors identified through literature studies of prior research. Anticipation was coded using two broad categories, namely anticipation for the future and anticipation for emergence, based on the literature from Miller and Sandford (2019) and Scarano (2024). As the literature on these concepts was barely developed, the analysis was guided by leading questions that found their basis in the original theories. The codebooks can be found in the appendix.

In order to enhance validity, the coding categories were grounded in the theoretical frameworks of the multi-level perspective (Geels, 2002) and anticipation theory (Miller & Sandford, 2019; Scarano, 2024). This theoretical grounding ensures that the analysis follows conceptually relevant patterns rather than using surface level observations (Van Thiel, 2014). Additionally, the coding was applied across an extensive dataset of articles, which made it possible to compare different sources that described the same events. This reduces the risk of source bias or over-reliance on a single narrative (Bryman, 2016).

3.3.2 Interviews

The semi-structured interviews are conducted with several different people on different topics. Within the innovation biography, it is necessary to do a core interview that serves as its backbone. This interview takes place after the qualitative historic event analysis is conducted and is meant to explore the development of the innovation according to the interviewee's perspective (Keaney et al., 2018). Normally, this interview is done with a key initiator of the innovation, but as this was not possible within the scope of this research, this

core interview was done with the Chief Marketing Officer of The Sharing Group, the company behind MyWheels (Butzin & Widmaier, 2016). This is considered an elite interview (Gubrium & Holstein, 2001). After the historic event analysis and the core interview, additional interviews are conducted with three MyWheels employees in order to explore the social network of the innovation. Apart from interviews with employees to construct the innovation biography, interviews are also held to get an understanding of the regime pressures that MyWheels is dealing with and to see what types of anticipation are employed. All people that were interviewed, their functions and what the topic of conversation was can be found in table 3.

For all interviews, interview guides are developed that serve as a guideline during the conversations (Kvale & Brinkmann, 2009). These guides include key topics and leading questions and differ slightly per interviewee, depending on their position within the organization. After each interview, the guide is critically assessed and potentially changed if it becomes evident that some topics are for example hard to introduce or some questions seem redundant (Van Thiel, 2014). The interview guides for all interviews can be found in appendix B, as well as the practical information concerning the interview and interviewee. Furthermore, in order to ensure the full attention of the interviewer, all interviews are recorded if allowed by the interviewee (Bryman, 2015). Afterwards all interviews are transcribed and prepared for analysis.

The interviews are analyzed through codes, these codes are partly predetermined based on the prior document analysis but also determined gradually during the process of analysis (Van Thiel, 2014). If new themes or motives emerge, the coding scheme is updated accordingly. To ensure consistency, earlier interviews are reviewed and recoded if necessary to incorporate newly identified codes. This iterative process continues until no additional codes emerge. When this process is complete, the codes will be grouped and analyzed using axial coding. This involves identifying relationships between different themes to develop a structured understanding of the MyWheels and its strategies and the overall regime barriers that it faces within its transition (Van Thiel, 2014).

To enhance reliability, all interviews were conducted using a semi-structured interview guide that was closely linked to the theoretical framework and operationalization. This ensured that the conversation flowed through a certain theoretical pattern, which ensures the replicability of the research (Van Thiel, 2014). A limitation of this study is that all interviewees are affiliated with MyWheels. This means that the findings primarily reflect the internal viewpoint of the organization, while perspectives from other stakeholders such as municipalities were not included. This limitation is acknowledged and will be reflected in the conclusion. Due to the supporting document analysis however, the internal claims are able to be cross-checked during analysis. Through this triangulation, the internal validity is therefore at least supported.

Table 3

Schematic overview of all interviewees in order of interview date

Interviewee	Position(s)	Interview	Date
Sprecher, D.	Head of Public Affairs and spokesperson for the coalition of car-sharing platforms	Face to face	March 27, 2025
Van Rooy, J.	Chief Marketing Officer at The Sharing Group	Face to face	April 22, 2025
Gieles, J.	City Manager Amsterdam	Face to face (online)	April 29, 2025
Van der Kolk, B.	City manager outside the G5	Face to face (online)	May 6, 2025

Chapter 4: Innovation biography

This chapter presents the innovation biography of MyWheels, tracing its development over time through key shifts, decisions and external influences. The biography is constructed from a combination of document analysis and interviews, offering a perspective on how MyWheels has evolved within the broader context of the Dutch mobility system from grass roots innovation to one of the biggest car-sharing providers in the country. The innovation biography serves as an empirical foundation for analyzing how different forms of anticipation have influenced MyWheels' strategic orientation and transition potential, which will be done in chapter five. Finally, through this chapter, the first subquestion will be answered, which is: "*How has MyWheels evolved since its founding and what major shifts and pivots have marked its development?".*

4.1 Key moments in development

MyWheels originated in 1993 as AutoHuurSaam, a grassroot car-sharing initiative founded by Henry Mentink in the village of Grootebroek, Noord-Holland. Mentink originally gave up his car for financial and ideological ideals. He found that renting a car each time he needed one was impractical and eventually came up with the idea to lease one car and share it among friends. The first shared car was therefore parked in front of his house and he managed the logbook and keys to keep track of the usage. Participants were drawn not only by the lower costs compared to private car ownership, but also by a deeper alignment with values of social connection and the environment (Van der Kris, 1995).

Since MyWheels' founding in 1993, several key events such as collaborations, mergers and pivotal shifts have contributed to its growth and development over the years. These key events are displayed in table 2. In section 4.2 a more elaborative description of events and of MyWheels further evolution is given. The 'nature of change' column categorizes key events based on their role in shaping the development trajectory of MyWheels, it reflects both internal organizational dynamics and external interactions with partners, markets and the broader policy context. The labels *founding*, *leadership change* and *name change* denote structural milestones, the labels *strategic pivot*, *strategic planning* and *strategic merger* capture deliberate, thus strategic, shifts in growth and business model. Lastly, *technological innovation* and *investment* capture moments of operational transformation. These categories offer analytical clarity on how MyWheels evolved and will be further used for analysis in chapter 5 of this research.

Table 2
Key events in the development of MyWheels and their nature of change

Year	Event	Nature of change
1993	MyWheels is found as AutoHuurSaam in Grootebroek by Henry Mentink	Founding
2003	AutoHuurSaam becomes Wheels4All	Name change
2003	Project *day car* in collaboration with the Call-A-Car foundation	Partnership

2009	Ronald Haverman becomes CEO next to founder Mentink	Leadership change
2009	Municipal collaborations and technological advancement	Partnership
2010	First big partnership with company (Connexxion)	Partnership
2011	Launch of MyWheels as a peer-to-peer (P2P) car sharing model	Strategic planning
2012	Wheels4All merges with MyWheels	Strategic merger
2016	Karina Tiekstra new CEO	Leadership change
2017	Technological advancement through for example MyWheels open	Tech innovation
2019	Investment of Mijndomein for more growth	Investment
2020	Mijndomein takes over MyWheels: rebrands into The Sharing Group (TSG)	Leadership change
2020	Partnership with Amsterdam for MADE: introduction of parking zones	Partnership
2020	End of P2P sharing model	Strategic pivot
2021	MyWheels merges with Juuve (business-to-business)	Strategic merger
2022	MyWheels merges with Amber (one-way trips)	Strategic merger
2023	Henri de Jong (TSG) interim-CEO	Leadership change
2024	Partnership with Utrecht, We Drive Solar and Renault on vehicle-to-grid	Strategic partnership
2024	Laurens van de Vijver new CEO	Leadership change
2024	New plans for European energy transition	Strategic planning
2025	Local focus expanded through the introduction of circles and city managers	Strategic pivot
2025	Making plans for self-driving cars	Strategic planning

4.2 Historical trajectory

In the first few years, AutoHuurSaam was operated analogically by Mentink from his own home, located in towns around Grootebroek. Mentink operated the four cars of his organization through a partnership with a local garage that leased out, maintained and insured the cars (Masselink, 2001).

In 2003, AutoHuurSaam became Wheels4All (W4A), a formal non-profit organization promoting car-sharing as a sustainable, community-based alternative to private car-ownership. W4A gradually spread to larger towns and rural areas, mostly situated in the provinces of Utrecht and Gelderland (e.g. Nieuwegein, Tiel and Bunnik), supported by subsidies from the European Social Fund. An example of this was project Day Car (Dagauto in Dutch), which aimed to introduce car-sharing in areas with limited public transport. This was a bottom up initiative and cars were only placed in a specific location when around 5-10 people had subscribed to this car, these users would then together discuss what type of car was the best fit for them and where it would be placed. Now that W4A was growing, Mentink was not able to manage all the cars by himself anymore. As a result, he appointed local car managers or key figures who held the keys. They were also responsible for vehicle oversight and did the administration of ‘their’ particular car (De Stentor, 2004). In

2008, W4A won €100.000 euros from *Stichting Doen*, which the organization wanted to use to place more cars (Leidsch Dagblad, 2008). Technological advancements in 2009 included the launch of an online booking system and automated access to the cars through membership cards. W4A also added its first electric vehicle to the fleet and began forming partnerships with municipalities such as Heerhugowaard. At the end of 2009, Ronald Haverman became the director of W4A, alongside Mentink. In 2010, W4A partnered with public transport provider Connexxion, which made it possible for members to unlock cars with their OV-chipcard (Bijlsma, 2010). Connexxion also placed W4A cars near bus stops (OV Magazine, 2010). In this phase of development, W4A operated through a decentralized model that was rooted in local initiative and intrinsic motivation of users. In addition, it also operated as a non-profit.

In 2011, Mentink and Haverman launched MyWheels as a peer-to-peer (P2P) car-sharing platform in collaboration with Stichting Doen, enabling private car owners to rent out their vehicles (Keuning, 2011; Van der Horst, 2011). This initiated the second phase of MyWheels development and marked a significant departure from W4A's model, removing the bottom-up requirement for at least seven members to subscribe to a car in their area before the actual placement of it (OV Magazine, 2011). In 2012, W4A officially merged with MyWheels (Cazander & Dankbaar, 2012). In the years that followed, the organization experienced only limited growth. To revitalize its development and expand its reach, Mentink hired a new CEO with a different professional background (Wytzes, 2021). Around the same period, the ANWB noticed that a lot of potential private sharers were hesitant due to concerns around their car insurance, roadside assistance and payment (IJmuider Courant, 2015). This resulted in a close collaboration with MyWheels with pilots in five cities (Termaat, 2015).

Under new CEO Karina Tiekstra, MyWheels started a more growth-oriented strategy that focused more on cities instead of suburban and rural areas. Argumentation for this was based on the fact that impact would remain limited if car sharing remained a small initiative (Wytzes, 2021). As a result, the fleet expanded but also shifted more towards electric vehicles. In addition, more emphasis was put on the tactical placement of vehicles to increase visibility and usage and thus impact (Fraanje & Spaargaren, 2019). While the platform became more growth-oriented, it was still a social enterprise with the ambitions to realize less CO2-emissions, liveable neighbourhoods and social engagement (Wytzes, 2021).
Technological investments played a key role in this transition. In 2016, MyWheels introduced smartwheels: a fleet of their own (leased) vehicles, equipped with onboard smart technology that allowed users to book and unlock cars via smartphone or smartcard, without human interaction. These cars had dedicated sparking sports and marked the shift towards a more centrally managed fleet (Fraanje & Spaargaren, 2019). In 2017, the launch of *MyWheels Open* expanded some of this technology to the P2P-segment, allowing users to access privately owned vehicles through an app, eliminating the need to exchange physical keys and for users

to stand in direct contact with each other (Numann, 2017). This marked an important step towards platform control over the user experience, as well as greater scalability.

In 2019, Henri de Jong from Mijndomein invested in MyWheels, through the purchase of 50 Renault leafs (J. Van Rooy, personal communication, April 22, 2025). This investment eventually led to Mijndomein acquiring MyWheels (The Sharing Group, 2020). This caused the platform to scale rapidly: within a year, their own fleet went from 225 cars to 1000, with 40% of the cars being electric (De Brug, 2021). In 2020 the P2P sharing was phased out to focus solely on the centrally managed fleet model (Wytzes, 2021). The period from 2019 to 2023 marked a phase of strategic positioning and merging. MyWheels absorbed car-sharing providers Juuve and Amber, which enabled the launch of one-way trips and business-to-business (B2B) services (Kuijpers, 2021; Van Buijten, 2022). In addition, MyWheels also collaborated with the city of Amsterdam, where they worked together on a project called *MyWheels and Amsterdam share electric* (MADE). This resulted in nearly 150 extra electric shared cars in the city and as a result also the introduction of parking zones. These zones were introduced to reduce the pressure on charging stations (Natuur & Milieu, 2020).

In 2023, MyWheels partnered with *We Drive Solar*, a smart mobility provider known for its innovation in bi-directional charging technology, specifically its vehicle-to-grid (V2G) charging. This collaboration aimed to integrate shared electric vehicles into the energy system, allowing cars not only to charge from the grid but also to return energy to it by transforming electric cars into *neighborhood batteries* (We Drive Solar, 2023). Building on this initiative, Renault joined the partnership in November 2024, supplying 500 electric vehicles equipped with Mobilize's V2G technology. Together with the city of Utrecht they launched Europe's first fully operational V2G car-sharing service, positioning MyWheels at the forefront of the unification between sustainable mobility and smart energy systems (We Drive Solar, 2024).

Around the same time, MyWheels was confronted with internal challenges related to the growth it had undergone over the past years. In earlier phases, the platform maintained strong relational knowledge of its operations, as employees could recall the location, users, key figures and sometimes even license plates of every vehicle. However, as the fleet scaled into the thousands, this closeness eroded. In response, MyWheels did an organizational restructuring in hopes to re-localize their operations. As part of this relocalization, the platform appointed city managers in key regions (circles) to ensure that local operations remain responsive, efficient and strategically aligned with municipal contexts (J. Van Rooy, personal communication, April 22, 2025).

Chapter 5: Results

This chapter analyzes how MyWheels has responded to key regime pressures throughout its development by focusing on five strategic decisions that significantly reshaped the platform. It zooms in on the most important shifts in MyWheels' development based on the innovation biography and additionally explores how these shifts were shaped by both regime pressures and anticipation. Every strategic response will be analyzed through two dimensions: the regime pressure(s) that led to the decision (1), the anticipatory logic guiding this response (2). In doing so, this chapter aims to provide a comparative perspective on how regime dynamics and anticipatory strategies co-evolve and how MyWheels has navigated these challenges to scale or adapt their approach over time.

5.1 The introduction of peer-to-peer car sharing

In 2011, MyWheels introduced a peer-to-peer (P2P) car-sharing model, marking a departure from its earlier cooperative structure. Where previously cars were only placed once a minimum number of committed local users had been secured, the new model enabled individual vehicle owners to list and rent out their own cars through the platform as well. This innovation allowed MyWheels to expand rapidly without needing to invest in a physical fleet or coordinate car placement centrally. It significantly reduced the logistical barriers to growth and in turn also increased the platform's geographic reach. The decision to adopt the P2P-model was a strategic response to the limitations of the grassroots model and to emerging pressures within the broader mobility regime.

5.1.1 Regime pressures

The decision to introduce the P2P model in 2011 was shaped by a combination of market, cultural and policy pressures. In the market domain, the bottom-up and community-based model that MyWheels initially relied on faced certain limitations as the platform attempted to grow (OV-magazine, 2011). In this original structure, cars were only placed in a neighborhood once a minimum number of participants had pre-subscribed to a specific vehicle in a designated place (De Gelderlander, 2006). For the most part, this created problems in areas where user density was low, such as rural villages and suburban or smaller towns (Ter Harmsel, 2011). The model's success depended heavily on active local coordination and engagement from key figures (i.e. sleutelfiguren in Dutch), neighborhood volunteers who managed the vehicles by having the key and did the planning for specific vehicles (De Stentor, 2004). This made the platform highly dependent on motivated individuals and grassroots momentum, which was difficult to scale consistently across different regions.

The reliance on local initiative links to one of the structural challenges in MyWheels' growth and geographic expansion: the paradox of car-sharing uptake. The more people participated, the more attractive the service became. However, in areas with limited vehicle availability, new users were often discouraged from joining,

as they could not rely on consistent access to a car (Driessen, 2012). As explained in NRC Handelsblad (2012): “The costs per trip go down if providers realize a higher occupancy rate of their fleet. And the more users there are, the larger the supply and the more diverse the options” (Frenken, 2012, p. 1, as cited in Driessen, 2012). Yet, because of the bottom-up initiative and the platform’s focus on less densely populated areas, actually placing a car was often difficult (Vermeer, 2008). This coordination problem posed a serious constraint to the existing model and made it difficult for MyWheels to offer a scalable alternative to private car ownership (Noordhollands Dagblad, 2009).

This market pressure revealed the potential opportunity of a decentralized model. Rather than relying solely on bottom-up and organized vehicle placement, the introduction of a peer-to-peer (P2P) model enabled private individuals to make their own cars available via MyWheels (Keuning, 2011). This reversed the platform’s supply logic: instead of MyWheels placing cars in response to demand, the supply was now user-driven and potentially unlimited in geographic reach. It allowed for a rapid increase in vehicle availability and a greater diversity in the types of cars offered (Hoekstra, 2011). Moreover, the P2P model allowed the platform to expand into new areas without needing to navigate the logistical complexity or financial risk associated with fleet ownership and decentralized management (Driessen, 2012).

At the same time, cultural pressures signaled a shift in public attitudes towards car use and ownership (Boex, 2013). Among young, urban residents, car ownership was increasingly seen as impractical and unnecessary. Cars were viewed less as status symbols and more as utilitarian tools, creating an opening for access-based services like car sharing (Langenhuijssen, 2011). Pressures from the policy context were in small amounts also present, Trommelen (2014) underlined the effect higher parking tariffs have on the number of (second) private cars. When the municipalities of The Hague and Utrecht made parking permits more expensive for second cars, car sharing platforms saw a rise in users. Direct policy support however, remained limited. While local governments occasionally supported small pilots or partnerships, car sharing was not embedded in long-term transport strategies. This lack of structural support meant that MyWheels had to rely on internally driven solutions rather than expecting institutional facilitation in their attempt of scaling up car sharing to make more impact.

5.1.2 Anticipation

The decision to introduce the P2P model was shaped not only by external pressures, but also by how MyWheels imagined and engaged with possible futures. Although the platform did not use formal long-term planning tools, its orientation began to shift from merely managing local operations, towards envisioning car sharing as a national mobility solution. This re-orientation became visible in how MyWheels publicly framed its ambitions. In an interview with De Groene Amsterdammer, MW stated that it aimed to integrate between one promille and one percent of the Dutch vehicle fleet into its platform (Hoekstra, 2011). While this goal

was not supported by detailed projections, it did signal a growing awareness that car sharing needed to scale in order to be effective and make an impact. MyWheels acted on a vision they had for a future: one in which shared mobility was part of the mainstream mobility system. This illustrates how the platform used imagined futures to justify decisions in the present, a process central to anticipation (Miller & Sandford, 2019).

At the same time, anticipation also manifested in the way the platform engaged with other actors in the P2P field. In another interview, Mentink suggested the idea for a P2P model that was developed through collective dialogue between platforms, "We're all sitting at the table to see if a broad platform is possible. If we work together, we can learn from each other, and support will follow" (Mentink, 2011, p. 1, as cited in Langenhuijssen, 2011). These interactions reflect anticipation that is not purely goal-driven but grounded in collaboration and open-ended exploration. Instead of pursuing a predefined outcome, MyWheels positioned itself to adapt and evolve through joint experimentation.

This openness to uncertainty was also reflected in the nature of the P2P model itself. By relying on private car owners to make vehicles available, MyWheels gave up a level of control it had previously maintained through local key figures and cooperative structures. It remained unclear whether users would be willing to share their cars or whether the platform could ensure reliability and trust. Nonetheless, the decision to proceed with P2P indicates a willingness to act under incomplete knowledge.

Theoretically, the anticipation shaping this response consists primarily of exploratory and adaptive engagement with the future and is thus most in line with anticipation for emergence. MyWheels did not move towards P2P by mapping out a clear trajectory, but by allowing future potential to guide experimentation in the present. While the expression of a growth ambition points to a more goal-oriented orientation, the decision-making process itself was largely emergent. The future was treated as something open, shaped through dialogue, trial and error and redefinition of the platform's own role. MyWheels' strategy was not based on implementing a fixed plan, but on staying responsive to what was possible as conditions evolved.

5.2 The introduction of smartwheels

In 2015, MyWheels implemented a digital key system that allowed users to access shared cars via their smartphone app. This technology, called *MyWheels Open,* was part of *smartwheels*, a broader development that involved not only app-based access, but also a shift in how and where cars were placed. In other words, the smartwheels model reorganized and reemphasized the layer of central coordination of the MyWheels fleet. The 200 'own' vehicles were no longer placed based on bottom-up local initiative as in the Wheels4All model but would now be strategically stationed by MyWheels employees in areas with high expected usage. Although the platform also still offered privately owned cars through its P2P model, the introduction of

smartwheels shows a growing emphasis on operational control, digitalization and fleet regulation (Fraanje & Spaargaren, 2019).

5.2.1 Regime pressures

The introduction of smartwheels was driven by a combination of pressures from the market and cultural context. The first pressure that was found comes from the market context and involves frictions in the coordination of the peer-to-peer model. In the P2P system, renters were completely dependent on the car's owners to respond to and confirm their booking. This meant that if owners did not respond, they were not able to use the car they requested. In addition, submitting multiple requests to different cars in order to spread the chances of reserving a car was costly, as for every booking renters had to prepay a percentage of the price (Fraanje & Spaargaren, 2019).

These coordination problems made the P2P model unreliable for users and complicated last-minute bookings. A test conducted by the Dutch consumer agency (i.e. Consumentenbond) in 2014 underlines this point by highlighting that even if an owner would respond to a request, the chances that it would be honored were very slim: of four booking attempts they did, only one was accepted (Trommelen, 2014). This uncertainty discouraged users and reduced the appeal of the platform, especially as alternatives were becoming available. By 2016, MyWheels faced increasing competition from commercial platforms with more streamlined booking systems. Even small differences in ease of access or reliability could shift user preferences (Fraanje & Spaargaren, 2019).

Alongside these market dynamics, user expectations were also shifting. While early adopters appreciated the social aspect of car sharing, such as meeting a neighbor at pick-up, the younger and more urban user groups prioritized speed and independence. One interviewee explained that they did not find interaction and having to talk to someone a positive element of car sharing (Fraanje & Spaargaren, 2019, p. 505). Feelings of discomfort about contacting private car owners, especially when they had not yet responded to a booking request, also created cultural barriers. Users often felt uncomfortable picking up or returning a private car late or at night, as they felt this might trouble the owner. Renting a private car came with a feeling of obtaining the owner's permission for everything, which limited the flexibility that was often associated with car sharing (Fraanje & Spaargaren, 2019).

In short, the introduction of smartwheels addressed both the practical challenges of the P2P system and the changing expectations of its users. It reduced access frictions and made the platform more reliable, while also aligning with a cultural shift towards more autonomous and impersonal forms of service. As such, it marked a strategic move that helped MyWheels remain competitive in a rapidly evolving market.

5.2.2 Anticipation

The decision to introduce Smartwheels was not only shaped by regime pressures but also by how MyWheels reimagined the role of their platform within the mobility landscape. The introduction of the peer-to-peer model was exploratory and open-ended, aligning for the most part with anticipation for emergence. It showed a willingness to act under uncertainty by experimenting with new forms of user-engagement and by shaping the platform's future through collaboration. In contrast, the introduction of smartwheels reveals a more targeted and goal-driven orientation. It responded to specific user frustrations, such as booking uncertainty and last-minute inflexibility, while also (re)positioning the platform within an increasingly professionalized and competitive field.

As previously mentioned, MyWheels has always positioned itself as a community-oriented initiative. In 2011, Henry Mentink described MyWheels as a non-profit organization aimed at creating local communities around shared vehicles: "We want to build a community around the cars, in order to make neighborhoods more livable" (Hoekstra, 2011). These ambitions were tied to broader societal hopes for car sharing to enhance social cohesion and reduce car dependency in a decentralized, bottom-up fashion (Driessen, 2012). The P2P model was a logical extension of this vision, allowing citizens to share their own cars with neighbors and thus anchor the practice within existing social networks. At the same time, MyWheels expressed national-scale ambitions and envisioned integrating one promille to one percent of the Dutch vehicle fleet into its platform (Hoekstra, 2011). Together, these examples illustrate a form of anticipatory work that was both visionary and experimental: guided by imagined futures but still open to uncertainty and adaptation.

In contrast, the development of smartwheels reveals a shift more towards anticipation for the future. This innovation was no longer primarily about keeping options open or exploring what might emerge, but about actively steering the platform towards a more reliable and standardized service model. The frustrations around P2P coordination were not incidental but posed a threat to user retention and platform growth, as competition between MyWheels and other platforms was present (Fraanje & Spaargaren, 2019). The problems with booking P2P cars made the model feel restrictive and inflexible, particularly for renters who started car sharing for convenience and last-minute access. In this context, a keyless system that enabled direct car access through the app without feeling discomfort about disturbing car owners was more than a technological upgrade; it was a strategic move to address both operational barriers and shifting user expectations.

The Smartwheels model allowed MyWheels to position itself more clearly as a provider of dependable, app-based mobility, which aligned with user preferences and demands in which convenience, speed and anonymity had become normative (Fraanje & Spaargaren, 2019). While this move marked a break from the earlier ideal of fostering local community connections, it also reflected a realistic appraisal of what users

valued most. As one industry observer commented, “We see that MyWheels Open cars are rented more often, because that important barrier has been removed” (De Kloe, 2018).

Seen in this light, the smartwheels intervention illustrates how MyWheels’ anticipatory orientation evolved. Whereas the adoption of P2P had been driven by an open, experimental logic that tested whether trust-based sharing could scale, the introduction of smartwheels reflected a more direct response to what the future of car sharing appeared to demand. It was based less on exploring new potentialities and more on addressing clearly articulated needs and removing known barriers. With this innovation, MyWheels began to shape its role more proactively and in line with a dominant mobility logic, one that chooses efficiency over community.

5.3 The shift from non-profit organization to for-profit business platform

One of the most significant strategic shifts in MyWheels’ development was its transition from a non-profit social enterprise to a commercially managed, for-profit platform. This shift started with an investment from Mijndomein in 2019, initially intended to help finance the electrification of the fleet, which eventually led to their full acquisition of MyWheels a year later (J. Van Rooy, personal communication, April 22, 2025). This change was not just administrative but marked a reorientation of how MyWheels positioned itself within the mobility landscape. In its early years, MyWheels was a cooperation that was rooted in environmental idealism, focused on community building and was financed through a mix of crowdfunding, the reinvestment of rental income and funding from supportive institutions that stimulated social innovations (Leidsch Dagblad, 2008; Utrechts Nieuwsblad, 2004). However, as the organization expanded, this model eventually hit financial and logistical limits which lead to the search for external investment. MyWheels ultimately partnered with Mijndomein, whose values were seen as most closely aligned with the platform’s social mission (J. Van Rooy, personal communication, April 22, 2025).

5.3.1 Regime pressures

Several regime pressures contributed to the MyWheels’ transformation to a business platform. A key market pressure was the limited scalability of the original non-profit model. As mentioned, the cooperative structure that had characterized MyWheels’ early years was insufficient to support the kind of growth needed to make a meaningful impact. This resulted in a situation where MyWheels was ‘too small’ to cover fixed operational costs and lacked the capital to expand its fleet (J. Van Rooy, personal communication, April 22, 2025).

These internal limitations were partly due to policy pressures, as national policy frameworks created financial barriers to scaling. For example, car sharing is taxed at the high VAT rate of 21%, in contrast to the reduced rate of 9% that public transport falls under. In addition, the vehicle road tax for shared cars is the same as for normal cars, causing MyWheels to be burdened with high operational costs (D. Sprecher, personal communication, March 27, 2025). At the same time, government funding for car sharing remains limited,

which makes it difficult to sustain the high costs as well as the high costs for leasing and insurances (B. van der Kolk, personal communication, May 6, 2025).

On the other side, market conditions were also changing. From around 2015 onwards, commercial platforms with private capital backing were entering the Dutch market (Coenegrachts et al., 2024). To compete effectively in this competitive environment, investment in both the fleet and technology was necessary, which the non-profit model could not support. In addition, MyWheels came to realize that in order to make more impact, scaling of the platform and the fleet was a necessity. This came forward in an interview:

> The organization struggled to scale further, because that required funding. A car still costs between 30,000 and 50,000 euros, for which you have to pay first before you can earn it back. [...] We were stuck in between: too small to recover our fixed operational costs and with too few cars to cover them. So we needed to grow, not only to absorb those costs, but also to increase our impact. But we couldn't manage that growth on our own, which is when the idea arose: maybe we need a different kind of financier or investor to make that possible (J. Van Rooy, personal communication, April 22, 2025).

The shift to a for-profit model was also shaped by pressures from the cultural context, particularly changes in user composition and expectations. As previously discussed in section 5.2, MyWheels' original user base consisted of environmentally motivated early adopters who were willing to tolerate inconvenience in favor of shared ideals. However, as MW expanded, its user base diversified and tolerance for friction and unreliability declined (Fraanje & Spaargaren, 2019). Meeting the expectations of this broader audience required scaling the fleet, improving app performance and offering more consistent availability, developments that demanded substantial capital investment (J. Van Rooy, personal communication, April 22, 2025).

5.3.2 Anticipation

The decision to transition from a non-profit to a for-profit model reflects a clear shift in anticipation. As discussed, in earlier years MyWheels used to operate based on anticipation for emergence: the future was uncertain and the organization experimented with new ways of organizing mobility through cooperative structures based on idealism and trust. Earning money from it was never the goal, what mattered was building a community of like-minded users and contributing to sustainability from the bottom up (Noordhollands Dagblad, 2009).

As regime pressures built, this approach became harder to maintain. The cooperative model lacked the capital needed to scale the platform, expand the fleet and professionalize the service to compete with other car sharing initiatives. The new commercial actors that entered the field had stronger technological capabilities and often access to private investment (Coenegrachts et al., 2024). The rising operational costs

and growing user expectations in terms of availability, usage and technology lead to MyWheels no longer believing that continuing to experiment with an idealistic model would be enough to stay competitive (J. Van Rooy, personal communication, April 22, 2025). As a result, MW shifted more towards anticipation for the future, as anticipating future developments and planning for the long term became more important.

This shift also involved a redefinition of what was seen as necessary to make an impact. In order to grow, MyWheels needed more users, and to attract more users, the platform needed to become more accessible, more visible and more mainstream. This meant letting go of some of the principles that had previously defined its grassroots character, by "moving from a dark, to a lighter green" (J. van Rooy, personal communication, April 22, 2025). Financial survival in this sense became a condition for remaining relevant in the long term. Regime pressures did therefore not just shape the decision to attract capital and try making profit but was in addition also shaped by what MyWheels saw as a viable and desirable future.

5.4 The partnership with We Drive Solar

The partnership with We Drive Solar represents a strategic response to operational, as well as structural bottlenecks in MyWheels' development: net congestion and the limited availability of charging infrastructure for electric vehicles. In 2023, MyWheels joined forces with We Drive Solar to explore vehicle-to-grid (V2G) technology, allowing shared electric vehicles to not only draw energy from the grid to charge but also return energy to it when the cars stand idle, turning cars into mobile energy storage units or neighborhood batteries (The Sharing Group, 2023). This collaboration reflects an important shift in MyWheels' position: from being a service provider reacting to regime conditions, to a proactive actor working to reshape the infrastructural and regulatory context in which it operates.

5.4.1 Regime pressures

One of the main pressures driving this strategic response was the structural misalignment between municipal electrification demands and the practical limitations of public charging infrastructure. Within the policy context, the municipality of Amsterdam demanded MyWheels to transition to a fully electric fleet by 2025 (J. Gieles, personal communication, April 29, 2025). However, the charging infrastructure to support this transition was insufficient. Due to existing concession agreements, MyWheels was not permitted to install its own charging stations, making the platform dependent on third-party providers who did not prioritize the specific needs of car-sharing services. This led to MyWheels looking for workarounds (B. Van der Kolk, personal communication, May 6, 2025). The electrification requirement thus acted as an indirect pressure: while cities expected providers to contribute to climate goals, they did not offer the infrastructure access needed to meet these expectations.

From a market perspective, this electrification requirement had both financial, as well as competitive consequences. The financial consequence has a twofold of layers. Firstly, the general costs of maintaining an electric fleet as opposed to a petrol fleet are much higher (J. Gieles, personal communication, April 29, 2025).

Secondly, with an electric fleet can come expensive overhead costs, like idle fees when electric vehicles remain connected to public chargers after reaching full capacity (B. Van der Kolk, personal communication, May 6, 2025). The consequence is a result of the municipality of Amsterdam postponing the electrification requirement. One platform deemed it impossible to electrify due to the limited charging infrastructure, which created an imbalance in the market. “We had agreed on the rules together, in consultation with the municipality: this is the framework, now the market can sort it out. But if you change the rules midway, it becomes much easier for some providers than for others.” (J. Gieles, personal communication, April 29, 2025).

5.4.2 Anticipation

The partnership with We Drive Solar was thus a strategic way to overcome infrastructural barriers by collaborating with parties that offered more flexibility than concession holders or municipalities. By introducing bi-directional charging and integrating with local energy systems, MyWheels aimed to gain more control over the availability and placement of charging infrastructure, while also contributing to reducing its dependency on external concession holders. At the same time, the partnership allowed the platform to contribute to innovations that addressed broader systemic issues, like net congestion and charger scarcity, which also created constraining factors for their own operations.

This strategic response reflects the goal-driven orientation of MyWheels and is thus in line with anticipation for the future. The organization acted deliberately in order to align itself to the municipal policy and to shape the conditions under which it could scale its electric fleet. This approach is in line with the earlier shift towards a for-profit model, where external investment was actively sought to enable long-term growth. In both cases, MyWheels increasingly framed the future not as something to be discovered through experimentation, but as something that needed to be strategically steered towards.

At the same time, the partnership with We Drive Solar also contains elements of anticipation for emergence. The bi-directional charging pilot was not a pre-planned outcome, but emerged from an ongoing search for a viable solution to the insufficient charging landscape. In this way, the response reflects a hybrid anticipatory logic, with elements of both anticipation for the future as well as anticipation for emergence: while clearly oriented towards specific goals, MyWheels remained open to dialogue and experimentation with external actors. This balance between strategic vision and engagement illustrates how MyWheels continues to navigate uncertainty to overcome direct operational constraints and to reposition itself as a relevant actor in the transition towards sustainable mobility.

5.5 The introduction of circles

In March 2025, MyWheels reemphasized the circle structure as a strategic response to the anonymization of the platform, which resulted in a growing disconnect from local contexts that made it harder to stay in touch

with what was happening to the cars and with its users. To address this, the platform reorganized internally and refocused its operations more locally (J. Van Rooy, personal communication, April 22, 2025). The Netherlands was divided into five regions: Amsterdam, Utrecht, Den Haag/Rotterdam, Eindhoven/Brainport and the rest of the country (referred to as *outside the G5*), with each region becoming a *circle*. Each circle is led by a *circle lead* or *city manager* who is responsible for the entire operation in their area. These roles combine strategic and operational tasks, such as managing the fleet, coordinating placement and maintaining relationships with municipalities and key figures. The goal was to give these leads a clearer mandate to respond to local needs and to act as the face of MyWheels in their region (J. Gieles, personal communication, April 29, 2025; B. Van der Kolk, personal communication, May 6, 2025). This change allowed the platform to reconnect with local dynamics and marked a shift back towards the more community-oriented mindset that had shaped its early years.

5.5.1 Regime pressures

From 2020 onwards, as MyWheels scaled and positioned itself more as a professional mobility provider, it began facing increasing pressures from the policy context. A central issue that was raised in all interviews, is the fragmentation of policy between and within municipalities. MyWheels is active in around 95 municipalities and as there is no national policy on shared mobility, every municipality has its own vision and therefore their own legislations, procedures and general operational expectations (B. Van der Kolk, personal communication, May 6, 2025). To give some examples, in Tilburg a townsman decided to completely halt the placement of new shared cars, in Amsterdam every shared car has a parking fee of at least 48 euros a month and in Rotterdam the municipality expects MyWheels to place cars ‘everywhere’, including neighborhoods known for frequent vandalism (D. Sprecher, personal communication, March 27, 2025; J. Van Rooy, personal communication, April 22, 2025). This contrasts with other cities where permit and parking fees are waived for shared cars, shared mobility providers are actively involved in policy discussions and municipalities have dedicated FTEs to shared mobility (B. Van der Kolk, personal communication, May 6, 2025). It eventually depends on what a municipality benefits: the private car or the shared vehicle (D. Sprecher, personal communication, March 27, 2025). This uneven regulatory landscape creates barriers for MyWheels to adopt and integrate car-sharing into the mobility regime.

Sprecher (personal communication, March 27, 2025) highlighted that municipal policies often contain internal inconsistencies as well. In Hilversum for example, the municipality has developed a vision on shared mobility, while in practice there are no city officials assigned for implementation and no concrete steps are being taken to actually promote it. This disconnect became evident when MyWheels received multiple parking tickets after a change in parking zones was implemented, without prior notification to the platform (D. Sprecher, personal communication, March 27, 2025). This reflects a broader misalignment between verbal support and policy support, which further underlines the fragmentation within the policy landscape.

Additionally, from the cultural context, the growth and centralization of MyWheels have also introduced new barriers to regime integration. As MyWheels grew and the user experience became more automated and app-based, the personal connection between users and the cars eroded. While this shift seemed logical and worked well in earlier years, it now has implications for how the cars are perceived and treated: vehicles are no longer seen as part of a community network, but instead as personal 'tools' that belong to no one in particular (J. Van Rooy, personal communication, April 22, 2025). This perceived lack of ownership contributes to careless behavior, such as leaving cars dirty and vandalism. The loss of this shared sense of responsibility appears to undermine both the user experience as well as the operational sustainability of the service (Oliver Wyman, 2023). In addition to users becoming alienated from the shared vehicles, the centralization and growth of MyWheels also created a distance between the platform and the environment in which it operates. Up until a thousand cars, employees could recall every license plate of every car, making it easier to detect problems with or around the car. Now that MyWheels has almost 3000 cars, these tasks have become much more difficult. Gieles (personal communication, April 29, 2025) emphasized that closer proximity to vehicles and the neighborhood is essential for identifying and solving operational issues that are often overlooked in a centralized form. He explained that he now regularly visits cars that are underperforming despite being booked frequently. By doing so he found a vehicle that was parked behind a gate that does not open properly, one with a charging cable that is too short to reach the charger and a car that is consistently dirty from bird droppings as it is parked under a tree. These kinds of problems, while seemingly minor, directly affect usage and user satisfaction and require someone with on-the-ground knowledge who can respond quickly and alter placements where needed.

These examples underline the relevance of locally focused operations and illustrate how proximity enables faster and more precise decision-making. More broadly, they reflect the growing limitations of a centralized governance model in managing a local context. As policy demands, user behavior and operational issues are all place-specific, the need for a more regionally anchored structure became increasingly apparent. This recognition laid the groundwork for a strategic shift within the organization, marking a transition from merely responding to external pressures towards actively anticipating and shaping future developments by (re)focusing on the local context.

5.5.2 Anticipation

The introduction of the circle structure in March 2025 was not only a strategic response to the regime pressures described in section 5.5.1 but also marks a shift in how MyWheels anticipates and engages with developments in the mobility regime. It represents a move away from a centralized governance model and reflects a deliberate effort to restore proximity to users, vehicles and municipalities. This approach aligns with anticipation for the future, as MyWheels uses long term aims and acts deliberately to align itself with

changes in their environment. Rather than waiting for municipalities to align their policies or for national regulations to be formed, MW proactively adjusted its internal structure to increase flexibility and responsiveness across different cities.

The introduction of circle leads with both strategic and operational responsibilities made it easier for MyWheels to navigate the fragmented policy environment and build stronger relationships with municipalities, as well as improve their overall service delivery. As Gieles explained, the managers are now accountable not just for daily operations, but also for aligning with city-specific goals and improving profitability over time (J. Gieles, personal communication, April 29, 2025). This move to a more proactive positioning highlights that future relevance requires not only scaling up, but also scaling in by reconnecting with the local realities in which the service is embedded.

At the same time, this reorganization contains elements of anticipation for emergence. It was namely not only about implementing a long-term strategic vision, but also about rebuilding the platform's capacity to sense and respond to issues as they arise. A central part of this was recognizing the loss of informal knowledge and local feedback mechanisms that accompanied the platform's earlier scaling. As Van Rooy explained:

> As we grew, the distance to the cars increased and things became more anonymous. With many tech products, like Google or Netflix, you accept that because the product works. But with our service, the connection between the user and the product, the ability to physically interact with it, is crucial. That's why we've now decided to move closer to the user again (Personal communication, April 22, 2025).

This statement reflects a re-evaluation of what makes car-sharing work in practice, not just efficiency or scalability, but also physical presence, trust and continuous interaction with local environments. The circle model was thus introduced as a way to reinstate a form of local and place-based responsiveness that had become increasingly difficult to maintain in the centralized model. In operational terms, this enabled city managers to address issues that do not appear in usage data but do affect user experience. These frictions only surface through on-the-ground observation and local familiarity. As such, the reorganization institutionalizes the ability to learn from emergent problems and act on them in a timely manner. Additionally, city leads also function as relational actors, actively building and maintaining dialogue with municipalities. This enables them to detect changing expectations early, surface policy ambiguities and represent MyWheels in negotiations that shape the conditions under which shared mobility is allowed to operate. Rather than passively adapting to regime dynamics, MW is using the circle structure to proactively shape its environment.

In sum, the reintroduction of circles represents a hybrid anticipatory logic. It demonstrates anticipation for the future by structurally repositioning the organization in response to expected shifts in governance and market conditions. Simultaneously, it fosters anticipation for emergence as it has helped restore proximity, responsiveness and local embeddedness through dialogue.

Chapter 6: Conclusion and discussion

The aim of this research was to understand how the car sharing platform MyWheels has developed over time and how different forms of anticipation have shaped its responses to regime pressures within the broader mobility system. This thesis focused on the internal development of the platform to understand how it navigates the complex institutional, market and cultural context that characterize the current mobility regime. The central research question guiding this study was:

How has anticipation shaped MyWheels' strategic responses to regime pressures over time and how have these responses influenced its development as a niche innovation in sustainable mobility transitions?

To answer this question, an innovation biography was constructed, tracing MyWheels' development from its grassroots beginnings to its current role as a professionalized, platform-based mobility actor. This trajectory was analyzed through the lens of the multi-level perspective on socio-technical transitions (Geels, 2002) and anticipation theory (Miller & Sandford, 2019; Scarano, 2024).

This chapter will start by interpreting the findings to the main research questions and the subquestions. It then discusses how these findings relate to the literature and theoretical frameworks as presented earlier in the thesis. Based on this, practical recommendations for policymakers and platform developers will be given. Lastly, the limitations of the research and suggestions for future studies are discussed.

6.1 Interpretations of the findings

The aim of this thesis was to understand how anticipation has shaped MyWheels' strategic responses to regime pressures over time. The findings show that the strategic decisions MyWheels has made were not merely reactions to external pressures but were also guided by their internal visions of what the future of mobility should look like and what their role is supposed to be within that**.** Through the innovation biography, it was found that MyWheels gradually shifted from a cooperative and socially embedded business model rooted in local trust and community participation, to a commercially oriented platform model aimed at profitability and scalability. While this shift aligned with pressures from the regime such as market competition or policy change, it was also informed by changing ideas within the organization about what it would take to remain relevant and legitimate and to make actual impact in a transforming mobility landscape. In this light, anticipation helps to reveal how normative values such as trust and sustainability were not entirely abandoned but got more redefined or deprioritized in response to shifting cultural expectations. Moreover, anticipation has been able to expose the internal tensions and trade-offs that occur when niche actors attempt to grow, professionalize and transition into the mainstream.

The findings show that anticipation at MyWheels changed in both character and function as the platform matured and became more entangled with the dominant mobility regime.

In its early phase, MyWheels mainly engaged in open-ended experimentation, most notably through the peer-to-peer model. This phase was marked by anticipation for emergence, where actions were driven by deeply held values like social connectedness, trust and environmental responsibility. Strategic decisions were exploratory and rooted in the belief that local actors and volunteers could organize sustainable mobility from the ground up. The introduction of smartwheels in 2015 marked a turning point. Here, the anticipatory mode began to shift towards anticipation for the future. MyWheels began to orient itself around user expectations and technological developments. Centralizing control over vehicle placement and access enabled them operational efficiency, but it also marked an internal reframing of what it would take to be competitive and scalable. Anticipation in this phase became more calculated: aligning the platform with what was likely to succeed within a shifting regime landscape. The shift to a for-profit business model in 2020 further illustrates this evolution. Because of financial and operational constraints, MyWheels adopted a more pragmatic vision of the future: one that prioritized financial survival, scalability and growth instead of holding on to their original community and cooperative values. In this phase, anticipation shifted solely towards anticipation for the future through the construction of a more deliberate long-term strategy: not simply responding to pressure but redefining what kind of organization MyWheels needed to become by creating clear financial goals and targets for itself in order to stay and remain relevant. The 2021 partnership with We Drive Solar built on this but also skewed towards anticipation for emergence more. By partnering with an actor focused on electrification, MyWheels confronted regime pressures from the policy context by anticipating that collaboration would enhance its legitimacy within the policy environment. Anticipation thus served as a guiding lens for strategic positioning: not just trying to fulfill policy targets by the implementation of scenario planning but also actively looking for dialogue with stakeholders in order to do so.

The reintroduction of the circle structure in 2025 reveals a key insight generated by this thesis: that anticipation for the future alone is not sufficient for niche actors attempting to grow within and adapt to a changing regime. MyWheels' earlier shifts towards long-term planning, goal setting and strategic alignment allowed the platform to scale and professionalize by becoming bigger and more digital. However, it also created distance: from users, municipalities and the continuous dynamics of local mobility systems. When these tensions surfaced, the limitations of strict future-oriented planning became visible. The decision to reintegrate local circles did not signal a rejection of planning but was a realization that remaining relevant within a complex regime requires elements of both anticipation for the future and anticipation for emergence. In this light, the thesis contributes to anticipation theory by showing how different anticipatory modes are not mutually exclusive but can be recombined over time. MyWheels' trajectory suggests that niche development depends not on choosing between anticipation for the future or emergence, but on

navigating the tension between them by strategically drawing on both when needed to remain adaptive and impactful.

The strategic trajectory of MyWheels is in line with elements of both the transformation and reconfiguration pathways as described by Geels & Schot (2007), where niche actors adapt to dominant regime structures in order to gain influence. However, the MLP does not account for how such alignment is shaped by internal shifts in vision, values or strategic reasoning. Anticipation has given insight into how MyWheels internally navigated uncertainty and interpreted regime pressures as it evolved from a grassroots initiative to a more mainstream platform. For instance, the results show that decisions were not just responses to immediate policy or market shifts but also reflected evolving visions about what a successful and legitimate car-sharing service should look like. These visions were not static but developed alongside internal debates, changing constraints and shifting user expectations. Through this lens, anticipation helps explain not only how regime pressures were responded to but also why certain paths were chosen and others left behind.

In answering the research question, this thesis has shown that anticipation shaped how MyWheels responded to regime pressures. While the MLP explains *when* and *under what* conditions niches can grow, anticipation revealed how niche actors internally navigate uncertainty and revise their strategies along the way. Over time, the platform alternated between anticipation for emergence and anticipation for the future, responding to both expected developments and unforeseen opportunities. These anticipatory shifts shaped the decisions that allowed the platform to scale, remain competitive and the attempt to align with dominant regime logics. In turn, these strategic responses enabled MyWheels to grow from a grassroots initiative into a more institutionalized car-sharing actor but not without tensions and trade-offs. The analysis demonstrates that niche development is not only influenced by external conditions but also by how actors internally interpret and act upon them over time. This adds a necessary layer of analysis to existing transition theory and highlights the value of combining systemic and interpretive perspectives when studying sustainability transitions.

6.2 Discussion

This research aimed to contribute to academic debates on sustainability transitions by responding to three gaps in the literature. First, while the multi-level perspective offers a useful way to identify systemic pressures and map the role of niche actors, it pays relatively little attention to how these actors interpret and respond to such pressures over time (Geels, 2011). Second, there have been calls for more detailed insight into how car sharing platforms develop, make strategic decisions and manage tensions between their social value and commercial viability (Fraanje & Spaargaren, 2019; Meelen, Frenken & Hobrink, 2019). Third, by working with an underdeveloped theory.

The thesis responds to all three points. First, by using anticipation as a lens, it helps to better understand how actors like MyWheels deal with different kinds of pressures over time. The findings show that anticipation can be fluid: it shifts depending on changing regime conditions. This highlights that agency in transitions is not only about exploiting windows of opportunity but also about proactively shaping or reinterpreting them. While the MLP often describes transitions in terms of windows of opportunity, which can happen under certain regime pressures, it also tends to treat niche actors as passive responders (Geels, 2011). By contrast, this study shows that actors actively use different forms of anticipation to navigate uncertainty. Anticipation thus helps explain why niche development does not always follow a clear path or lead to the outcomes actors initially envisioned. It reveals how actors work through uncertainty in real time instead of simply reacting once a transition pathway becomes visible. Secondly, the thesis speaks to the growing literature on commercialization in sustainability transitions (Martin, 2016; Frenken, 2017; Lagendijk & Wiering, 2024). Although car sharing is often framed as a sustainable alternative to private car use, platforms like MyWheels still operate in a commercial setting (Fraanje & Spaargaren, 2019). The development of MyWheels shows how it is possible that social models can gradually shift towards more commercial logic, but at the same time is also able to prove that a shift back, from within the commercialized setting, is also possible if the regime is receptive to accepting it. Lastly, the thesis contributes to anticipation theory itself. The distinction between anticipation for the future and anticipation for emergence was largely underdeveloped and only briefly conceptualized by Scarano (2024) and Miller and Sandford (2019) and thus lacked empirical application. This research helps to advance the theory by giving an operationalization of the concepts of AfF and AfE in a way that makes them observable in practice and shows how they unfold over time in a real-world setting. In doing so, it provides conceptual handles for future research to engage more concretely with anticipation.

Overall, this thesis suggests that more attention is needed to understand how organizations work with the future, not just in terms of their stated goals, but in the way they interpret change and organize around it. The concept of anticipation allows to examine this process more directly, offering a vocabulary to describe how actors think and act when the future is uncertain and unpredictable. These more practical and often less visible aspects of organizational development are crucial to understanding how sustainability transitions unfold in practice. By focusing on one platform over a longer period, this research adds a more practical perspective to current transition theory. It shows how platform strategies evolve in response to both regime pressures and internal concerns and how futures are used to navigate this complexity. These dynamics often remain invisible in high-level transition frameworks, but they shape how change unfolds.

6.3 Limitations

A main limitation of this research is that it draws primarily on interviews with people who were involved with MyWheels in its most recent phase. As a result, the analysis of the platform's current direction is based on more direct and detailed insights, while the earlier phases rely mostly on retrospective accounts, media

coverage and one core interview with someone who has only been with the organization for the past five years. This makes it harder to fully understand the internal dynamics, challenges and motivations that shaped the early years. It also means that some developments may be interpreted through the lens of how MyWheels sees itself now. Including voices from people who were active during earlier stages would have provided more depth and balance, especially in understanding how certain shifts were experienced from within at the time.

6.4 Recommendations for praxis

This research highlights a structural misalignment between the expectations municipalities have for shared mobility platforms and the fragmented policy environment in which these platforms operate. While municipalities often see car sharing as a lever to reduce emissions and car dependency, their approaches vary widely in terms of regulation and collaboration. For platforms operating throughout the country, this creates significant barriers to strategic planning, long-term investment and consistent service development. Rather than fostering innovation, this fragmented landscape often forces platforms into reactive modes of operation, tailoring their models to meet local preferences without the ability to scale or align internally. Additionally, the main strategic direction platforms take will often align with the municipality where they have the largest fleet or most favorable operating conditions, which might limit the geographic reach and thus the broader societal impact of shared mobility initiatives. To address this misalignment, greater coordination is needed across municipal levels. By aligning expectations and simplifying the operational landscape, governance actors can enable platforms to plan more proactively. In this regard, national policy can play a crucial role in setting the conditions for more effective collaboration between municipalities, as well as providing structural support to integrate car sharing into the mobility regime.

6.5 Implications for future research

This research focused on the internal development of one platform and how it responded to changing conditions over time. Future research could build on this by looking at other car-sharing platforms, both in the Netherlands and elsewhere, to see whether similar patterns emerge or whether different organizational choices lead to different forms of anticipation. It would also be valuable to include perspectives from users, local governments or former employees, in order to gain a more complete picture of how platform strategies are experienced and negotiated in practice. Finally, further work could explore the spatial aspects of car sharing more explicitly, including how anticipation plays out differently across regions or urban settings.

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Appendix

Appendix A: Operationalization

A-1 Operationalization of the concepts of anticipation

Concept	Variable	Leading question	Indicator
Anticipation for the future	Forecasting	Is MyWheels using data (AI/trends/ modeling) to anticipate future developments?	Mention of future demand, climate trends, market studies
	Foresight	Is MyWheels using scenarios, visioning tools or long term planning methods?	Reference to scenario planning and long term mobility visions
	Goal setting	Are there explicit long-term aims MyWheels is working towards?	Presence of KPIs, fleet size targets, electrification goals, implementation timelines
	Policy alignment	Are goals tied to policies or institutional targets?	Mention of SDGs, national/local climate policies when developing strategy & goals
Anticipation for emergence	Experimental mindset	Is there a willingness to experiment and act under uncertainty?	Presence of pilot projects and trial-and-error/non-linear projects
	Dialogical engagement	Are decisions or strategies shaped through stakeholder dialogue?	Mention of feedback sessions, presence of diverse actor input, references to collaborative learning
	Imaginative exploration	Is MyWheels imagining new futures or radically different paths?	Framing and mentioning of ideas outside current norms

A-2 Operationalization of the concepts of regime pressures

Concept	Variable	Indicator
Regime pressure	Policy context	Degree to which institutions actively promote car sharing
		Presence of regulations related to car sharing
		Presence of financial instruments (taxations/ subsidies/funding) affecting car sharing
		Degree of clarity and direction across institutional regulations affecting car sharing
		Presence of indirect regulations influencing car sharing
		Degree of complexity of regulations
	Market context	Amount of competition with other car sharing platforms in The Netherlands
		Level of brand recognition under users
		Amount and division of operational costs
		Presence of infrastructural related constraints
		Indications that car sharing leads to changed demand of cars
	Cultural context	Presence and nature of public attitudes towards car sharing
		Presence and nature of public attitudes towards private car ownership
		Degree and direction of changes in transport mode due to car sharing
		Evidence of user behavior leading to increased vehicle damage and degradation

A-3 Operationalization of the concepts of strategic response

Concept	Variable	Indicator
Strategic response	Organizational structuring	Leadership change
		Internal reorganization or restructuring
		Acquisitions or mergers with other organizations
	Market positioning	Introduction of new business model
		Changes in fleet composition
		Introduction of new technologies
	Regime alignment	Number of collaborations with public actors
		Number of partnerships with private actors
		Evidence of policy integration
		Indications of lobbying or coalition forming

Appendix B: Interview guides

B-1 Interview guide for core interview of the innovation biography

Interviewee: J. Van Rooy
Conducted on: April 22, 2025

Over het interview:

- Dit gesprek is onderdeel van mijn masterscriptie.
- Ik zou het gesprek graag willen opnemen, is dat akkoord?
    - De opname wordt verwijderd nadat mijn scriptie is ingeleverd.
    - Alleen ik, mijn scriptiebegeleider en de tweede corrector hebben toegang tot deze opname.

Anonimiteit en vertrouwelijkheid:

- Je mag anoniem blijven in de uiteindelijke thesis, als je dat wilt.
    - Je hoeft dat nu nog niet te beslissen.
    - Ik vraag het je ook nog eens na afloop en je kunt het ook later alsnog aangeven.

Praktisch tijdens het gesprek:

- Voel je vrij om een vraag over te slaan of aan te geven als je liever later op een vraag terugkomt.
- Stel gerust zelf ook vragen als je die hebt.
- Sommige vragen lijken misschien voor de hand liggend of als een 'open deur'.
    - Dat is helemaal oké – soms zijn ze bedoeld als context of als soort 'leidraad' in mijn onderzoek.
- Heb je op dit moment nog vragen?
- Zo niet, dan stel ik voor dat we van start gaan

Om te beginnen:

- Zou je kort kunnen uitleggen wat jouw rol binnen MW/TSG precies inhield/inhoudt?
    - Hoe lang ben je al bij de organisatie betrokken?

1) De evolutie van MyWheels (Auto Huursaam → Wheels4All → MyWheels)

1.1 Oorsprong en beginfase

- Kun je het verhaal vertellen over hoe MyWheels is begonnen?
    - Wat was de motivatie achter het concept?
    - Wat was de oorspronkelijke missie of visie van MyWheels?
    - Is dat door de tijd heen veranderd? Hoe zou je de missie of visie van MyWheels nu omschrijven?
    - Hoe is dit ontwikkelingsproces verder gegaan? Want daarna Wheels4All + investering TSG?

1.2 Belangrijke mijlpalen en veranderingen

- In de beginfase: wat zie jij als de belangrijkste keerpunten in de ontwikkeling van MyWheels?
- MW is heel erg gegroeid, zeker in recente jaren .. Hoe is MyWheels gegroeid van een kleine autodeelinitiatief tot zijn huidige omvang?
    - Wat waren de belangrijkste factoren die deze groei mogelijk maakten?
    - Waren er momenten waarop de groei vertraagde of werd geblokkeerd? Waarom?
    - Kun je één of twee momenten beschrijven waarop MyWheels zijn strategie aanzienlijk moest veranderen?

- Waren er externe gebeurtenissen (wetgeving/vraag van gebruikers/iets anders) die deze veranderingen hebben beïnvloed?

2) Barrières en uitdagingen

2.1 Regelgevende en juridische barrières

- Wat zijn belangrijke regelgevende of juridische uitdagingen waarmee MyWheels te maken heeft (gehad)? Naast bijvoorbeeld de elektrificatie-eis?
  - Waren er specifieke wetten of lokale regels die obstakels creëerden?
  - Hoe heeft MyWheels op deze uitdagingen gereageerd?
  - Was er ooit een moment waarop MyWheels vond dat een beleid direct tegen haar belangen inging?

2.2 Conflicten en 'irritaties' met externe actoren

- Zijn er conflicten geweest met gemeenten, traditionele mobiliteitsaanbieders (bijvoorbeeld autoverhuurbedrijven) of andere belanghebbenden?
  - Kun je een specifiek conflict beschrijven? Hoe werd dit opgelost?

3) Netwerkopbouw en strategische allianties (associatieve capaciteit)

3.1 Partnerships en strategische samenwerkingen

- Wie zijn de belangrijkste partners voor MyWheels (geweest) om haar doelen te bereiken?
  - Waren er partnerships die mislukten of niet zo goed hebben gewerkt als verwacht?

3.2 Belangenbehartiging en industriebetrokkenheid

- Heeft MyWheels zich ooit actief beziggehouden met belangenbehartiging of lobbyen?
  - Op welk niveau (lokaal, nationaal)?
  - Kunt u een voorbeeld geven van een succes of een mislukking in belangenbehartiging?

3.3 Gebruikersgemeenschap en sociale netwerken

- Hoe bouwt en onderhoudt MyWheels een gemeenschap van actieve gebruikers?
  - Zijn gebruikers zelf ooit als ambassadeur voor MyWheels opgetreden?
  - Zijn er gebruikersgestuurde initiatieven of ideeën die MyWheels heeft overgenomen?

4) Strategische positionering en toekomstvisie

4.1 Strategische positionering en branding

- Hoe presenteert MyWheels zichzelf aan gebruikers en partners?
  - Wat is de belangrijkste boodschap of waardepropositie?
  - Is deze boodschap in de loop der tijd veranderd?
    - Framing als duurzaam / meer plek in openbare ruimte / goedkoop / minder autobezit
- Hoe proberen jullie vooruit te kijken of in te spelen op toekomstige ontwikkelingen in mobiliteit?
  - Werkt MyWheels met scenario's, pilots of partnerships gericht op toekomstige veranderingen?

4.2 Huidige status en regime-integratie

- In hoeverre denk je dat MyWheels nu deel uitmaakt van het reguliere mobiliteitssysteem in Nederland?
  - Zijn er beleidsregels die nu actief autodelen ondersteunen?
  - Zijn er nog steeds barrières die voorkomen dat MyWheels een volledig mainstream mobiliteitsoptie wordt?

4.3 Toekomstvisie

- Hoe ziet MyWheels haar rol in het Nederlandse mobiliteitslandschap in de komende 5–10 jaar?
    - Wat zijn de grootste kansen voor verdere groei?
    - Wat zijn de grootste bedreigingen of uitdagingen?

B-2 Interview guide for interviews on regime pressures and anticipation

Interviewees: D. Sprecher, B. Van der Kolk & J. Gieles
Conducted on: March 27, 2025; May 6, 2025 & April 29, 2025

Over het interview:

- Dit gesprek is onderdeel van mijn masterscriptie.
- Ik zou het gesprek graag willen opnemen, is dat akkoord?
    - De opname wordt verwijderd nadat mijn scriptie is ingeleverd.
    - Alleen ik, mijn scriptiebegeleider en de tweede corrector hebben toegang tot deze opname.

Anonimiteit en vertrouwelijkheid:

- Je mag anoniem blijven in de uiteindelijke thesis, als je dat wilt.
- Je hoeft dat nu nog niet te beslissen.
- Ik vraag het je ook nog eens na afloop en je kunt het ook later alsnog aangeven.

Praktisch tijdens het gesprek:

- Voel je vrij om een vraag over te slaan of aan te geven als je liever later op een vraag terugkomt.
- Stel gerust zelf ook vragen als je die hebt.
- Sommige vragen lijken misschien voor de hand liggend of als een ‘open deur’.
    - Dat is helemaal oké, soms zijn ze bedoeld als context of als soort ‘leidraad’ in mijn onderzoek.
- Heb je op dit moment nog vragen?
- Zo niet, dan stel ik voor dat we van start gaan

1) Over barrières en mogelijkheden voor MW voor transitie

a. Kun je jezelf kort voorstellen en je functie binnen MyWheels omschrijven?
b. Zou je zeggen dat je meer op operationeel of strategisch niveau werkt binnen MyWheels?
c. Hoe zou je zelf de missie of kernwaarden van MyWheels omschrijven?

1.1 Samenwerkingen (reglementair/markt barrières en mogelijkheden)
Wat ik heb begrepen moeten jullie veel samenwerken met gemeenten, maar ik hoorde bijvoorbeeld ook laatst over een samenwerking met Tivoli

a. Kun je van dat soort samenwerkingen uit het verleden een of meerdere voorbeelden noemen? *Gemeentes, rijksoverheid, bedrijven*
    1. Wat voor een rol spelen hebben die samenwerkingen gespeeld in de ontwikkeling van MyWheels?
    2. Wat voor nieuwe kansen hebben samenwerkingen kunnen bieden voor MyWheels?
b. Zijn er mogelijke samenwerkingen waar MW nu mee bezig is? Of samenwerkingen die jou/jullie in de toekomst interessant of nuttig lijken?
    1. Wat voor impact kan dat hebben voor MyWheels of autodelen in het algemeen?

1.2 Barrières en mogelijkheden
Mogelijk geswitcht vanuit samenwerkingen – eerst dingen die goed gaan noemen (daarop aangestuurd vanuit intro samenwerkingen), maar misschien al snel een bruggetje naar problemen

a. *Op het gebied van beleid:* wat voor soort beleidsmatige mogelijkheden/barrières loop jij tegenaan in je werk?
    1. Wat is de rol van gemeenten hierin?

2. Speelt de landelijke overheid ook een rol?

b. Wat zijn beleidsmatige opties die volgens jou bij zouden kunnen dragen aan de groei van MW of het autodelen in het algemeen?
   - Subsidies?
   - Wetgeving?
   - Financiering?

c. *Op het gebied van infrastructuur:* Ik kan me voorstellen dat er ook fysieke barrières zijn, zoals bijvoorbeeld qua infrastructuur (parkeerplekken, laadpalen, etc)
   - In welke mate?
   - Waar?
   - Wat doen jullie daarmee?

d. *Op het gebied van markt*: Heb je het idee dat MW veel competitie heeft?
   - Met andere deel aanbieders?
   - Met het OV?

e. Zie jij dit als probleem? Denk je dat dit hoort in de wereld van autodelen?

f. Wat zie jij als de belangrijkste stappen die MyWheels kan zetten om zowel de barrières te overwinnen als de kansen te benutten, met het oog op (verdere) groei?

2) Over anticipation strategies bij MyWheels

2.1 Anticipation for the future

a. Hoe zie jij de toekomst van het autodelen voor je?

b. Heeft MW expliciete lange-termijndoelen op het gebied van (duurzame) mobiliteit waar naartoe wordt gewerkt?
   1. Wat voor soort doelen zijn dit?
   2. Zijn het kwantificeerbare doelen?
   3. Op welke termijn wordt geprobeerd deze doelen bereikt te hebben? (kort, middellang, lang)

c. Worden er binnen jouw regio/landelijk bepaalde lange-termijnontwikkelingen verwacht waarop je je probeert voor te bereiden?
   1. Denk aan milieuzones, autoluwe binnenstad, parkeerbeleid, etc.
   2. Hoe proberen jullie daarop te anticiperen? Hoe ziet zo'n proces eruit?

d. Worden hier ook intern investeringen voor gemaakt of bepaalde samenwerkingen voor aangegaan?
   1. Zo ja, waar worden deze investeringen dan op gebaseerd?
   2. En met wie wordt dan bijvoorbeeld samengewerkt?
   3. Wat leveren die op?

2.2 Anticipation for emergence

a. Zou je zeggen dat MW flexibel is ten opzichte van onverwachte veranderingen in bijvoorbeeld de markt, gedrag van gebruikers of milieutrends?
   1. Hoe zie je dat terug? / Is dit wel eens gebeurd?
   2. Kan je vertellen hoe dat precies ging en wat jullie hiervan geleerd hebben?
   3. Zijn hier speciale budgetten of medewerkers op toegewezen?

b. Werken jullie bij MW met pilot-projecten? Zo ja: Kun je een of meerdere voorbeelden noemen van deze pilots?

c. Kun je aan de hand van een van de zojuist genoemde voorbeelden een schets geven van hoe zo'n pilotproject in zijn werk gaat, van begin tot einde? Bijvoorbeeld:
   1. Wat triggert de pilot?
   2. Wie is er verantwoordelijk voor deze pilots? (welke werknemers?)
   3. Maken jullie gedurende het pilotproject veranderingen in de uitvoering of gebeurt dat pas achteraf? Of wordt een pilot bijvoorbeeld halverwege afgebroken als blijkt dat het niet werkt?
   4. Hoe wordt bepaald of een pilot werkt?

d. Bij MW maken jullie gebruik van sleutelfiguren om zo ‘dichter’ op de auto’s te zitten en een gevoel van community te creëren
    1. Hoe vind jij dat dit systeem werkt? Doet het zijn werk?
    2. Denk je dat zij bij zouden kunnen dragen aan pilots of om korte termijn problemen op te lossen? Waarom wel of niet?
    3. Zijn er andere redenen waarom de sleutelfiguren echt wel/niet van meerwaarde zijn?
e. Als jij één ding zou mogen veranderen of verbeteren aan hoe jullie anticiperen op veranderingen, wat zou dat zijn?

2.3 Elektrificatie en duurzaamheidsinitiatieven

a. Elektrificatie is een belangrijk onderdeel van MW haar duurzaamheidsstrategie
    1. Zijn er nog andere duurzaamheidsinitiatieven waar MW door opvalt?
    2. Denk je dat deze strategie heeft bijgedragen aan de groei van MW? Of aan bepaalde lokale steun?
b. De daadwerkelijke duurzaamheid van delen komt weleens ter sprake, hoe kijk jij daarnaar?

Appendix C: Table of selected newspaper articles

Overview of all newspaper articles selected for document analysis in chronological order

Title	Newspaper	Author	Date
Huishoudens ecowijk delen met zijn tienen tweede auto	Utrechts Nieuwsblad		29-03-2004
Wheels4all gaat concurrentie aan	Amersfoortse Courant		27-05-2005
Interesse autodaten groeit gestaag	De Gelderlander		04-08-2005
Bommelse buurtauto voor bewuste rijders	Brabants Dagblad	Kers, B.	21-09-2005
Parkeerplaats voor autodelers	De Gelderlander		05-10-2005
Systeem met deelauto mogelijk uitgebreid	De Gelderlander		20-07-2006
Zutphen paradepaardje	De Stentor		22-07-2006
Deelauto loopt als een trein	De Stentor	Hirdes, R.	22-07-2006
Wijk gaat buurtauto delen	De Gelderlander		06-09-2006
Lochem maakt zich op voor komst buurtauto	De Stentor	Bolink, J.	29-11-2006
Rhenen krijgt buurtauto's in 2007	De Gelderlander		07-12-2006
Buurtauto biedt het gemak van een tweede auto zonder de hoge kosten ervan	De Gelderlander	Van der Velden, R.	16-02-2007
Provincie promoot buurtauto	Algemeen Dagblad		03-03-2007
Deelauto in Culemborg in de lift	De Gelderlander		19-06-2007
Deelauto's op komst in Voorschoten; groei Leiden en Leiderdorp	Leidsch Dagblad		15-08-2007
Een afspraakje met een gedeelde auto	Eindhovens Dagblad	Jansen, Y.	09-10-2007
Buurtauto rukt op in landelijk gebied waar weinig bussen komen	Amersfoortse Courant		17-11-2007
Geen buurt straks nog zonder deelauto	Amersfoortse Courant	Cazander, R.	07-12-2007
Proef met verlichting Stede Broec	Noordhollands Dagblad		10-09-2008
Buurtauto ideaal alternatief in plattelandsgebieden	Algemeen Dagblad		02-10-2008
Gemeente Beek positief over inzetten buurtauto	Limburgs Dagblad		16-10-2008
Een tweede wagen is duurder dan buurtauto	Dagblad van het Noorden		08-11-2008
Goirle moet auto's delen	Brabants Dagblad	Vermeer, B.	18-11-2008
Met de maandelijkse rekening zijn alle kilometers en kosten gespecificeerd	De Stentor	Huizinga, B.	20-11-2008
Parkeerprobleem? Ga autodelen!	Noordhollands Dagblad		13-06-2009
Deelauto niet voor autofiel, maar voor degene die milieu belangrijk vindt	De Stentor	Ten Brinke, N.	26-06-2009
Door de crisis groeit de interesse voor een buurtauto	Provinciale Zeeuwse Courant	Balkenende, F.	31-07-2009
Nu Nederland veroveren	Noordhollands Dagblad		02-09-2009
5 vragen over de dorpsauto	De Stentor	Bolink, J.	02-04-2010
Wheels4all introduceert systeem voor onderling autodelen	OV Magazine		01-07-2011

Bezitters verhuren eigen auto	De Volkskrant	Keuning, W.	15-07-2011
Particulieren verhuren auto	De Stentor	Ter Harmsel, J.	16-07-2011
Met de auto van de buurman op pad	Leeuwarder Courant	Van der Horst, S.	21-07-2011
De heilige koe wordt een uitleenbak	Trouw	Langenhuijssen, E.	29-07-2011
Auto huren van de buurman; Nederland loopt achter op Stockholm en San Francisco	De Groene Amsterdammer	Hoekstra, E.	07-09-2011
Deelauto's veroveren de weg	NRC Handelsblad	Driessen, C.	21-12-2012
Creatief consumeren	De Telegraaf	Van den Berg, M.	12-01-2013
Autodelen? Graag, maar wel met mijn auto	De Gooi- en Eemlander	Vijge, M.	20-02-2013
Met de cabrio van de buren op vakantie	Algemeen Dagblad	Boex, H.	20-07-2013
Op pad met de auto van de buurman	De Volkskrant	Trommelen, J.	05-12-2014
Vervoeder Syntus stapt in autodelen	Algemeen Dagblad	De Kloe, E.	04-05-2018
Ik ben later pas ambitieus geworden'	Elsevier Weekblad	Wytzes, L.	02-10-2021
MyWheels market leader in Dutch car sharing market	The Sharing Group		04-04-2022
Gebrek aan laadpalen nekt elektrische deelauto in Amsterdam; uitstootvrije deadline van 1 januari gemist	De Telegraaf	Schrijver, M.	07-01-2025

Appendix D: AI statement

All writing and analysis presented here are the result of my own work. Generative AI tools were only used in the preparatory phases of research (background exploration and brainstorming) but never instead of critical thinking or as a tool for academic writing.