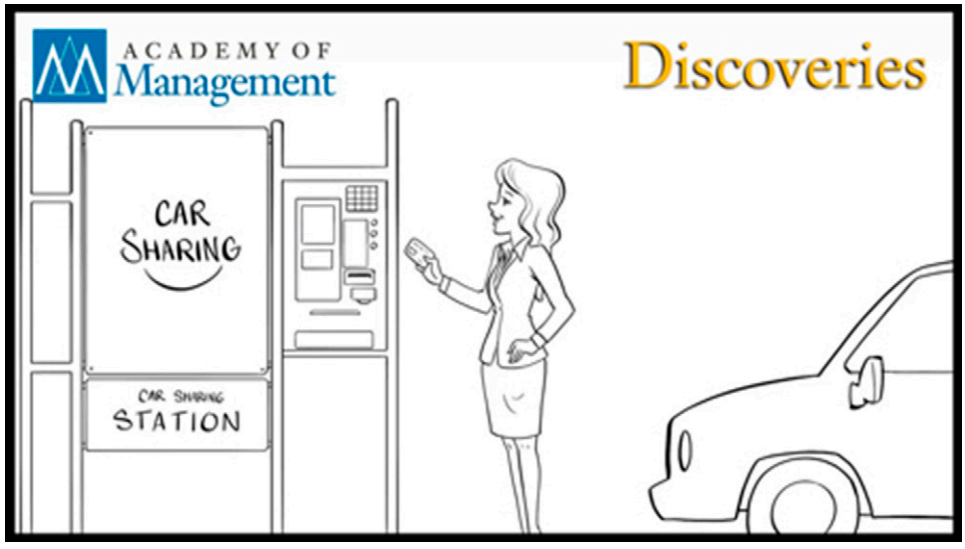
© *Academy of Management Discoveries*
2018, Vol. 4, No. 3, 273–293.
Online only
https://doi.org/10.5465/amd.2016.0149

THE EFFECT OF INSTITUTIONAL LOGICS ON BUSINESS MODEL DEVELOPMENT IN THE SHARING ECONOMY: THE CASE OF GERMAN CARSHARING SERVICES

TANELI VASKELAINEN[1]
KARLA MÜNZEL
University of Utrecht



The forces influencing business model development are widely discussed in the literature, but so far, the effects of macro-level forces such as institutional logics have received little attention. This study describes the effects of institutional logics in the context of business model development in the German carsharing industry. We longitudinally analyze a rich qualitative dataset from the start of professional carsharing in 1988–2015 to uncover the forces influencing the business models. We find that the two main business models—the free-floating model and the station-based model—have developed along disparate trajectories because the actors in the market are committed to different institutional logics. Corporate-backed companies that operate the free-floating business model are committed to corporation logic, and the small, environmentally minded organizations that operate in a station-based model are committed to community logic. We contribute to the business model literature by presenting institutional logics as a moderating force that empower some development trajectories and inhibit others. We also argue that commitment to community logic concerns actors in many other sharing economy markets outside of German carsharing. We discuss the implications of this proposition and suggest topics for further research.

INTRODUCTION

The sharing economy, also referred to as collaborative consumption, describes services intended to replace ownership with the sharing and exploitation of underused assets, ranging from cars, houses, and parking spaces to pets, books, and clothes (Botsman & Rogers, 2010). Sharing economy markets are growing rapidly. A recent study by PricewaterhouseCoopers

Jenny and Antti Wihuri Foundation, Alfred Kordelin Foundation, and the Academy of Finland (project number 296699) as well as Dialogic, the Rathenau Institute, and NWO under the 'Sustainable Business Models' program (no. 438-14-904) for financial support; Wouter Boon, Koen Frenken, Nina Granqvist, Hanna-Leena Pesonen, and Marjo Siltaoja for reviewing and their guidance; and the two anonymous reviewers for their helpful comments.

[1] Corresponding author.

(Vaughan & Daverio, 2016) on the five key sectors of the sharing economy in Europe finds that from 2013 to 2015, the value of the transactions of sharing economy services grew by more than 175 percent, from €10B to €28B.

The business models of many corporations are founded on the idea of private ownership of goods. Therefore, it is possible that the mainstreaming of the sharing economy could radically reform the markets (Howard-Grenville, Buckle, Hoskins, & George, 2014). Carsharing, for example, has the potential to radically reduce the demand for cars; one car used for sharing services has been shown to replace 9–13 private cars (Martin, Shaheen, & Lidicker, 2010). To understand the effect of sharing economy companies on the markets, it is important to understand how these new business models work and which forces shape them.

Research identifies a range of forces that influence companies' development of business models. Internally, business model development is influenced by the cognitive shortcomings of managers (Chesbrough, 2010; Chesbrough & Rosenbloom, 2002; Tripsas & Gavetti, 2000) and the threat that new models might reduce the profitability of existing models (Markides, 2013; Sosna, Trevinyo-Rodríguez, & Velamuri, 2010). The literature on business models, however, has not focused on the external forces that can influence business model development. It is seen as only being moderated by the market in which the company operates, which defines the competitiveness of a business model (Teece, 2010). However, Ocasio and Radoynovska (2016) argue that in many industries, actors are embedded in institutional logics other than the market logic. In these industries, business model development cannot be understood without organizations' commitment to different institutional logics.

Thornton and Ocasio (1999: 804) define institutional logics as "*the socially constructed, historical pattern of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality.*" Institutional logics form the basis for reasoning by determining which activities are seen as desirable and legitimate, thus influencing all aspects of organizations, including their business models (Ocasio & Radoynovska, 2016). Organizations working under different dominant institutional logics have various missions and goals that contribute to the creation of the diversity of the business models. This illustrative case study explores the effect of the plurality of institutional logics on business models by examining the development of various business models in the German carsharing market. This research also answers the recent call to examine the plurality of institutional logics in the sharing economy, which is seen as "*critical to examine the dynamics of the sharing economy*" (Mair & Reischauer, 2017: 1).

Carsharing services, which are offered mostly in cities, consist of membership-based rental schemes that allow people to rent cars on an as-needed basis (Shaheen, Chan, Bansal, & Cohen, 2015). Carsharing is widely considered one of the most significant sectors of the sharing economy (Botsman & Rogers, 2010) and it provides a good context for studying the development of the sharing economy business models because it is one of the few models with a long history. Professional carsharing began in Switzerland and Germany in the late 1980s (Shaheen, Sperling, & Wagner, 1998). In addition to this long history, the German context is also useful for studying the effect of different institutional logics because small, environmentally motivated organizations initially dominated the industry, but corporation-backed companies later entered the market (Loose, 2014b).

We use a rich qualitative dataset of press releases, newspaper articles, practitioner studies, interviews, and company webpages from 1988 to 2015 to describe the major business model changes and investigate the reasons behind these changes. We focus on two dominant business models in the German market: station-based carsharing and free-floating carsharing. The former is based on round trips: the customer returns the car to the same spot from where it was taken. The latter is based on one-way trips in a designated city area: the customer can leave the car at the trip destination as long as it is within the operating area of the service.

This study shows that business model development in the German carsharing industry has progressed on two clearly separate trajectories that are driven by the actors embedded in differing institutional logics: corporation-backed companies embedded in corporation logic and small, environmentally minded organizations embedded in community logic.

Author's voice:
What motivated you to undertake this research?

Author's voice:
How did the paper evolve as you worked on it?

Corporation-backed actors have focused on the free-floating business model. This is because it enables fast growth, which is an inherent part of strategy in corporation logic. Small, environmentally minded organizations have focused on the station-based model and additionally created their own version of the free-floating model. This is because the business models must be aligned with the core principle of the community logic of the station-based operators: it must incentivize people to drive as little as possible.

The differing institutional logics have inhibited the actors from directly imitating each other's business models. Therefore, we contribute to the business model literature by introducing the effect of institutional logics as an inhibitor of business model imitation. The differing institutional logics also affect the physical presence of the different kinds of actors because the business models thrive in different environments. We also demonstrate that institutional logics empower actors to develop the business models into directions that are well aligned with their principles. For example, community logic has helped the station-based actors collaborate and overcome challenges that would probably have been overpowering to any individual organization. We identify the rise of community logic to be a wider trend in the sharing economy and contemplate its impact and future research topics related to it.

INTRODUCING THE CONTEXT: THE GERMAN CARSHARING MARKET

Carsharing emerged in Germany in the late 1980s and has since grown into a diverse market populated by many smaller players driven by environmental goals and a few larger organizations partly backed by large corporations in related industries, such as the automobile industry. In a relatively short time, carsharing services have moved from an eco-niche to the mainstream market. Currently, there are 1.7 million carsharing customers and more than 17,000 carsharing cars in Germany, and the sector has seen double-digit growth for more than 10 years (Bundesverband CarSharing, 2017a). Awareness of the service has likewise grown substantially over the years, as shown in numerous studies. In a survey conducted in 2004 (Loose, Mohr, Nobis, Holm, & Bake, 2004), only 15 percent of the respondents could correctly describe what carsharing is, but in a study conducted in 2015, 64 percent of the respondents were aware of the services (Schreier, Becker, & Heller, 2015).

Two main business models exist in the German carsharing market: station-based and free-floating carsharing. Their basic differences are presented in Table 1. Station-based carsharing enables round trips, with time slots booked in advance; this model uses a fleet of varying car models and types and bases pricing on both the distance driven and rental hours. Free-floating carsharing serves spontaneous, one-way trips in a designated city area by using a fleet of small and microcars from a specific manufacturer; here, pricing is based on rental minutes. Free-floating services are not present in most cities where station-based carsharing companies operate, but rather, they are concentrated in the largest cities. The two models also have some similarities: the carsharing organization owns the fleet, and customers make a frame agreement with the carsharing company and then may make individual rentals independently.[2]

The free-floating market is clearly dominated by two actors. Although four free-floating providers operate in Germany (Bundesverband CarSharing, 2016a), DriveNow and car2go run more than 90 percent of the free-floating cars (Bundesverband CarSharing, 2016a; car2go, 2016; DriveNow, 2016). Both operators are wholly owned by car manufacturing and car rental corporations: DriveNow by Sixt and BMW and car2go by Daimler and Europcar.

The station-based carsharing market is much less centralized. The 150 station-based providers in Germany range from associations operating a single vehicle to companies operating thousands of cars in many regions (Bundesverband CarSharing, 2017a). Most companies are privately owned, but some larger companies are also involved in the industry. Other car manufacturers, in addition to BMW and Daimler, have launched small pilot carsharing programs. Germany's incumbent train operator also has a major player in the market with its carsharing service Flinkster. Almost all the station-based companies belong to the central

Author's voice:
What was the most difficult or challenging aspect of this research project?

[2] The peer-to-peer carsharing business model is also present in the German carsharing market. This model differs from the station-based and the free-floating models because individuals, not companies, own the cars. Peer-to-peer carsharing, however, falls outside the scope of this study. It is quite new and, to date, has few users. In addition, no business model changes in the coevolution of the two dominant business models could be traced to influences from the peer-to-peer model.

TABLE 1
Basic Differences between Station-based and Free-floating Carsharing

Characteristic	Station-based Carsharing	Free-floating Carsharing
Trip type	Round trips with pickup and return at fixed stations	One-way trips in designated areas
Booking	Advance booking for fixed time slots	Instant booking and open-ended use
Fleet	Large variety in the vehicle fleet: the fleet includes cars ranging from microcars to vans with a wide variety of car brands and models.	Smaller variety in car models from only one manufacturer. Although the fleets include SUVs and station wagons, they are clearly focused on small and microcars (e.g., Smart and Mini).
Pricing	Price based on rental time and distance	Price based on rental time
Geographical diffusion	Present in 597 cities of various sizes	Present in 12 of Germany's largest cities

carsharing umbrella organization Bundesverband CarSharing (BCS). This organization serves the political interest of the members, works as a central point for information sharing, and supports its members in practical areas (Bundesverband CarSharing, 2017b). About 80 percent of the station-based companies, including all the major operators, belong to BCS (Bundesverband CarSharing, 2017c).

FORCES INFLUENCING BUSINESS MODEL DEVELOPMENT

A business model is a conceptual model that defines the basic architecture for how a company does business. A business model "*articulates the logic and provides data and other evidence that demonstrates how a business creates and delivers value to customers. It also outlines the architecture of revenues, costs, and profits associated with the business enterprise delivering that value*" (Teece, 2010: 173). The business model reflects the company's realized strategy (Casadesus-Masanell & Ricart, 2010). The strategy determines the goals and a plan of action to achieve them, and the business model is the configuration of the various elements of the business that brings the strategy to life.

Major strategic changes usually require changing the existing business models or creating new ones (Casadesus-Masanell & Ricart, 2010). Many factors, however, constrain a company's strategic agency. Internally, concerns regarding the dominant business model limit innovation and change in this area. Some promising new business models might run the risk of decreasing revenue from a current model (Markides, 2013; Sosna et al., 2010). Other models might be difficult to pursue because they would push the company into its partners' and customers' markets, possibly crippling existing value networks (Teece, 2010). Established companies, therefore, often have difficulty changing their business models even when facing an imminent need for a strategic change. Furthermore, management's cognitive capabilities influence which business models they perceive as valuable, which are most often the business models similar to the dominant one (Chesbrough, 2010; Chesbrough & Rosenbloom, 2002; Tripsas & Gavetti, 2000). Consequently, managers remain oblivious to the potential of many innovations because unlocking their value requires new thinking about business models.

The business model development literature has mainly focused on internal forces. The only external force identified that can moderate business model development is customer needs, which determine what the customer perceives as valuable and how much the customer is willing to pay. These deep truths of customer needs are not apparent, and companies usually must conduct many repeated rounds of investigation to figure out what kind of model works (Teece, 2010). The literature shows no evidence of attention to the influence of institutional forces on business model development, arguably because it is assumed that all the market actors adopt the market logic as their dominant institutional logic (Ocasio & Radoynovska, 2016). Therefore, in a recent review on the business model innovation literature, Foss and Saebi (2017) identified the moderating effect of the institutional forces as an important future research topic.

Actors committed to the market institutional logic primarily pursue constantly increasing profitability (Thornton, Ocasio, & Lounsbury, 2012). This is a fair assumption in many markets with mostly private, entrepreneurial, for-profit actors. In highly institutionally pluralistic markets, the assumption that the various actors pursue only profit maximization might present an oversimplification that leads to a poor understanding of the dynamics of business model development. Although all markets have pluralistic institutional logics to some extent, the level of pluralism differs substantially (Ocasio & Radoynovska, 2016). Mair and Reischauer (2017) argue that sharing economy markets likely have pluralistic institutional logics for two reasons. First,

most of these companies operate in local service markets and they are deeply embedded in local cultures. Consequently, sharing economy markets look very different not only, for example, in the United States and Germany but also even within a single country. Second, sharing economy actors vary greatly in how they interact with their stakeholders. For example, users often are not only customers of the service but also take on some co-creation responsibilities. Understanding the business model development in these markets, therefore, requires comprehending the actors' institutional underpinnings.

Effect of Institutional Logics on Business Models

The institutional logics perspective draws from the neo-institutional theory pioneered by Meyer and Rowan (1977). Their work began with the question of why the forms of different kinds of organizations resemble each other even though their technical activities differ. Meyer and Rowan's seminal argument is that organizations must adhere to the expectations of the organizational structure in modern society, which leads to organizational isomorphism, meaning that the structures gradually become similar. However, organizations can decouple their technical activities from their structure, creating room for strategic agency. DiMaggio and Powell (1983) elaborate on the theory of isomorphism by applying this societal-level theory to the meso-level. They argue that structuration happens in groups of interdependent organizations called organizational fields, which slowly become isomorphic. The work of the early institutionalists granted organizations little agency in institutional processes; they were external forces compelling the organizations either to conform or perish.

The institutional logics perspective, introduced by Friedland and Alford (1991) and later elaborated on by Thornton et al. (2012), has posed theoretical counterpoints to the prevailing assumptions of the neo-institutional theory. According to the metatheory of institutional logics, all organizational agency is institutionally embedded. The prevailing institutional logics create the basis for what is seen as valuable and desirable (Thornton et al., 2012). However, organizations are not mindless puppets: they have partial autonomy. Institutional orders set the basis for agency, but they do not exactly dictate how to use it. Furthermore, the institutional orders themselves can be changed. In addition, the fact that organizations are embedded in multiple institutional orders enables them to pick the cultural elements of the different institutional orders in a unique way.

Institutional logics are macro-level cultural logics that create the basis for the individual's sense-making. Institutional logics are usually conceived through ideal types, and these types define the basis for sense-making in a particular societal domain. Thornton et al. (2012) identify seven of these ideal types: family, community, religion, state, market, profession, and corporation. Each order creates the sources for individual and organizational legitimacy, authority, identity, the basis of norms, attention and strategy, and the informal control mechanisms that uphold the institutional order. Although the institutional orders get their names from specific organizational types, this does not mean that an organization is only committed to a single institutional logic. For example, a large family firm could be committed to family logic through its ownership ties, to corporation logic through the management system of the company, and to market logic through its business.

Although all organizational fields have institutional pluralism to some extent, typically one logic clearly dominates over the others (Reay & Hinings, 2005). Organizational fields are not always stable because institutional logics compete for dominance. This competition might stem from an exogenous shock that forces a new institutional logic onto an organization, as the environmental catastrophes of the 1970s did to the U.S. chemical industry (Hoffman, 1999). In these cases, stakeholders commonly force the organizations to consider a new logic that was previously foreign to them. Conflict among institutional logics can also result from institutional entrepreneurs who introduce a new institutional logic into a field (Rao, Monin, & Durand, 2003).

A conflict between institutional logics usually reaches a resolution eventually. Either one institutional logic ends up dominating the other (Rao et al., 2003), or they converge, creating a new, dominant field-level logic (Glynn & Lounsbury, 2005; Hoffman, 1999). However, sometimes the conflict does not resolve; rather, it becomes a more or less constant state in the organizational field. In this case, the different dominant institutional logics usually remain siloed within different organizations in the same market that either collaborate (Reay & Hinings, 2009) or compete (Lounsbury, 2007).

Organizations in institutionally pluralistic fields must learn to cope with the demands of the conflicting institutional logics and create strategies and practices that balance the logics (Battilana & Dorado, 2010; Pache & Santos, 2013). Highly institutionally pluralistic environments present different configurations for how to achieve this balance. Ocasio and Radyonovska (2016) theorize that institutional pluralism increases the heterogeneity of the business

models on the level of the organizational field. The different configurations of commitment provide a foundation for the varied strategies that lead to the creation of different business models.

So far, no empirical research has investigated the influence of institutional logics on business models. In the institutional logics literature, some studies show business practices more or less as the given extensions of the institutional logics and do not examine the creation of the practices (Battilana & Dorado, 2010; Lounsbury, 2007; Rao et al., 2003). We contribute to filling in this research gap by illustrating how different institutional logics influence the business models in the German carsharing industry. Our observational context is the industry, here referring to the producers in the carsharing market. Therefore, it is a narrower context than the organizational field that, in addition to the producers, often includes many kinds of actors that influence the creation of institutions, for example, regulatory bodies and social movements (Wooten & Hoffman 2016). We have chosen the narrower focus because we do not look at the change or emergence of the institutions. They appear in the data as external forces influencing the business models. We have chosen to look at the providers because they are ultimately the ones making the decisions on the business models.

Understanding the institutional underpinnings of the German carsharing industry requires reviewing the different institutional logics and the base these logics form for strategy formation. Of the institutional logics presented by Thornton et al. (2012), three influence business model development in the context of this study: market logic, community logic, and corporation logic. In market logic, the aim of strategy formation is to increase profitability either by cutting costs or enhancing competitiveness by creating more value for the customers. Market logic, therefore, can be expected to steer the business model design toward greater efficiency and improving the value proposition. The aim of strategy formation in community logic is to increase the status of the organization within the community and honor the community's members and practices. Community logic, therefore, can be expected to manifest in business models through practices agreed on within the community. In corporation logic, the aim of the strategy is to increase the size of and diversify the firm. Corporation logic, therefore, can be expected to direct business model development toward entering new markets and growing the company.

METHODOLOGY

To understand the forces influencing the development of business models in the German carsharing industry, we conducted a phenomenon-driven single case study based on qualitative evidence. Theories developed in studies based on rich contextual evidence tend to explain the studied phenomenon very accurately and be loyal to the particulars of the context (Dyer & Wilkins, 1991). We considered this a good research approach because it allowed us to understand what is novel in the phenomenon. We also did not work from any presuppositions in theory but rather conducted research abductively. We formulated a theory grounded in the contextual evidence collected, and the simultaneous reading of the theory helped us see patterns in the data.

Demil and Lecocq (2010) argue that business models can be used in two ways: in a static way to capture the manner in which a company does business or in a dynamic way to illustrate innovation and change in an organization or the business model itself. We adopt the latter approach. To understand the forces influencing business models, we observe how they change and examine the factors driving the changes. Focusing on a single institutional context yields a nuanced picture of the environment in which the carsharing actors have operated at different times. This helps us understand the data from the actors' perspective and enables us to observe the development of business models to reveal not only the event histories but also the deeper logic, enablers, inhibitors, reasons, and motivations for their development (Van De Ven, 1992).

Zott, Amit, and Massa (2011) suggest that in the literature, scholars use business models as an analytical unit to explain how firms create and capture value across firm boundaries. For example, Bohnsack, Pinkse, and Kolk (2014) use business models in this way to understand the generic patterns for how business is conducted in the electric car market. In a similar way, the generic business model configurations of the German carsharing industry form our analytical units. These configurations do not exactly portray the business model of any single company because all models are unique. However, they form the basis for all the models of the individual companies. Therefore, they describe the generic ways in which companies can do business and survive in the market. This is also important in terms of revealing forces such as institutional logics that affect business model development on a collective level. Deeply ingrained belief systems are often not even acknowledged or questioned by organizations (Scott, 2013), so they would be difficult to spot by only looking at the business models of individual operators.

Business Model Framework Used for Analysis

The literature shows many kinds of business model frameworks with varied components (e.g.,

Bohnsack et al., 2014; Chesbrough & Rosenbloom, 2002; Demil & Lecocq, 2010; Morris, Schindehutte, & Allen, 2005; Teece, 2010), including factors related to value creation, the firm's financial structure, back office activities, and the company's strategy to capture a competitive advantage. Because of the industry-level focus of this study, the factors that reflect the choices of individual organizations (e.g., strategy) are excluded.

Figure 1 shows the business model framework, which consists of the value proposition, value capture, value network, and customers. Value proposition describes the value that a product or a service offers to the customer, and value capture is the way the company receives money for the proposed value. These are the basic elements needed for the survival of any for-profit organization in any market.

In carsharing, value proposition consists of three components: the variety of the fleet that is offered to customers, how a rental is started and ended, and how the customer accesses the car. Although customers do not necessarily value the access procedure, it moderates the convenience of the rental experience. Convenience is highly important to carsharing customers (Shaheen & Cohen, 2013) and thus part of the offered value. Value-capture mechanisms in the carsharing industry are straightforward because renting cars is almost the operator's sole revenue source. Hence, this value capture determines the pricing of the carsharing companies.

In addition, the business model framework includes the targeted customers. For this element, we look at the specific segmentation that carsharing companies use, not the customers who choose the carsharing services. The reasoning is that as business models develop, the company's customer segmentation becomes more fine-grained, revealing the forces influencing the business model development. The framework also includes the value network. Few customers use only carsharing for their transportation needs, so the service is always part of a transportation chain. Thus, carsharing is a networked business by nature, and the value network is a major part of the business model development.

Data

Table 2 lists the data sources used in this study. Data collection began with a round of interviews in 2015. The first interview was conducted with the central umbrella organization, BCS. In the interview questions, we asked who the central actors in the carsharing industry were. Starting with this first set of actors, we used snowball sampling (Heckathorn, 2011), in which each interviewee recommended other individuals and organizations to be interviewed. The goal of the interviews was to shed light on the most significant business model changes in the carsharing industry and to discover their causes.

Interview data describing past events are prone to post hoc rationalization and memory lapses. Therefore, in theorizing change processes, interview data should be complemented with archival data to get a more fine-grained understanding of how events have unfolded (Langley, 1999). Thus, we collected an extensive set of archival data to confirm and contextualize the findings and to set the events in the correct order. We examined the press releases of the key players to create an event history of the major business model changes in the free-floating and station-based models.

We identified the key players by asking the interviewees which organizations had the most influence in bringing about changes in the business models. In the case of the free-floaters, the choice of which organizations to analyze in detail was straightforward because DriveNow and car2go clearly dominate the industry and initiated all the major

FIGURE 1
Business Model Framework of the Current Study

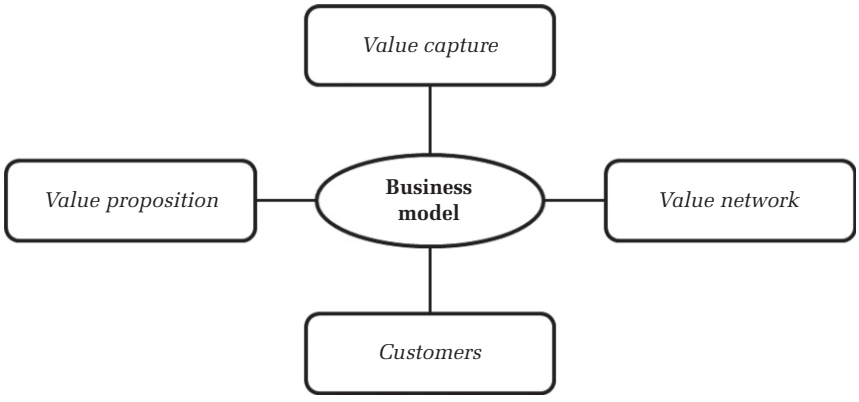


TABLE 2
Description of the Data Sources

Data Source	Description
Documents (press releases) describing business model changes	Major business model changes in the case companies were collected from 360 press releases published from 2001 to 2015 (car2go: 118; DriveNow: 93; cambio: 72; Stadtmobil: 77)
Histories and books on carsharing: *25 Jahre Carsharing* (Loose, 2014a) Dissertation by Petersen (1995) Histories on cambio's and Stadtmobil's websites	The first source is a book on the history of carsharing, which was written in 2014. It describes the emergence of the carsharing movement, development of carsharing technology, most important partnerships in the industry, and history of the major carsharing players in Germany. The second source is a dissertation completed in 1993 by the founder of the first professional carsharing organization, STATTAUTO Berlin. The dissertation describes the company's business model in detail and gives an overview of the carsharing market at the time. Cambio's and Stadtmobil's websites describe the most significant events and changes in their histories.
Various studies on German carsharing	Six studies of the German carsharing market in different eras (Byzio, Heine, Mautz, & Rosenbaum, 2002; Johnsen, 2007; Loose, 2010; Loose et al., 2004; Schreier et al., 2015; Traue, 2001)
All the carsharing articles from the weekly German newspaper *Der Spiegel* and *Spiegel Online*	Sixty-seven articles on carsharing published from 1990–2015 identified using *Der Spiegel*'s own categorization and the search term *carsharing*, which is accepted as a general term for the industry
Fourteen semi-structured interviews of 30–120 minutes	The interview questions covered the most important business model changes, justifications for major business model changes, the backgrounds of some historical events, and the missions driving the companies. The interviewees represented various kinds of organizations and were managing directors, communication directors, or consultants. The interviews were distributed among the organizations as follows: two each from cambio, stadtmobil, BCS, and DriveNow; three each from other station-based carsharing organizations and from industry consultants who used to work for free-floating organizations.
Database describing the business models of all German carsharing operators that have websites	A database of 100 carsharing operators in the German market collected in the spring of 2016 with rich information, including the basic value proposition, pricing model, ownership structure, partners, area of operations, number of cars, and membership in BCS

developments in the free-floating model. Selecting which station-based organizations to analyze was more difficult because numerous organizations operate this service type. After studying the history of carsharing and holding discussions with key informants, two organizations emerged as clear game changers in the station-based carsharing industry: stadtmobil and cambio. According to our data, these two actors together control more than 40 percent of the station-based carsharing market, as measured by the number of cars, and they introduced major changes in the business model.

The archival data were further complemented with books on carsharing, studies on different eras of carsharing, and all the articles on carsharing published in the German weekly newspaper *Der Spiegel*. The data served two purposes: first, it provided information from the early period of carsharing before the turn of the millennium. The press release data start in the year 2001, so the event history does not expand to this earlier period. Second, it contextualized the changes, providing snapshots of what the carsharing market looked like during different eras.

Finally, to get a comprehensive picture of the German carsharing industry, we constructed a database describing the business models of all German carsharing organizations that have websites. Data were collected in the Spring of 2016 from the company websites and they describe the business models of 100 station-based and free-floating companies, including all the major actors in the industry. At this stage, two confirmatory interviews were also conducted to fill some gaps in the data and to verify the initial findings regarding the reasons for some early business model changes and business model experimentation in the station-based carsharing industry.

Analysis

The analysis was carried out over four rounds that partially overlapped. In the first round, we traced how the station-based and free-floating carsharing business models had developed. We examined the organizations identified as central to the business models development: car2go, DriveNow, cambio,

Author's voice:
How did you get access to your data or site?

and stadtmobil. The press releases, interviews, and other archival material concerning the organizations were analyzed for any references to the business model. We coded all the sections that contained any references related to the business model. At this point, we did not consider what might be relevant in the later stages of analysis. Consequently, the business model framework was more extensive than the one presented in this article and included elements concerning, for example, individual company's organizational design and strategy. We documented all these changes chronologically in a 100-page Microsoft Word document.

In the second round of analysis, we identified the major business model changes based on the document made in the previous round and on archival material concerning other actors in addition to those studied in the first round. We defined a major change as one not only affecting one element of the business model but also as reconfiguring the business model in some way. Each major change raised the question of why it happened, and the new kinds of actors entering the carsharing market with different business models raised the question of why they selected their particular business models. Market exits and discontinued experiments raised questions about their causes as well.

We analyzed the available data to discover the reasons behind the business model changes, market entries, and market exits. Sometimes, the reasons could not be found, so we consulted complementary data sources, including carsharing operators' current websites and old websites retrieved using the Wayback Machine, as well as newspaper archives, press releases from carsharing organizations and BCS, and the annual reports of the owners of the free-floating companies. On the rare occasions that the answers still could not be found, we asked our key informants about them. Based on the results of the second round of analysis, we wrote a narrative of the major business model changes and the reasons leading up to them.

In the second round of analysis, institutional logics emerged from the data as a major factor explaining how some elements of the business models developed. These themes reoccurred throughout the data across the individual organizations studied. The institutional logics, therefore, were not the phenomenon that motivated the study; instead, they were an explanatory factor grounded in the data.

Identifying institutional logics as an important influence on business model development led to the third round of analysis. We examined how the institutional logics formed and how and why they affected the business models. The institutional logics, especially those of the station-based actors, could be tracked to the coded norms affecting the overall business model of the industry. The finding that institutional logics stabilize the business model development through norms prompted us to pay closer attention to the areas of the business model that had not changed or that had been improved gradually during the observation period. This deepened our understanding of the different institutional logics, driving the development of the two business models.

In the fourth and final round of analysis, we attempted to ensure that we had not overlooked any of the business model trajectories within the German carsharing industry. We scrutinized a database containing all the German carsharing actors for business model configurations other than those we identified in the earlier stages. We also more carefully studied the business model development regarding some of the major actors and more peculiar actors to understand their role in the business model development and the reasons for their specific business model configurations. In particular, because of its position in the carsharing industry, we studied the business model of German train operator Deutsche Bahn (DB) at different points in history. We also wanted to make sure that we had not missed any major discontinued business model experiments and accordingly examined books on carsharing, studies on the German carsharing market in different eras, and interviews discussing this topic.

FINDINGS

This section presents the findings from two eras in chronological order. The first era began with the founding of the first station-based organization and the second era started with the founding of the first free-floating organization. The section on each era starts with a brief introduction of the historical underpinnings of the institutional logics to which the actors entering the market are committed. Next, we describe the business model development and the causes behind this development by using the business model framework presented in the methodology.

Era 1: Emergence and Professionalization of Station-based Carsharing: 1988–2009

The story of professional carsharing in Germany began on June 10, 1988, with the founding of a company called stadt-AUTO. Before this, carpooling initiatives had operated in Germany, but no organization offered short-term usage of a car. Markus Petersen founded stadt-AUTO as a field experiment for his dissertation on the economic feasibility of carsharing. Shortly after the founding of the organization, however, the media became interested in it, and the organization started to grow rapidly.

After the establishment of the first organization, carsharing services in Germany rapidly proliferated. In 1994, 69 providers existed, mostly motivated by environmental concerns, and almost without exception, they were founded as associations. Loose (2014b: 11) describes the motivation behind the initiatives as follows: "*Carsharing originated as an alternative to the overpowering position of the individual car mobility in German cities, which had dominated German transportation politics* since *the end of the Second World War. The impulse emanated from environmental associations and ecological oriented transport initiatives. Cars should be used more efficiently and intelligently. Thereby fewer cars would be needed, and thus they would cause less ecological damage. The idea to use cars instead of owning them was the right answer to them to the challenges of the transport and environment situation of the time.*"

The most important purpose of carsharing companies from the beginning has been to reduce the use of private cars. Carsharing exists as a service because the operators perceive that people sometimes need a car and would have to acquire their own without the service. However, companies should incentivize customers to use cars only when necessary and as little as possible, encouraging customers to otherwise use more ecological transportation modes such as walking, bicycling, and public transportation. The manager of a carsharing organization expresses this view in an interview: "*One of our big goals is that we have an ecological claim. We want to reduce the car traffic in cities. That is really our great commitment and a reason why we do the whole thing.*"

Although many station-based carsharing operators later professionalized and changed their organizational form into private for-profit companies, they did not abandon their original mission. Running carsharing through a company structure merely serves as a means to an end: to get people to drive less with their privately owned cars. Station-based operators see operating carsharing on a for-profit basis rather than, for example, on a state-subsidized basis as supporting their mission. Any driving harms the environment; therefore, drivers need to carry their own costs and should not be subsidized. A manager of a major carsharing firm expresses this position well, as follows: "*It is clear: the economic side has to work. We cannot go around that. Without that, nothing works. And you ask a question about subsidies. We have always objected to that. We have always thought that driving a car should not be subsidized. The person who wants to drive needs to pay for it.*"

The ecological mission became the basis for the community institutional logic among station-based carsharers. German and Swiss carsharing operators founded a common European umbrella organization in 1991, which formed the foundation for the later German umbrella organization BCS. To belong to BCS, an organization must adopt a business model that meets the central organization's definition of a carsharing business model. This definition imposes certain requirements on the business models of carsharing companies, and if a firm later violates these requirements, BSC may question its membership and expel it.

The principles of the community logic were further shaped into norms as carsharing received the environmental label "der Blaue Engel" (The Blue Angel) at the turn of the millennium. The German government created this label and awards it to products and services based on criteria decided by an independent jury. The environmental label exercises major influence in the station-based carsharing industry, with three of the five biggest carsharing companies earning it. Der Blaue Engel reflects the BCS definition of a carsharing service but contains further requirements for the business model. Table 3 presents the requirements of both parties. The

TABLE 3
Bundesverband CarSharing (2007) Definition of Carsharing and Der Blaue Engel (2016) Requirements

BCS's Definition	Der Blaue Engel's Requirements
• The service is open to everybody. • Usage of the cars is based on a frame agreement, and a separate agreement is not made for each transaction. • The cars are distributed at decentralized stations, the residences of users, and public transportation network. • The cars can be booked at all times and taken and delivered independently by users. • Car usage is priced according to the rental time and distance traveled. • Short-term usage of an hour is possible. The hourly price may not be more than one-eighth higher than the daily price.	• The cars must be maintained regularly according to the manufacturer's recommendations. • The operators must provide customers with information about fuel-saving driving habits either online or in distributed informational material. • Annual subscribers to public transportation must be given discounts if the public transportation operator does not offer its own service. • The fleet must be labeled with a green sticker (a label given by the government to low-emissions vehicles). • No vehicles may exceed the maximum CO_2 emissions (199 CO_2/km), and the average emissions of the fleet must meet a limit that becomes stricter each year. By 2020, emissions must be brought down to 95 g CO_2/km.

following sections explain their effects on the elements of the station-based carsharing business model.

Business model development: Value proposition. Before the turn of the millennium, the various carsharing organizations had similar value propositions. At this stage, the service remained rather amateurish and required the customers' dedication and patience. Customers could do bookings only by telephone, and many carsharing organizations, especially early on, took reservations only during certain hours of the day. Cars did not have regular parking spots, and customers had to find them using instructions given by the carsharing organization before starting a rental. Booking times could not be controlled, but the customers were trusted not to keep the cars longer than promised. Some organizations even required that new customers give up their private cars before joining to ensure that they actually drove less. Companies, however, quickly abandoned this requirement because it restricted the circle of carsharing users too much.

During the 1990s, the basic carsharing business model changed only incrementally. Despite the relative clumsiness of the value proposition, almost all carsharing organizations enjoyed steady, brisk growth throughout the decade. However, as the turn of the millennium approached, the carsharing organizations started to face challenges. As the Internet's popularity grew, many customers requested the ability to book cars online. At the same time, concerns regarding the security of the cars grew. All the customers held keys to all the key cabinets, and there was no control over who took the car keys and when they were returned. Toward the end of the 1990s, several incidents of fraud and even car theft occurred. This situation motivated carsharing organizations to consider automated access to cars using personal keycards.

Small carsharing organizations operating in separate cities faced significant challenges in implementing these technological changes. Internet booking required developing applications, and automatized access required rolling out board computers throughout the vehicle fleet and giving out chip cards to members. Carsharing organizations had neither the expertise nor the funding to carry out these improvements. This need brought the organizations closer together, and different kinds of clusters started to form, giving rise to the carsharing clusters stadtmobil and cambio, today the biggest operators in the German carsharing market. After the turn of the millennium, these organizations introduced the first online booking systems, automatic access systems, and on-board computers, which other leading carsharing operators quickly adopted.

Although the market logic of reducing risks, increasing efficiency, and answering customer demand were the main motivations behind creating carsharing clusters, community logic aided the organizations in finding common ground. The organizations constantly discussed issues with each other and sought to solve problems together, which eventually led to integration. For example, cambio came into being as follows (Warmke & Dannheim, 2014: 35): "*The experience exchange leads the [carsharing] companies in [the cities of] Aachen, Bremen and Köln more and more together and finally to the realization that efficiency and professionalism can only be accomplished together.*"

Many smaller carsharing players did not have the ability to get onboard with the technological development but received support when DB, the German train operator, entered the market in 2001. DB did not have its own fleet; instead, it created a franchising model in which local partners delivered the service but followed a uniform pricing structure. DB also provided a common marketing portal, an Internet booking system, a competency center, and back office activities. Many small carsharing companies partnered with DB and gained access to an Internet booking system. Later, stadtmobil also enabled other organizations to use its technological platform and created a pricing model based on the size of the carsharing organization. The carsharing systems of both DB and stadtmobil helped station-based carsharers bring their value proposition into the Internet age.

Although the entry of DB accelerated the technological development of the carsharing market, it did not change the station-based carsharing business model in any significant way. DB had little motivation to shake things up in the market. The corporation saw carsharing as an important last-mile service to its core business: railway traffic. Carsharing services provided a way for train customers to get to the train station and continue their travel from there.

Regarding the fleet, the principle stemming from community logic holds that station-based carsharing should answer to all the automobile needs of customers. Thus, station-based carsharing organizations have fleets with a wide variety of cars of different types and sizes. Furthermore, fleet emissions have been a target of constant optimization in the business model. Many carsharing companies must focus on this area to earn the environmental der Blaue Engel label, which sets the absolute maximum emissions and maximum average emissions of the carsharing fleet and requires constant improvement in this area. For example, the current label requires reducing average emissions to 95 g CO_2/km by 2020.

Business model development: Value capture. The value capture model remained similar throughout the first era: it had a time- and distance-based component and usually a monthly fee. Bundesverband CarSharing (2007) definition of carsharing includes the time- and distance-based pricing components (see Table 3), making them part of the business model imposed on station-based carsharers by community logic. A monthly fee is not required and is dictated more by market logic. Each new customer requires administrative work, so a large number of customers who drive little create costs but generate no revenue.

Business model development: Value network. The value network of carsharing companies has developed by allowing customers to cross-use the services. German carsharing companies have focused on providing services to specific cities or areas of the country. However, from the very beginning, the community has entertained the thought of allowing customers to cross-use other carsharing services on trips outside their hometowns without having to register as customers of the local carsharing organizations. Some cross-usage partnerships already existed in the 1990s, but online booking systems accelerated their development.

Gradually, two cross-usage networks developed in Germany. In 2001, DB launched the first franchising network, using its booking system and a unified tariff structure to facilitate easy cross-usage among partners. Second, cambio and stadtmobil agreed on a cross-usage partnership in 2004. Later, other carsharing organizations joined this cross-usage network. In 2017, both cross-usage networks allowed customers to use more than 4,000 cars across Germany through membership to a single carsharing organization (cambio, 2017; Flinkster, 2017). The networks included most carsharing organizations in Germany.

Although the motivation to create cross-usage networks stems from market logic, community logic created the groundworks for these partnerships. Unlike many entrepreneurial companies, station-based carsharing companies do not perceive growth as valuable in and of itself. A manager of one carsharing organization expresses this view in an interview, as follows: "*First of all, it is important [to note that] all the classic carsharing providers are not companies that came to the market with the goal to operate carsharing in as many cities [and] as many countries as possible. We are not interested in growth. ... We are concentrated in the places where we are present and trying to have a service network as dense as possible*." Because of the shared community logic, station-based operators have little motivation to move to areas where other carsharing firms already operate because these firms belong to the same community. The organizations, therefore, have found it easy to agree on cross-usage because they see other organizations more as partners than as possible future competitors.

In addition to other carsharing organizations, another important partner has been public transportation. Local carsharing and public transportation operators entered their first partnerships in 1995, and since then, new agreements have emerged in most German cities where carsharing is available. The nature of the partnerships ranges from common marketing campaigns to permanent tariff partnerships, offering customers package deals that include annual public transportation subscriptions and carsharing usage rights.

The motivation to strike up partnerships with public transportation partly originates from market logic. Regular users of public transportation present an attractive customer group for carsharing organizations. They are far less likely than others to own cars, so they are easily drawn to carsharing services to satisfy their occasional need for private automobiles. However, the motivation behind these partnerships also stems from community logic. The BSC's definition of carsharing states that carsharing is complementary to walking, bicycling, trains, and buses. The environmental certificate der Blaue Engel lays out further requirements for the companies' business models, including that carsharing companies give discounts to annual public transportation subscribers.

Business model development: Customers. The target customers of the carsharing firms' business models have also developed. Initially, the services were not especially targeted at anyone because the scarce amount of human resources had to be dedicated to running the service. However, as more customers joined, the companies faced challenges with the utilization of the cars. First, customers used the cars almost exclusively for private purposes, with peaks during off-business hours, especially on the weekends. Consequently, not all customers could secure cars during peak hours, and cars stood idle during nonpeak hours. Utilization was important because the carsharing organizations had significant fixed costs for central office activities and investments in technology and their fleets. The need to even out utilization guided carsharing companies' attention to business customers early on. Business customers have a complementary usage profile to private customers because business customers mainly use the cars on weekdays during office hours.

To increase the share of business customers, organizations made numerous tweaks to increase the attractiveness of the business model. Regarding the value proposition, companies offered business

customers centralized billing services and fine-tuned the service to serve their transportation needs, setting up stations in business areas and even stations dedicated to specific business customers. Regarding value capture, firms gave separate discounted pricing schemes to business customers.

Era 2: Rise of the Free-floating Operators, 2009–2016

Daimler became the first free-floater to enter the carsharing market, announcing the pilot of car2go in 2008. When Daimler started to expand the service in 2011, it partnered with the car rental company Europcar. Car2go was not the only free-floating carsharing company for long. In March 2011, BMW announced that it and the car rental company Sixt were founding a carsharing joint venture called DriveNow, opening first in Munich and Berlin and later expanding internationally. Within the German markets, car2go and DriveNow competed in the same spaces, and by the end of 2013, both companies had a presence in Germany's five largest cities.

The main strategic motivation behind entering the carsharing market stemmed from the eroding status value of the car in the eyes of young urban dwellers. BMW and Daimler saw carsharing as complementary to their dominant business model, which is based on manufacturing and selling cars; the companies saw this as a way to work in brand marketing to this hard-to-reach customer segment. This view emerges in the following quotation in *Der Spiegel* (Rieckmann, 2010): "*Behind the mobility concepts of the manufacturers ultimately lies the calculation to turn young purchase refusers into young car buyers. Andreas Leo, speaker of car2go formulates it this way: 'Every ride with car2go is, of course, also a test ride in a smart (car).'*"

The free-floating business model suited corporation-owned joined ventures because it aligned with the parent companies' corporation institutional logic. Any new business in which corporations invest must provide the means to grow the corporation. The corporations did not publish explicit targets for the growth of their subsidiaries, but they expected this of car2go and DriveNow, as illustrated in the following car2go press release (Daimler, 2013): "*Daimler has made a contribution to revolutionizing carsharing. . . . We also want to grow strongly in the future and achieve a market leadership in this segment.*"

For corporations' growth targets, the station-based business model would be far too slow. In 2015, cambio, a leading station-based carsharing company, reported a turnover of 22.5 million euros after some 25 years of operations (cambio, 2016). It is very hard to imagine Daimler or BMW, with their revenues measured in the scale of a hundred billion euros, to invest in such a business. Slow growth, however, is inherent to station-based carsharing businesses because of the difficulty in getting good spots for stations. The best stations are in congested inner cities, so acquiring the spots for stations usually requires local knowledge and lengthy negotiations with the city or the owner of the premise.

Free-floating businesses, however, can experience fast growth. They can start operations immediately with hundreds of cars because they use normal, on-street parking spaces. The difference in these business models is characterized by a director of DriveNow, in the following: "*Let's say the basics to understand the growth of DriveNow, the basic point is always the concept. It could not have been or it could not have grown so fast if the concept [had not been] free-floating carsharing. Free-floating, the flexible kind of carsharing in itself is the frame, or the base actually, for the growth. . . . Also, you can scale it easily if needed. You can put another 100 or 500 or 1,000 cars [into] the city, which the station-based carsharing cannot.*"

Both car2go and DriveNow indeed have grown very quickly. In less than 10 years of operations, they have gained almost three times as many customers as the station-based operators, and there are almost as many free-floating cars as there are station-based cars in Germany (Bundesverband CarSharing, 2017a).

Business model development: Value proposition. Both DriveNow and car2go approached the carsharing market with a similar value proposition based on one-way trips in designated city areas. Customers book cars using web-based software or rent the cars spontaneously on the street. They access the cars using membership cards given on registration. The companies, however, approach their fleets a bit differently. Car2go operates only with two-seater cars: Smart fortwos. DriveNow provides various mini and BMW sedan models and later added Cabrios and sport utility vehicles to the fleet.

The companies have continuously developed the value proposition of the free-floating model in several areas. The organizations have expanded and shrunk their operational areas according to the service's popularity. An important area has been the airports, which both DriveNow and car2go have integrated into their operational areas in all cities where they operate. This improvement particularly targets business customers who use free-floating services as last-mile transportation for their business trips. Regarding fleet development, electric cars have stood as an area of constant development. Their proportion in the whole fleet has constantly increased since the founding of free-floating services.

Overall, the development of the free-floating model has been gradual. The only major deviation

from the business model came from a station-based pilot called car2go black in Hamburg and Berlin powered by the B-model Mercedes Benz cars. The business model was rolled out following a fast-growth model similar to that used for free-floating carsharing. The service started with 200 cars in both Hamburg and Berlin but was unsuccessful and later discontinued.

The company Citeecar introduced another station-based, fast-growth business model in the German carsharing market in December 2012. This marked the first station-based operator backed by venture capitalist money and it aimed at quick growth. The company otherwise acted as a station-based provider but crowdsourced its stations and many fleet-related back-office activities. The company recruited so-called hosts, who gave a parking spot that they owned to a company car and were responsible for the vehicle's maintenance and daily care. In return, the host received an ample amount of free driving hours with the car. The company, however, never achieved profitability and had to cease operations due to insolvency.

The value proposition of the station-based business model has changed very little throughout the second era, but the number of operators has grown substantially, and the model has spread to new cities through the founding of new organizations and expansion of existing organizations. The only major change during the second era concerned some free-floating services provided by station-based operators. Since the emergence of the free-floaters, the customers of station-based providers have actively asked for these services as well.

Station-based providers have reacted to these customer requests in two ways. Some see the station-based model as well aligned with community logic and hence do not perceive the need for free-floating services. For example, cambio's chief executive officer, Joachim Schwarz, comments in the following way in a press release (cambio, 2014): "*Cambio puts its stakes on station-based carsharing. . . . The reserved parking spot and the planning security when booking make it easy for our customers to manage without a private car. Only if carsharing is suitable for all trip purposes in daily use can we really reduce the number of cars in the city.*"

However, other operators have started to provide free-floating services in addition to station-based carsharing. To align the free-floating model with community institutional logic, however, station-based carsharing companies have created a new value-capture mechanism.

Business model development: Value capture. The pricing model of the free-floating operators has been very simple. It bases prices on driving minutes and is purely transaction based, charging no monthly fees. During the second era, the basic model has stayed the same despite some tweaks, including a less-expensive parking tariff and prepaid driving time packages. This pricing model is different from the one described in the definition of carsharing given by Bundesverband CarSharing (2007) and, therefore, conflicts with the norms of community logic. Therefore, BCS has declared that free-floaters are not carsharing organizations because they offer no guarantee that they can reduce private automobile use. As the following Bundesverband CarSharing (2010) press release explains: "*Short one-way car trips for a low price can definitely be a substitute to trips that are normally conducted by foot, with a bike, with a train or with a bus. Therefore, car2go can quickly become a replacement for these environmentally friendly travel modes and not a good supplement, such as station-based carsharing.*"

In the press release, BSC attributes the potentially environmentally detrimental effect to, among other things, the lack of a distance-based pricing component that encourages people to drive as little as possible. To create a free-floating business model that aligns with community logic, the station-based carsharing companies that do try the free-floating model offer it with a pricing model based on both minutes and distance. Minutes are very cheap, whereas kilometers are costly. In this way, carsharing organizations seek to ensure that the cars are not used for brief trips that cannibalize public transportation. Station-based operators see this distinction to the free-floating models implemented by car2go and DriveNow as very important. Bundesverband CarSharing (2016b) recently published a fact sheet highlighting scientific studies that support the distinction.

Business model development: Value network. Similar to station-based carsharers, free-floaters have actively built partnerships with public transportation operators. Car2go, in particular, has seen itself as part of its customers' transportation chains and integrated itself with other transportation options. Its parent company, Daimler, has developed an app called moovel, which is intended to serve as a route planner and information hub for different transportation options. In addition to car2go vehicles, the app presents local public transportation routes, train connections, and selected taxi and bike rental operators. Daimler later also developed the app into a ticket purchase hub for the public transportation options in some cities.

DriveNow has created partnerships with public transportation and been especially active in marketing partnerships. The company has introduced partner packages, in which customers can buy

a skiing, spa, or shopping trip for a fixed price. The package includes trips with a DriveNow car and services and discounts at the destination.

Business model development: Customers. The main factor determining free-floating operators' targeted customers is the free-floating business itself, which is financially feasible only in larger cities. During an interview, the director of a free-floating operator explains this regarding the company's expansion strategy, as follows: "*Very easy story, we need a certain number of inhabitants, we need a certain type of city, which at the beginning was around a million, that we need a minimum of a million people. Which in Germany is only four cities: Berlin, Hamburg, Cologne, and Munich. They have more than one million people. Düsseldorf was a kind of pilot, they are a little less, they have 650,000 inhabitants. It's the smallest city, but connected with Cologne to our Rhineland business area.*"

Only in central cities are there many different kinds of use cases for free-floating services that can facilitate car utilization at a profitable level. The specific geographical focus of free-floating operators makes business customers not quite as important to them as to station-based operators. However, free-floaters have made various tweaks to the business model to attract business customers, offering centralized tools to manage and monitor multiple users under a firm's accounts. Business customers can also receive discounts based on the number of users and have various billing options, including direct integration into the customer's billing system.

Summary of the Findings

Table 4 summarizes the effect of market, community, and corporation institutional logic on the business models of free-floaters and station-based providers. Market logic affects both kinds of organizations. Its fundamentals stem from the carsharing market itself, and any actor in the market must adhere to these fundamentals, at least to some extent, to survive. This logic can be seen as what Teece (2010) describes as the deep truths of the market. Two issues seem to be especially relevant. First, cars provide the sole income source, so carsharing is a utilization business. Both station-based providers and free-floaters, therefore, must seek complementary usage profiles to ensure high utilization. Second, carsharing is a networking business. Very few customers use only carsharing for their transportation needs. Hence, all carsharing operators must consider integrating their services into transportation chains, making public transportation an especially important partner.

Although market logic influences much of the business model development, many aspects of it cannot be understood without examining the other institutional logics affecting the operators. The station-based operators' community logic becomes

TABLE 4
Institutional Logics Influencing the Development of the Business Models

	Station-based Organizations	Free-floating Organizations
Value proposition	*Market and community*: The value proposition is developed primarily based on market logic. Customer requests, risk management, and efficiency all guide development. However, community logic exerts a moderating influence, especially in constant efforts, to make the fleet more environmentally friendly.	*Corporation*: Corporation logic limits the value proposition to the free-floating model. The companies cannot imitate the station-based business model because it does not enable sufficiently fast growth.
Value capture	*Community*: The community demands a pricing model based on both time and distance. Not adhering to this model leads to expulsion from the community.	*Market*: The free-floaters' value-capture mechanism is bound only by market logic, freeing them to focus on maximizing profits.
Value network	*Market and community*: Market logic primarily drives the expansion of value networks. Cross-usage across operators and partnerships with public transportation significantly improves the value proposition of carsharing services. However, the shared community logic also substantially helps organizations find common ground and heavily promotes partnerships with public transportation.	*Market*: Partnership creation is guided by market logic. Like the station-based providers, the free-floaters partner with public transportation because public transportation customers are attractive to the free-floaters as well.
Customers	*Market*: Market logic moderates customer targeting. Cars provide the only source of income, so they should be used as much as possible. In station-based carsharing, this requires building a balanced share of private customers and business customers because of their complementary usage profiles.	*Market and corporation*: Corporation logic restricts which customers can be targeted because the free-floating model only works in metropolises. Like station-based operators, the free-floaters must look for complementary usage profiles within their operational areas to maximize utilization.

especially visible in their value-capture mechanisms. All station-based operators must have distance- and time-based pricing components or face expulsion from BCS. This requirement has prompted station-based operators to create a new hybrid model, offering free-floating cars in addition to station-based cars and basing pricing on inexpensive minutes and expensive kilometers.

Institutional logic has also guided fleet choices to cover different automobile usage needs and constantly optimize car emissions. This logic has urged and even obliged some station-based operators to partner with public transportation. Regarding partnerships, the shared community logic empowered station-based operators by creating a foundation for value networks, paving the way for the creation of carsharing clusters at the turn of the millennium, which spurred technological development. Later, community logic aided operators in creating cross-usage networks to improve the value proposition. It is hard to imagine the resource-constrained organizations of the 1990s individually bringing their services into the Internet age and creating country-spanning usage networks.

The free-floaters have not joined the station-based operators' community but have exhibited the limitations of their parent companies' corporation logic. This logic has first and foremost constrained these companies to the free-floating model because the station-based model does not grow quickly enough. So far, no operator has demonstrated the ability to create a fast-growing station-based model; thus, the market is limited to actors who have the patience to wait for the slow organic growth inherent to this model.

DISCUSSION

This study contributes to the business model literature and offers initial insights into how the plurality of institutional logics plays out in the context of the sharing economy. We demonstrate that institutional logics empower some business model development trajectories and inhibit others. For example, community logic has empowered the collaboration among the station-based operators but inhibited them from directly imitating the free-floating model. The fact that differing institutional logics have inhibited the actors from imitating each other's business models is a contribution to the business model literature. Business models are assumed to be quite easily imitable because they cannot be patented and are usually discernible to competitors.

Teece (2010) mentions three possible factors that can inhibit the imitation of business models: the need for systems, processes, or assets that are hard to come by; the opacity of the business model, making them hard to understand; and the incumbents' possible concerns about cannibalization. Working from the assumption that market logic governs all actors and that organizations make maximizing profits their main goal, this list is probably quite definitive. However, in more institutionally pluralistic industries, this is not necessarily the case. In the German carsharing industry, BCS rules inhibit station-based carsharers from directly imitating the free-floating business model. At the same time, growth expectations inhibit free-floaters from imitating the station-based business model.

The fact that the two kinds of actors cannot imitate the other's business model supports Ocasio and Radoynovska (2016) argument that institutional plurality increases the heterogeneity of business models. Without the differing institutional logics in the German carsharing industry, the free-floating business model might never have emerged, and the hybrid model of the station-based carsharers would unlikely have been introduced. Interestingly, however, the differing institutional logics also limit business model innovation because the norms render some business model combinations illegitimate for the carsharing companies. We, therefore, cannot take a stand on whether an institutionally pluralistic carsharing industry has a higher plurality of business models than one committed to only market logic.

We also offer an alternative explanation for why some corporations fail to capitalize on product and service innovations. An important factor influencing free-floaters' presence and growth is the alignment of the business model with the parent companies' corporation institutional logic. It seems likely that the parent companies are aware of the station-based model but have not entered the market because it cannot be grown quickly enough; therefore, it does not align with corporation logic.

Like management's cognitive shortcomings, institutional logics restrain corporations from benefiting from product and service innovations. In the case of cognitive shortcomings, innovation of the

Author's voice:
Was there anything that surprised you about the findings?

Author's voice:
If you were able to do this study again, what if anything would you do differently?

business model faces resistance from the dominant logic of the firm because managers see the world through their current business model (Chesbrough, 2010; Chesbrough & Rosenbloom, 2002). Similarly, the institutional logics turn executives' attention toward solutions that are consistent with the dominant institutional logic of the industry (Thornton, 2004). On the organizational level, these two forces have similar outcomes because they both restrain the innovation of corporations' business models. However, on the industry level, these forces create protected niches for smaller organizations, which can capitalize on business models that are unaligned with the institutional logics to which the dominant actors are committed.

This dynamic can be also seen in the carsharing market. Corporation-backed firms can only enter cities with more than 500,000 inhabitants, leaving smaller cities to station-based operators that follow community logic. This finding is relevant to Mair and Reischauer (2017) call for research on the consequences of institutional plurality in sharing economy markets. Community logic makes some business model variants illegitimate, so the carsharing offerings in the metropolises and smaller cities follow different trajectories. This situation, of course, might be temporary and change because of a major technological disruption, such as autonomous cars, which would substantially change the players' cost structures (Münzel, Boon, Frenken, & Vaskelainen, 2018).

Regarding institutional plurality, it is important to note that the operators of the German station-based carsharing market are almost exclusively for-profit actors following a community logic of their own creation. The usual assumptions hold that for-profit companies follow corporation and market logics (Ocasio & Radoynovska, 2016). This emphasizes Mair and Reischauer (2017) call to unpack the institutional underpinnings of the sharing economy markets. The emergence and development of the German carsharing market cannot be understood without observing the institutional logics in which the actors are embedded.

This finding is also relevant to the recent discussion on whether the sharing economy leads to radically increased ecological sustainability by replacing the old, unsustainable manufacturing-based business models. Martin (2016) predicts that this will not occur and that corporations will co-opt the sharing economy, making it business as usual, because the corporations entering sharing economy markets have much more power than the ecologically motivated actors that previously populated them. However, in our study on the German carsharing market, we found evidence contrary to this prediction. At least for the time being, station-based operators are thriving in the German market. In addition, preliminary studies indicate that the corporations' free-floating model is ecologically beneficial as well (Martin & Shaheen, 2016; Schreier et al., 2015). Its pro-environmental nature is not as strong as the station-based model, but free-floaters appeal to a different customer group and thus expand the ecological impact of the carsharing industry.

This is not to deny that the differing institutional logics have consequences for the potential ecological sustainability effects. Car2go and DriveNow only entered the carsharing market when they had created a business model in line with their parent companies' corporation logic. The pro-environmental nature of the business model is more of a side effect than a reason for existence, as it is for station-based carsharers. Corporations entering other sharing economy markets, therefore, might indeed erase the sustainability benefits presented by smaller actors' business models. However, in contrast to Martin (2016), we argue that the effects of corporate cooptation cannot be concluded at the level of the whole sharing economy but must be studied on the individual market level.

Regarding institutional plurality, sharing economy markets outside of the German carsharing market seem to be especially attractive to actors committed to community logic. For example, a cooperative called Mobility Carsharing (2016) operates in the carsharing market in neighboring Switzerland and permits its customers to become members of the cooperative and have the right to direct its development. Within the home-sharing market, Couchsurfing, a community-based initiative, allows members to offer accommodations in their homes to other members for free; those who ask for money are expelled (Couchsurfing, 2016). The ride-hailing company Lyft attempts to build a community among the drivers, delivering the service through common perks and practices that connect the drivers (Ocasio & Radoynovska, 2016).

There are at least two reasons behind the prominence of community logic in the sharing economy. First, many sharing economy actors hold a belief in a common mission, the one which is often institutionalized in the community's practices. Second, customers coproduced many sharing economy services, which erodes the boundary between the producers and the consumers and makes it easier to produce a community around the service. The commitment of some organizations to community logic leads to institutional plurality in the sharing economy markets because often, organizations are committed to market logic. For example, the home-sharing market also features the venture-capital-backed Airbnb alongside Couchsurfing. Interestingly,

however, Airbnb also emphasizes community values in its public statements (Chesky, 2014).

A possible area for further study is to examine to what extent community logic is inherent to sharing economy markets and to what extent it stems from the producer organization's historical backgrounds. It, for example, seems questionable whether the German carsharing operators could have created such a tight-knit community if the service were not born as a solution to the environmental problems caused by private cars. An investigation into the roots of the logics could include a historical comparative analysis of similar markets in different institutional environments.

Another interesting research topic related to community logic is to examine the commitment to community logic for different kinds of actors. Airbnb, for example, has been accused of using community values only for marketing when it actually erodes the existing communities (Slee, 2015). A study on the meaning of communities could be conducted by examining how two or more companies in a similar market have communicated their commitment to the communities and how this is shown in their business models. It would also be interesting to know why many sharing economy companies emphasize communities so much. There is evidence that in some markets, the consumers are indifferent toward the feeling of community belonging and that they mainly use sharing services for practical and economic reasons (Bardhi & Eckhardt, 2012; Möhlmann, 2015).

One more interesting area for further study is the ecological consequences of corporations co-opting pro-environmental markets formerly dominated by environmentally motivated actors. The current research shows examples of very optimistic views of the sustainability effects of corporate co-optation (e.g., Hockerts & Wüstenhagen, 2010). In this view, corporations become more sustainable as they directly co-opt the pro-environmental practices of the markets that they enter. There is also literature that shows very pessimistic views on the sustainability effects (e.g., Martin, 2016). In this view, corporations replace pro-environmental practices with their own. However, the German carsharing industry shows a more complex picture. On the one hand, corporations have not adopted the business model used by the original actors. On the other hand, their business model has pro-environmental effects, and the actors using the original business model continue to thrive in the market.

Limitations

Our study focuses on the carsharing business models in one institutional environment: the German industry. Although carsharing business models resemble each other throughout the world (Shaheen & Cohen, 2013), the market remains in its emerging phase, with much experimentation being performed. It is also probable that in other countries, carsharing business models are tightly embedded in the local institutional context. Therefore, we do not claim that our findings can be directly generalized to other countries, especially to other sharing economy markets. It is possible, and even probable, that the same markets in different countries are organized according to different institutional logics.

Our study focuses on the development of the business model at the industry level, so we do not describe the variations in the two major business models. Even though the different institutional logics create stability for the major developmental lines of the business models, they also allow for ample room for the strategic agency of individual organizations in the industry. More deeply, understanding the dynamics of the carsharing industry in general and in Germany requires more carefully studying the variances within the business model trajectories. This is a topic left for further study.

REFERENCES

Bardhi, F., & Eckhardt, G. M. 2012. Access-based consumption: The case of car sharing. ***Journal of Consumer Research***, 39(4): 881–898.

Battilana, J., & Dorado, S. 2010. Building sustainable hybrid organizations: The case of commercial microfinance organizations. ***Academy of Management Journal***, 53(6): 1419–1440.

Bohnsack, R., Pinkse, J., & Kolk, A. 2014. Business models for sustainable technologies: Exploring business model evolution in the case of electric vehicles. ***Research Policy***, 43(2): 284–300.

Botsman, R., & Rogers, R. 2010. ***What's mine is yours: The rise of collaborative consumption*** (1st ed.). New York, NY: HarperCollins Publishers.

Bundesverband CarSharing. 2007. Grundsätze der Mitgliedschaft im bcs—Definition CarSharing. Available at: https://carsharing.de/images/stories/pdf_dateien/carsharing-definition_2007-03-28.pdf. Accessed March 28, 2007.

Bundesverband CarSharing. 2010. Zweifel an der Umweltentlastung durch car2go bisher nicht ausgeräumt. Available at: http://www.carsharing.de/sites/default/files/uploads/presse/pdf/pm_car2go_in_hamburg_2010-10-15.pdf. Accessed October 15, 2010.

Bundesverband CarSharing. 2016a. Carsharing-Varianten. Available at: http://www.carsharing.de/sites/default/files/uploads/infografik_cs-varianten_2016.jpg. Accessed January 1, 2016.

Bundesverband CarSharing. 2016b. Wirkung verschiedener CarSharing-Varianten auf Verkehr und Mobilitätsverhalten. Available at: https://carsharing.de/sites/default/files/uploads/bcs_factsheet_3.pdf. Accessed June 29, 2016.

Bundesverband CarSharing. 2017a. CarSharing in Zahlen. Available at: https://carsharing.de/alles-ueber-carsharing/carsharing-zahlen. Accessed July 22, 2017.

Bundesverband CarSharing. 2017b. Der Bundesverband CarSharing stellt sich vor. Available at: https://carsharing.de/verband/wir-ueber-uns/bundesverband-carsharing-stellt-sich. Accessed August 1, 2017.

Bundesverband CarSharing. 2017c. Mitglieder. Available at: https://carsharing.de/verband/wir-ueber-uns/mitglieder. Accessed July 22, 2017.

Byzio, A., Heine, H., Mautz, R., & Rosenbaum, W. 2002. ***Zwischen Solidarhandeln und Marktorientierung***. Göttingen: Soziologisches Forschungsinstitut an der Georg-August-Universität Göttingen.

cambio. 2014. Die Fahrzeuge des CarSharing-Anbieters cambio sind täglich sechs bis zwölf Stunden unterwegs. Available at: http://www.cambio-carsharing.de/cms/carsharing/de/1/cms_f2_2/cms?cms_knuuid=7749ac91-3a83-43ce-a29a-ea19fa430952. Accessed September 5, 2014.

cambio. 2016. cambio CarSharing blickt auf ein erfolgreiches Geschäftsjahr 2015. Available at: http://www.cambio-carsharing.de/cms/carsharing/de/1/cms?cms_knuuid=1125398d-ded2-4ecb-a09b-c5ba96c7f3ab. Accessed February 29, 2016.

cambio. 2017. Überall mobil—Mit CarSharing Partnern. Available at: https://www.cambio-carsharing.de/cms/carsharing/de/1/cms_f2_8/cms?cms_knuuid=f13b1fca-0b09-47cd-aeec-ecbdccaf3301&cms_f8=1. Accessed July 21, 2017.

car2go. 2016. Fact sheet car2go. Available at: https://www.car2go.com/media/data/germany/microsite-press/files/fact-sheet-car2go_december-2016_en.pdf. Accessed December 28, 2016.

Casadesus-Masanell, R., & Ricart, J. E. 2010. From strategy to business models and onto tactics. ***Long Range Planning***, 43(2): 195–215.

Chesbrough, H. 2010. Business model innovation: Opportunities and barriers. ***Long Range Planning***, 43(2–3): 354–363.

Chesbrough, H., & Rosenbloom, R. S. 2002. The role of the business model in capturing value from innovation: Evidence from Xerox corporation's technology spin-off companies. ***Industrial and Corporate Change***, 11(3): 529–555.

Chesky, B. 2014. Shared city. Available at: https://medium.com/@bchesky/shared-city-db9746750a3a. Accessed March 26, 2014.

Couchsurfing. 2016. Couchsurfing policies. Available at: http://www.couchsurfing.com/about/policies/. Accessed December 28, 2016.

Daimler. 2013. 5 Jahre car2go: 500.000 Kunden und 1 Million Mieten monatlich. Available at: http://media.daimler.com/marsMediaSite/de/instance/ko/5-Jahre-car2go-500000-Kunden-und-1-Million-Mieten-monatlich.xhtml?oid=9916447. Accessed October 24, 2013.

Demil, B., & Lecocq, X. 2010. Business model evolution: In search of dynamic consistency. ***Long Range Planning***, 43(2–3): 227–246.

Der Blaue Engel. 2016. Umweltfreundliches Car Sharing | Der Blaue Engel. Available at: https://www.blauer-engel.de/de/produktwelt/haushalt-wohnen/car-sharing. Accessed December 9, 2016.

DiMaggio, P., & Powell, W. W. 1983. The iron cage revisited: Collective rationality and institutional isomorphism in organizational fields. ***American Sociological Review***, 48(2): 147–160.

DriveNow. 2016. Factsheet DriveNow. Available at: https://prod.drive-now-content.com/stage/fileadmin/user_upload_de/12_Presse/Daten_Fakten/DriveNow_Factsheet_November_2016_General.pdf. Accessed November 29, 2016.

Dyer, W. G., & Wilkins, A. L. 1991. Better stories, not better constructs, to generate better theory: A rejoinder to Eisenhardt. ***Academy of Management Review***, 16(3): 613–619.

Flinkster. 2017. Flinkster—Mein carsharing: Startseite. Available at: https://www.flinkster.de/. Accessed July 21, 2017.

Foss, N. J., & Saebi, T. 2017. Fifteen years of research on business model innovation. ***Journal of Management***, 43(1): 200–227.

Friedland, R., & Alford, R. R. 1991. Bringing society back in: Symbols, practices and institutional contradictions. In W. W. Powell & P. J. DiMaggio (Eds.), ***The new institutionalism in organizational analysis***: 232–263. Chicago, IL: University of Chicago Press.

Glynn, M. A., & Lounsbury, M. 2005. From the critics' corner: Logic blending, discursive change and authenticity in a cultural production system. ***Journal of Management Studies***, 42(5): 1031–1055.

Heckathorn, D. D. 2011. Comment: Snowball versus respondent-driven sampling. ***Sociological Methodology***, 41(1): 355–366.

Hockerts, K., & Wüstenhagen, R. 2010. Greening goliaths versus emerging davids—Theorizing about the role of incumbents and new entrants in sustainable entrepreneurship. ***Journal of Business Venturing***, 25(5): 481–492.

Hoffman, A. J. 1999. Institutional evolution and change: Environmentalism and the U.S. chemical

industry. ***Academy of Management Journal***, 42 (4): 351–371.

Howard-Grenville, J., Buckle, S. J., Hoskins, B. J., & George, G. 2014. Climate change and management. ***Academy of Management Journal***, 57(3): 615–623.

Johnsen, D. 2007. ***Möglichkeitsräume innovativer mobilitätsdienstleistungen als ergänzende Funktion des ÖV***. Berlin: DLR–Institut für Verkehrsforschung.

Langley, A. 1999. Strategies for theorizing from process data. ***Academy of Management Review***, 24(4): 691–710.

Loose, W. 2010. ***The state of European car-sharing—Final Report D 2.4 Work Package 2***. Berlin: Bundesverband CarSharing e.V.

Loose, W. (Ed.). 2014a. ***Eine Idee setzt sich durch! 25 Jahre CarSharing*** (1st ed.). Köln: ksv kölner stadt- und verkehrs-verlag.

Loose, W. 2014b. Vom Solidarhandeln zur Marktorientierung—25 Jahre CarSharing im Überblick. In ***Eine Idee setzt sich durch! 25 jahre CarSharing***: 17–27. Köln: ksv kölner stadt- und verkehrs-verlag.

Loose, W., Mohr, M., Nobis, C., Holm, B., & Bake, D. 2004. ***Bestandsaufnahme und Möglichkeiten der Weiterentwicklung von Car-Sharing***. Freiburg: Öko-Institut e.V.

Lounsbury, M. 2007. A tale of two cities: Competing logics and practice variation in the professionalizing of mutual funds. ***Academy of Management Journal***, 50(2): 289–307.

Mair, J., & Reischauer, G. 2017. Capturing the dynamics of the sharing economy: Institutional research on the plural forms and practices of sharing economy organizations. ***Technological Forecasting and Social Change***, 125: 11–20.

Markides, C. C. 2013. Business model innovation: What can the ambidexterity literature teach us? ***Academy of Management Perspectives***, 27(4): 313–323.

Martin, C. J. 2016. The sharing economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism? ***Ecological Economics***, 121: 149–159.

Martin, E., & Shaheen, S. 2016. ***The impacts of Car2go on vehicle ownership, modal shift, vehicle miles traveled, and greenhouse gas emissions: An analysis of five North American cities*** (1st ed.). Berkeley, CA: TSRC.

Martin, E., Shaheen, S., & Lidicker, J. 2010. Impact of carsharing on household vehicle holdings. ***Transportation Research Record: Journal of the Transportation Research Board***, 2143: 150–158.

Meyer, J. W., & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. ***American Journal of Sociology***, 83(2): 340–363.

Mobility Carsharing. 2016. Annual cycle—Mobility. Available at: https://www.mobility.ch/en/about-mobility/mobility-cooperative/cooperative-structure/annual-cycle/ Accessed December 28, 2016.

Morris, M., Schindehutte, M., & Allen, J. 2005. The entrepreneur's business model: Toward a unified perspective. ***Journal of Business Research***, 58(6): 726–735.

Möhlmann, M. 2015. Collaborative consumption: Determinants of satisfaction and the likelihood of using a sharing economy option again, ***Journal of Consumer Behaviour***, 14(3): 193–207.

Münzel, K., Boon, W., Frenken, K., & Vaskelainen, T. 2018. Carsharing business models in Germany: Characteristics, success and future prospects. ***Information Systems and e-Business Management***, 16(2): 271–291. doi:10.1007/s10257-017-0355-x.

Ocasio, W., & Radoynovska, N. 2016. Strategy and commitments to institutional logics: Organizational heterogeneity in business models and governance. ***Strategic Organization***, 14(4): 287–309.

Pache, A., & Santos, F. 2013. Inside the hybrid organization: Selective coupling as a response to competing institutional logics. ***Academy of Management Journal***, 56(4): 972–1001.

Petersen, M. 1995. ***Ökonomische Analyse des Car-Sharing***. Wiesbaden: Gabler Verlag, Deutscher Universitäts-Verlag.

Rao, H., Monin, P., & Durand, R. 2003. Institutional change in toque ville: Nouvelle cuisine as an identity movement in french gastronomy. ***American Journal of Sociology***, 108(4): 795–843.

Reay, T., & Hinings, C. R. 2005. The recomposition of an organizational field: Health care in Alberta. ***Organization Studies***, 26(3): 351–384.

Reay, T., & Hinings, C. R. 2009. Managing the rivalry of competing institutional logics. ***Organization Studies***, 30(6): 629–652.

Rieckmann, T. 2010. Hersteller wappnen sich gegen Autofrust. Available at: http://www.spiegel.de/auto/aktuell/neue-carsharing-angebote-hersteller-wappnen-sich-gegen-autofrust-a-710515.html. Accessed August 7, 2010.

Schreier, H., Becker, U., & Heller, J. 2015. ***Endbericht—Evaluation Carsharing***. Berlin: Teamred Deutschland Gmbh.

Scott, W. R. 2013. ***Institutions and organizations: Ideas, interests, and identities***. Thousand Oaks, CA: Sage Publications.

Shaheen, S., Chan, N., Bansal, A., & Cohen, A. 2015. ***Shared mobility: A sustainability & technologies workshop: Definitions, industry developments, and early understanding***. Berkeley, CA: TSRC.

Shaheen, S. A., & Cohen, A. P. 2013. Carsharing and personal vehicle services: Worldwide market

developments and emerging trends. ***International Journal of Sustainable Transportation***, 7(1): 5–34.

Shaheen, S., Sperling, D., & Wagner, C. 1998. Carsharing in Europe and North America: Past, present, and future. ***Transportation Quarterly***, 52(3): 35–52.

Slee, T. 2015. ***What's yours is mine: Against the sharing economy***. New York, NY: OR Books.

Sosna, M., Trevinyo-Rodríguez, R. N., & Velamuri, S. R. 2010. Business model innovation through trial-and-error learning: The naturhouse case. ***Long Range Planning***, 43(2–3): 383–407.

Teece, D. J. 2010. Business models, business strategy and innovation. ***Long Range Planning***, 43(2–3): 172–194.

Thornton, P. H. 2004. ***Markets from culture: Institutional logics and organizational decisions in higher education publishing***. Palo Alto, CA: Stanford University Press.

Thornton, P. H., & Ocasio, W. 1999. Institutional logics and the historical contingency of power in organizations: Executive succession in the higher education publishing industry, 1958–1990. ***American Journal of Sociology***, 105(3): 801–843.

Thornton, P. H., Ocasio, W., & Lounsbury, M. 2012. ***The institutional logics perspective: A new approach to culture, structure, and process***. Oxford: Oxford University Press on Demand.

Traue, R. 2001. Moses project—State of the art report. Bremen, Germany: cambio StadtAuto.

Tripsas, M., & Gavetti, G. 2000. Capabilities, cognition, and inertia: Evidence from digital imaging. ***Strategic Management Journal***, 21(10–11): 1147–1161.

Van De Ven, A. H. 1992. Suggestions for studying strategy process: A research note. ***Strategic Management Journal***, 13: 169–191.

Vaughan, R., & Daverio, R. 2016. ***Assessing the size and presence of the collaborative economy in Europe***. Luxembourg: Publication Office of the European Union.

Warmke, G., & Dannheim, B.. 2014. Cambio. In ***Eine Idee setzt sich durch! 25 Jahre CarSharing***: 29–40. Köln: ksv kölner stadt- und verkehrs-verlag.

Wooten, M., & Hoffman, A. 2016. Organizational fields: Past, present and future. In ***The SAGE handbook of organizational institutionalism***: 129–148. London: SAGE Publications.

Zott, C., Amit, R., & Massa, L. 2011. The business model: Recent developments and future research. ***Journal of Management***, 37(4): 1019–1042.

Taneli Vaskelainen (t.vaskelainen@uu.nl) is an assistant professor in the Innovation Studies Group of the Copernicus Institute of Sustainable Development at Utrecht University. His research interests lie in the emergence dynamics of new industries and market categories focusing mostly on empirical contexts with a promise of contributing to a more sustainable society (e.g. the sharing economy). Theoretically he approaches the studied phenomena using multiple theoretical lenses including business model development, market categorization practices and institutional theory.

Karla Münzel (k.l.munzel@uu.nl) is a doctoral student in the Innovation Studies Group of the Copernicus Institute of Sustainable Development at Utrecht University. Her research focuses on the diffusion of innovative mobility options and the transition toward a sustainable mobility system by taking on supply, demand, and policy perspectives.