

Report from the EU H2020 Research Project Ps2Share:  
Participation, Privacy, and Power in the Sharing Economy

# Recommendations for the Sharing Economy: Increasing Participation

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## **Recommendations for the Sharing Economy: Increasing Participation**

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# 1. Introduction: Participation in the Sharing Economy

This report is part of a European Union Horizon 2020 Research Project on the sharing economy: Ps2Share ‘Participation, Privacy, and Power in the Sharing Economy’ ([www.ps2share.eu](http://www.ps2share.eu)). It presents the recommendations derived from Work Package 4 “Non-Participation, Inequalities, and Exclusion” within the Ps2Share project. Work Package 4 encompassed a systematic literature review on participation in the sharing economy (Andreotti, Anselmi, Eichhorn, Hoffmann, & Micheli, 2017), focus group discussions among Millennials in several European countries (Ranzini, Newlands, Anselmi, Andreotti, Eichhorn, Etter, Hoffmann, Jürss, & Lutz, 2017) and a large-scale survey of citizens of twelve European countries (Andreotti, Anselmi, Eichhorn, Hoffmann, Jürss, & Micheli, 2017). The project also included three deliverables on the topic of privacy in the sharing economy: a comprehensive literature review (Ranzini, Etter, Lutz, & Vermeulen, 2017), a large-scale survey report (Ranzini, Etter, & Vermeulen, 2017) as well as recommendations on a more privacy-friendly sharing economy in Europe (Ranzini, Kusber, Vermeulen, & Etter, 2018). In addition, three deliverables on power in the sharing economy were produced: a comprehensive literature review (Newlands, Lutz, & Fieseler, 2017a), a large-scale survey report (Newlands, Lutz, & Fieseler, 2017b) as well as recommendations on a more empowering sharing economy in Europe (Newlands, Lutz, & Fieseler, 2018). Finally, two deliverables about platforms in the sharing economy formed part of the project: a comprehensive platform analysis report (Stanoevska-Slabeva, Lenz-Kesekamp, & Suter, 2017) and a set of platform design implications in the form of guidelines (Stanoevska-Slabeva, Lenz-Kesekamp, & Suter, 2018).

For the purposes of the Ps2Share project, the project partners have defined ‘sharing’ as

*“A reciprocal exchange process, whereby individuals share their personal goods with others for use mediated through a digital platform.”*

In analyzing (non-)participation in the sharing economy, the authors have based their analyses on a model of the ‘sharing divide’ (see Figure 1), which was derived from previous research on sharing behaviors as well as digital divide research (Van Dijk, 2005). The model defines a number of critical antecedents of sharing participation, participatory behaviors, and outcomes of participation. This analytical structure was applied to the ensuing recommendations.

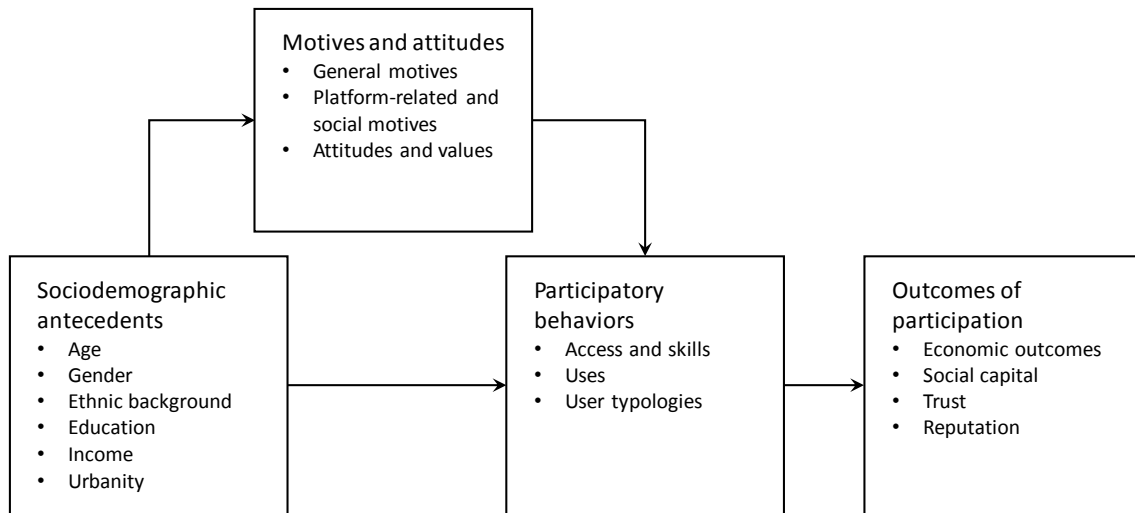


Figure 1: Analytical framework

The recommendations derived from Work Package 4 of the Ps2Share project are addressed to five distinct audiences: (1) Providers, (2) consumers, (3) sharing economy platforms, (4) educators, and (5) policy makers. For each audience, five recommendations were derived. However, as all five sets of recommendations are based on the same analytical framework, our recommendations refer to some recurring themes:

- **Sociodemographics:** A key research interest of this work package was the sociodemographic stratification of participation in the sharing economy. In fact, our analysis revealed a number of divides, for example, based on age, gender, education, and income. Some of our recommendations are directed at overcoming these divides.
- **Access:** A critical requirement for participation in the sharing economy is access to sharing platforms. This encompasses access to the Internet and the availability of access devices, but also the requirements for signing up to sharing platforms (e.g., a credit card). Accordingly, a number of our recommendations address facilitating access to the sharing economy.
- **Skills:** The literature on the participation divide stresses the importance of skills as a mediating factor. Users require PC, Internet, or privacy skills to successfully navigate digital services. The prevalence of these skills tends to be related to sociodemographic antecedents, thereby contributing to the stratification of digital participation. Various recommendations, particularly those to educators, therefore address the skills required for responsible participation in the sharing economy.
- **Motives and attitudes:** The ‘motivational divide’ refers to the fact that some users do not engage in digital activities because they do not realize or understand the potential benefits or because they are detained by insecurities and concerns. Therefore, aside from access and skills, users require a realistic understanding of the potential risks and benefits associated with digital participation. A number of our recommendations, accordingly, address the unequal understanding and distribution of (realized) benefits as well as common concerns quoted as obstacles to sharing participation.

- **Uses:** Once users decide to and manage to participate in the sharing economy, very different usage patterns emerge. Some only engage occasionally, others regularly. Some only engage as consumers, other as providers of sharing services. Some diligently make use of sharing affordances, such as searching, posting, sharing, recommending, or rating, others tend to only selectively engage. A finding of our empirical analyses was that users tend to only engage in very few large international sharing services. Some of our recommendations thus focus on broadening the scope of sharing participation.
- **Outcomes:** Different sharing motives, skills, and uses result in different outcomes of sharing participation. Most obviously, this holds for the distinction between consumers, occasional providers and regular/'professional' providers. Some of our recommendations specifically address these distinct roles and the expectations and outcomes associated with them. We also find that the outcomes of sharing recommendations tend to depend strongly on the reputation mechanisms that largely determine the emergence of sharing relationships. Finally, our empirical findings highlight that, despite some claims to the contrary, the sharing economy appears to result in very little reciprocity. Therefore, some of our recommendations focus on (possibly unintended) consequences of reputation mechanisms employed by sharing platforms.

In preparing this report, the research team engaged in intensive debates on what our recommendations would actually be *for*. While the audiences addressed by our recommendations may be quite clear, it is less obvious what the common objective(s) for all parties involved should be. As researchers, we do not pursue the goal of creating higher levels of sharing participation *per se* (as opposed, possibly, to platform or service providers), so arguing for more sharing engagement, in general, would be problematic. Deciding on whether higher or lower levels of sharing participation are desirable does not only depend on the specific forms and outcomes of sharing, but ultimately implies a value judgement on the desirability of these actions or outcomes. Thereby, when deriving recommendations in terms of the (non-)participation in the European sharing economy, a normative perspective needs to be applied.

Based on these discussions and given the scope of our research project, we propose that all parties involved should strive to foster a European sharing economy that is:

- *Participatory:* Barrier-free and open to all who wish to contribute to and benefit from mediated sharing. This should include both current and potential consumers, providers and platforms.
- *Privacy-friendly:* Respectful of privacy rights and conscious of the individual and shared responsibilities for robust privacy protection.
- *Empowered:* Fair to all parties involved in the sharing process, particularly the current and future user base. All platforms should behave ethically and with due regard for their power as intermediaries.

These principles were the foundations upon which the ensuing recommendations rest. Given different evaluations or objectives, quite different recommendations could be derived from our empirical analyses.



The following chapters will present our recommendations for (1) providers, (2) consumers, (3) platforms, (4) educators, and (5) policy makers – with five recommendations, each. We will conclude the report by highlighting the need for a critical assessment of the normative foundations for our recommendations by suggesting a number of open questions to be pondered both when assessing these recommendations as well as when drafting initiatives for future research on participation in the sharing economy.

## 2. Executive Summary

The following recommendations for providers in the sharing economy can be derived from our study. We recommend that providers should do the following things:

- (1) **Ensure availability:** Stable mobile Internet access is not always guaranteed. When traveling, ensure that you are still reachable by your sharing partners. If lack of network coverage is an issue, do think of alternative means of communication in advance.
- (2) **Don't act like strangers:** Many consumers are insecure about interacting with strangers. Understand and employ reputation mechanisms to alleviate fears. Consumers cross-reference profiles on different social media sites to assess the quality of providers. A strong online presence is therefore helpful, also to complement rating scores on platforms.
- (3) **Let their skills pay off:** Internet skills are clearly related to benefits received from sharing. The better your skills at using online platforms, the more you will get out of sharing services.
- (4) **Check their (legal) status:** If a sharing service is illegal in your jurisdiction, do not endanger others, especially foreigners, by involving them in illegal transactions. Do you share full-time? Is sharing your main means of making a living? Then get informed about opportunities for organizing with fellow professional sharers.
- (5) **Beware of discrimination:** Most sharing services employ reputation mechanisms that reward experienced consumers. If you are a new consumer or represent a minority, it may be difficult to gain a foothold. Few reviews may not necessarily indicate an untrustworthy sharing partner, it may also signify someone struggling to gain initial experiences with sharing.

For consumers, recommendations for responsible engagement in the sharing economy can be derived. We recommend that consumers should do the following things:

- (1) **Beware the gap:** In some areas, lack of (mobile) Internet access may restrict access to sharing services. Consumers should beware blind spots in sharing coverage.
- (2) **Let practice make perfect:** Internet skills are clearly related to benefits received from sharing. The better a consumer's skills are at using online platforms, the more they will get out of sharing services.
- (3) **Be open, but safe:** Consumers who are not afraid to interact with strangers receive more benefits from sharing. Reputation mechanisms help to overcome insecurity towards strangers. Consumers should learn how reputation mechanisms work to estimate the trustworthiness of providers.

- (4) **Question the score:** Reputation scores on platforms can be artificially inflated. Consumers should consult text reviews to get a better understanding of a provider and their offer.
- (5) **Give diversity a chance:** For most users, the sharing economy consists of a few large, international services, primarily in home- and ride-sharing. Yet, there are hundreds of sharing services, ranging from food- to finance-sharing. It may be worthwhile to explore the less trodden paths of the sharing economy.

These implications for sharing economy platforms were derived. We recommend that sharing economy platforms should do the following things:

- (1) **Create awareness:** The “marketing funnel” begins with customer awareness. Most users are unaware of smaller, regional alternatives. Banding together with other services may help generate awareness.
- (2) **Widen their user base:** Large, established sharing services tend to cater to a young, well-educated, high-income clientele. Lowering barriers to entry by providing convenient processes allows for a wider, more diverse user base (e.g., older, lower-education).
- (3) **Don’t oversell their offer:** For most consumers, sharing is all about having a low-cost, fun experience. Reciprocity benefits tend to be low, especially on large, commercial platforms. Platforms should be transparent about the benefits they offer and should avoid misrepresenting their business model.
- (4) **Invest in social capital:** Users frequently make initial experiences with sharing in the company of others or via a proxy. Facilitating shared use may make it easier for non-users to gain access to the sharing economy.
- (5) **Take responsibility:** Currently, higher-income consumers are most likely to enjoy financial benefits, but lower-income users could especially benefit from financial advantages in sharing offers. Platforms should address barriers to access particularly common among lower-income users.

The following recommendations for educators are quite interdependent, each contributing to a responsible participation in the sharing economy. We recommend that educators should do the following things:

- (1) **Support digital literacy:** Providers have lower skills than consumers on average, but providers with higher skills see more benefits from participation in the sharing economy. Educators should develop Internet skills, especially for sharing providers.
- (2) **Reach out to lower-SES users:** Lower-SES users have less experience with the sharing economy, lack a clear understanding of its benefits and show low levels of awareness.



Reaching out to this demographic, in particular, could help spread sharing benefits more widely.

- (3) **Don't forget the elderly:** Age still plays a key role in determining Internet (non-)use. To close the digital divide, educators should reach out to the elderly.
- (4) **Create awareness for sharing benefits:** The main motivation to participate in the sharing economy is its financial benefits. Through education, users can learn and be supported to strive for both the societal and the individual benefits.
- (5) **Educate about gender or ethnic bias on sharing platforms:** Female consumers or consumers coming from ethnic minorities may experience difficulty in accessing sharing platforms either because of safety issues or because they have difficulties in finding suitable partners. Vulnerable consumers should be aware that platforms have means to ensure their safety and inclusion.

Suggestions for policy makers can be derived from the perspective of participation in the sharing economy. We recommend that policy makers should do the following things:

- (1) **Foster Internet skills:** Skills are clearly related to sharing self-efficacy and benefits derived from sharing (especially financial benefits). By creating awareness, policy makers can help to spread the benefits of sharing more widely.
- (2) **Seize opportunities for rural development:** Sharing is mostly an urban phenomenon. At the same time, rural areas allow for less commercialized, more reciprocity-based forms of sharing. Well-established rural sharing services can make rural living more attractive, because urban centers tend not to provide the same level of reciprocity.
- (3) **Share locally:** The sharing economy is dominated by large, international services, particularly in ride- and home-sharing. Both local alternatives and sharing services from other sectors are little known. Policy makers should take care to differentiate when regulating the sharing economy.
- (4) **Consider non-commercial sharing:** Aside from the well-known commercialized sharing economy, sharing can encompass a wide variety of non-profits, social enterprises, local enterprises or cooperatives. Policy makers should think about ways to encourage these less commercialized forms of sharing.
- (5) **Account for professional sharing:** For some, especially in ride-sharing, providing sharing services is a full-time job. These workers may require new forms of work protection, and new forms of social security.

### **3. Recommendations for Providers**

#### ***3.1. Providers should ensure availability***

Stable mobile Internet access is not always guaranteed. When traveling, providers should ensure that they are still reachable by their sharing partners. If lack of network coverage is an issue, providers should think of alternative means of communication in advance. Providers should also consider that their sharing partner may be encumbered by a lack of coverage. While most sharing services are concentrated in urban areas, some users will also look for sharing opportunities when exploring the countryside. Lower supply in these areas may allow for attractive pricing.

A majority of sharing service providers are engaged in ‘sharing on the side’. This means that they have to squeeze their sharing activities into other obligations. In some instances this can lead to a lack of reachability. For some consumers, not being able to reach their sharing partner may be a mere nuisance. For others, especially those travelling abroad or with language barriers, it may be quite disturbing and create actual security concerns. Providers should therefore communicate clearly when and how they can be reached.

If providers live or provide in an area with spotty network coverage, they should make sure to warn their sharing partners and provide alternative means of communication. Most consumers access sharing services through their smartphones. In fact, some services can only be accessed through an app. A lack of connectivity may therefore cut off consumers entirely.

Lack of connectivity is most likely to become an issue outside of urban centers. That should not mean that rural areas are not fit for sharing opportunities. In fact, scarcity of supply may make sharing offers in rural areas quite valuable. It may simply require a bit more effort in providing directions and means of communication.

### ***3.2. Providers should not act like strangers***

Many consumers are insecure about interacting with strangers. Providers should understand and employ reputation mechanisms to alleviate fears. Consumers cross-reference profiles on different social media sites to assess the quality of providers. A strong online presence is therefore helpful, also to complement rating scores on platforms. Women tend to be especially careful when interacting with strangers. Providers should be aware of gendered insecurities and be respectful and accommodating to alleviate concerns.

One of the most common issues that customers have to deal with is interacting with strangers. While it may be enjoyable for some customers to meet new people, especially on larger scale platforms, some users may be uncomfortable about having to deal with strangers. To alleviate their anxiety, consumers routinely cross-reference profiles on sharing platforms with social media in order to find clues about the personal life of providers they interact with.

In order to reassure consumers, providers, especially those devoting a significant amount of their time to sharing and deriving a sizable part of their salary from it, should consider maintaining a professional image on social media. Of course, maintaining a meaningful profile on the sharing platform itself also helps. To a degree, providers may have to decide how they want to market their offer: as a more professional service accessible to those shy of interacting with strangers, or as more of a personal, authentic experience for more adventurous consumers.

Our survey results show a gender gap in usage of sharing platforms: female consumers tend to participate less and have less reciprocal interaction. They also have a more pronounced fear of unpleasant interactions with providers and/or other customers. Newspapers and online news sources have often reported stories about sexual harassment by sharing providers. While the scope of this phenomenon is not established, it is undeniable that this kind of narrative has an impact on participation, or on the perceived safety of women or minorities. It is also undeniable that interacting with strangers is, usually, more risky for women and ethnic, religious, or sexual minorities.

Providers should be aware of this issue and adjust their behavior in relation to customer expectation. A friendly, warm but professional demeanor is guaranteed to alleviate consumers' fears. Providers can also highlight the degree to which they are welcoming and friendly towards female and minority guests.

### ***3.3. Providers should let their skills pay off***

Internet skills are clearly related to benefits received from sharing. For providers, the better their skills are in using online platforms, the more they will get out of sharing services. Internet skills are an important asset for both consumers and providers in the sharing economy. Data shows that highly skilled providers have a wider range of motives for their participation on sharing platforms. Similarly to highly skilled consumers, they perceive sharing as more financially rewarding and more enjoyable compared to people with average, low or very low Internet skills level. Furthermore, amongst the highest skilled providers there are more that reciprocate, meaning that there is a greater tendency of engaging in repeated exchanges with peers met on the platforms and, therefore, to build social connections.

The fact that Internet skills matter for sharing participation and its outcomes is certainly a good reason to invest in online expertise. Providers can try to do so both individually, through trial and error and information seeking, and socially, seeking support from experts in their social circle or from people employed to provide it (e.g., technicians and IT staff).

For the small cluster of ‘professional providers’, for whom the economic outcomes of participation in the sharing economy are the main source of income, a higher level of Internet skills is of utmost importance. The more skilled they are, the more likely they will be able to adequately present themselves on their profiles and in other social media platforms, to interact with others online, as well as to understand rating systems and use them to their advantage. Internet skills are important to increase their understanding of the mechanisms through which platforms manage their job.

### ***3.4. Providers should check their (legal) status***

If a sharing service is illegal in their jurisdiction, providers should not endanger others, especially foreigners by involving them in illegal transactions. If providers share full-time, they should get informed about opportunities for organizing with fellow professional sharers and not rely only on the availability of the platform. In some jurisdictions, efforts are under way to categorize professional sharers as employees to provide additional benefits.

The legality of using sharing services is a highly relevant issue for both providers and consumers. Consumers travelling from abroad may not be familiar with the local law. Providers, on the other hand, have a much better understanding of the local rules – and also the risks involved with sharing. Local providers may therefore decide that offering a sharing service may be worth the risk despite a lack of legality. The problem with this approach is that consumers may tend to rely on the availability of services, assuming that a service must be legal just because it is offered. In other words, providers of sharing services should be aware of their responsibility as the more knowledgeable sharing partner.

Even aside from legal issues, it is not good practice to share goods that are not meant to be shared. For example, hosting guests in an apartment building that does not allow sharing. Again, consumers cannot be expected to know such local rules and should not be surprised by such rules only once they arrive or it is too late to cancel the transaction.

Knowing the law is also in the best interest of providers themselves. Not only could illegal sharing lead to net financial losses, but providers should also be aware of their own status and their rights as (semi-)professionals. This includes sufficient insurance coverage, but – especially for full-time sharers – also workers' rights. In some areas, those engaged in sharing professionally have started organizing. Some jurisdictions are also currently pondering adapting the legal status of "freelances" for providers who actually depend on one platform for the majority of their income.

### ***3.5. Providers should beware of discrimination***

Most sharing services employ reputation mechanisms that reward experienced consumers. If providers are new or represent a minority, it may be difficult to gain a foothold. Few reviews may not necessarily indicate an untrustworthy sharing partner, it may also signify someone struggling to gain initial experiences with sharing.

As providers are well aware, reputation mechanisms on sharing platforms favour heavy users. Also, reputation mechanisms provide a social currency that is key for gaining a foothold and attracting beneficial sharing transactions. Ratings and reviews can be unfair or inaccurate. A lack of reviews may be difficult to overcome. The same holds true for both providers and consumers.

It is quite understandable that providers choose to share their offers with those consumers experienced with the platform or service and those featuring good previous ratings. However, that may make it very difficult for inexperienced customers to gain entry to the service and unnecessarily restrict the consumer base.

Providers should be aware that they could, consciously or unconsciously, end up engaging in discriminatory behaviors when they select (or do not accept) a request by a consumer. Many professional services have strict non-discrimination policies, providing a safe space for minorities. The same does not necessarily hold for sharing platforms. Users that understand sharing transactions as peer-to-peer exchanges are more sympathetic and acknowledge that people have the right to choose with whom they share with, even if it could be perceived as discriminatory.

There are two different types of discrimination. One is based on demographic and socioeconomic factors, such as gender, race, and sexual orientation. During our focus groups, male respondents reported having been denied a room in a shared flat due to their gender. However they did not seem to be very bothered by that. The same relaxed attitude cannot be assumed for all.

On the other hand, a more subtle form of discrimination could be based on consumers' ratings. Providers should be aware that it could be harder to have many reviews and ratings for members of a minority. For these categories, especially, few reviews may not necessarily indicate an untrustworthy sharing partner, it may also signify someone struggling to have initial experiences with sharing. Therefore, providers should not deny transactions without first taking into considerations when profiles were created and also whether other factors, such as ethnicity and income, might have had a role in explaining the presence of fewer reviews.

## 4. Recommendations for Consumers

### ***4.1. Consumers should beware the gap***

In some areas, a lack of (mobile) Internet access may restrict access to sharing services. Consumers should beware blind spots in sharing coverage. Smartphone use, as well as mobile Internet access, are very common throughout Europe. However, mobile Internet access requires sufficient network coverage. 3G, 4G or LTE coverage is not guaranteed throughout Europe. Rural areas, especially, still lack high-speed mobile coverage.

Potential lack of coverage, therefore, should be taken into account when choosing sharing services. For example, when booking an apartment in a rural area, visitors may easily get lost on the way to their destination as private establishments are not marked by signs. Booking a ride-sharing option may be similarly inaccessible due to lack of coverage.

Many sharing services rely on mobile Internet as a point of access and some are only accessible through an app. Quite a few sharing services are location-based. In each case, those planning on using a sharing service may be unpleasantly surprised if they found themselves without a signal.

A complete lack of signal would also prevent any coordination with a sharing partner, such as a host or a co-driver. Again, a sharing partner may not be easy to reach, for example by asking locals for direction or by browsing through a phone book. Consumers should be aware that private individuals, even if they offer a service, are not as easy to identify and reach as a professional service.



## ***4.2. Consumers should let practice make perfect***

Internet skills are clearly related to the benefits received from sharing. Internet skills are necessary to successfully employ online platforms to achieve an objective. As online platforms are constantly evolving, so do Internet skills. To a large degree, skills are acquired ‘on the job’ – in other words, skills commonly rely on learning by doing. At the same time, there are ample opportunities to train skills in a variety of educational programs.

According to our survey, Internet skills boost participation in the sharing economy. Presumably, this is a mutually enforcing process, with higher skills facilitating access and usage honing skills. Even more importantly, though, the more Internet skills users have, the more benefits they obtain from using sharing platforms. Highly skilled Internet users perceive their sharing participation as more financially rewarding and more fun. Therefore, Internet expertise is related with a more enjoyable experience and with better economic and social outcomes. Indeed, our survey data show that being skilled in using the Internet correlates with self-efficacy in sharing, which is the confidence in one’s ability to successfully employ services offered by sharing platforms, such as renting an apartment or catching a ride. This confidence, in turn, also increases the likelihood of actually using such services.

Sharing economy participants, as well as potential participants, should be aware that their general skills in Internet use are a crucial asset, which may be advantaging or disadvantaging them in terms of opportunities obtained online. Striving to increase Internet skills is an important objective. Consumers should also be aware that, as platforms change, so do the skills necessary to navigate them successfully. Internet skills are a complex and mobile target, which is not limited to technical abilities. An increasing number of diverse dimensions of Internet skills are gaining relevance, including, for example, awareness of social media’s algorithms and the ability to successfully manage one’s digital identity and reputation (Hargittai & Micheli, forthcoming). Keeping all this in mind, users can still build stronger skills by exploring and using a variety of web services and by seeking out for support. In the long run that will allow them to benefit more not just from sharing economy platforms, but from other web services as well.

### ***4.3. Consumers should be open, but safe***

Users who are not afraid to interact with strangers receive more benefits from sharing. Reputation mechanisms help overcome insecurity towards strangers. Consumers should learn about how reputation mechanisms work to estimate the trustworthiness of providers. If consumers are insecure about the reliability of provider information or profiles, they should cross-reference them with other platforms, such as social media.

An important reason why users refrain from using sharing platforms is fear or dislike of interacting with strangers and using other people's belongings. At the same time, allowing strangers to exchange services or resources lies at the heart of the sharing economy. So how do sharing platforms overcome our natural skepticism towards relying on strangers? Reputation mechanisms play a crucial role. These rating systems allow users to judge the reliability of those they have already shared with. Over time, participants of the sharing economy generate a visible, quantified online reputation (e.g., number of stars and favorable comments).

Being active on platforms, through leaving reviews or interacting with sharing partners or providers, can generate a reputation and help users to expand their network of contacts. Rating systems, generally, ensure safer transactions, as opposed to traditional sectors like the taxi or hospitality industry. Here, it can be harder or even impossible to report unpleasant interactions to an appropriate supervisor. Conversely, the centralized nature of sharing platforms means that every transaction on a platform gets monitored and if something goes wrong, users can rely on the platform to react to complaints and resolve an issue.

However, interpreting reputation systems can be hard sometimes, especially for inexperienced consumers. What if all providers seem to have excellent ratings? What does a rating difference of half a star actually mean? Some platforms may be open to systematic abuse of the rating system or host plainly fake reviews. Providers may enroll friends and contacts in order to create fake positive evaluations, or users may leave unrealistic negative reviews out of spite.

There are a couple of recommendations in order to be safe. First, provider accounts should always be checked against available data on a variety of platforms. If you know the name and location of a sharing partner, it may be quite easy to find that person, for example, on Facebook and check their profile. Social media activity can be harder to control and counterfeit than ratings on sharing platforms. Second, as a rule of thumb, providers with more reviews are to be preferred. It should be harder to fake multiple reviews or ratings. Also, having multiple reviews means that, on average, the feedback is more accurate. It also helps to check out the worst reviews first: Do they appear well-argued and relevant or irrelevant and exaggerated? Sometimes, complaints can be unfair, too. That should be taken into account when interpreting reputation mechanisms.

#### ***4.4. Consumers should question the score***

Reputation scores on platforms can be artificially inflated. Consumers should consult text reviews to get a better understanding of a provider and their offer. Overly positive or negative reviews may be biased – consumers should consult some middle of the ground text reviews as well. Most sharing services employ reputation mechanisms that reward established providers. If someone is a new provider or represents a minority, it may be difficult to gain a foothold. Few reviews may not necessarily mean bad service, it may also signify someone struggling to get their service off the ground.

Sadly, reviews on sharing platforms can be faked. No security system is perfect. However, even reviews and evaluations made in good faith can be confusing. For example, there is empirical evidence (Zervas et al. 2015) that some platforms encourage the production of positive reviews, as opposed to ones with a critical bent, thus leading to the overproduction of ‘good’ scores. This constitutes a major problem for customers as it inflates ratings, essentially reducing their informative value. A good practice would be for consumers to focus on text reviews, as opposed to simply trusting the reputational scores (i.e., the number of stars). However, it can be challenging and disorienting to read hundreds of reviews.

Furthermore, extremely positive or negative reviews may, again, be biased. It is therefore worthwhile for consumers to focus on textual reviews which are linked to ‘average scores’, as those reviewers are more likely to have a balanced view and point out both the positive and negative aspects of their experience.

Most sharing services employ reputation mechanisms that reward successful providers. New providers, minority providers, or providers without the ability or means to promote their activity may find it difficult to gain a foothold in the platform. Most platforms tend to privilege high score/high review providers, thus enforcing further inequality between first movers and newcomer providers. While, in general, a higher number of (positive) reviews is proof of the trustworthiness of a provider, there is also a power dynamic involved. Few reviews may not necessarily mean bad service, it may also signify someone struggling to get his/her service off the ground. Again, checking textual reviews. Consulting social media activity may be an alternative way of establishing the trustworthiness of a given provider.

Especially on platforms allowing providers to set their own compensation, it may be worthwhile to experiment with reliable but less evaluated providers. As a matter of fact, high reputation providers may be able charge more for the same services, essentially monetizing their reputation. Conversely, fees paid to a lesser known provider may better reflect the nature of services traded.

#### ***4.5. Consumers should give diversity a chance***

For most users, the sharing economy consists of a few large, international services, primarily in home- and ride-sharing. Yet, there are hundreds of sharing services, ranging from food- to finance-sharing. It may be worthwhile for consumers to explore the less trodden paths of the sharing economy. Also, some local small-scale services may provide a better sharing experience by facilitating reciprocal bonds with local providers.

The sharing economy is highly diverse. Online platforms allow for a tremendously diverse set of sharing experiences, including food-, finance-, or goods-sharing. Europeans are mostly familiar with international 'big players' like Uber or Airbnb. Smaller and local services are rarely used. At the same time, surveyed Europeans said that they enjoy sharing largely because of the authenticity of interacting with locals. Local services may therefore be especially enjoyable. There is evidence that smaller, local sharing networks produce higher levels of reciprocity and may more closely resemble the actual experience of sharing something with others.

Our focus group interviews showed that most of the interviewed millennials came in contact with sharing services while traveling (Ranzini et al., 2017). Using sharing services at home may provide for an entirely new sharing experience (such as sharing food or tools). This may extend to non-commercial sharing, such as for hobbies or for mutual support.

## 5. Recommendations for Platforms

### ***5.1. Sharing economy platforms should create awareness***

The ‘marketing funnel’ begins with customer awareness. Today, the sharing economy is dominated by a few, large international services. Most users are unaware of smaller, regional alternatives. Also, many Internet users simply don’t know the benefits of sharing. Some forms of sharing are little known in general, such as food-, goods- or finance-sharing. Possibly banding together with other services may help generate awareness.

In our survey, the most widely known sharing platforms are the three international services Airbnb, Uber and BlaBlaCar. Only few users refer to other platforms when relating their sharing experiences. As a result, a wide variety of local and specialized sharing services suffer from a lack of awareness. For small services, creating awareness can be a struggle. Local services may consider joining forces and highlighting their benefits compared to large, international alternatives.

When non-aware non-users were asked about their perception of services one could find on sharing platforms, they primarily named ride-sharing. Fewer could imagine sharing apartments, fewer still would think of sharing food or tools. In general, these service categories are little known and rarely used. Again, services may consider banding together to highlight the variety of sharing opportunities available to consumers.

When creating awareness, it is important to remain realistic. Large international services tend to stretch the sharing-notion by promising reciprocal exchanges than rarely ever happen. Smaller services struggling to establish themselves should therefore carefully consider how they should present and market themselves on a spectrum of truly reciprocal sharing to strictly professional service interactions.

## ***5.2. Sharing economy platforms should widen their user base***

Large, established sharing services tend to cater to a young, well-educated, high-income clientele. But sharing could also provide benefits to lower-SES users. This user segment tends to have specific reservations against sharing, such as lack of understanding or fear of exposing themselves to strangers. Taking these concerns into account can widen the user base. Low Internet skills are a key obstacle to sharing participation. Non-users tend to doubt their ability to successfully use sharing services. Lowering barriers to entry by providing convenient processes allows for a wider, more diverse user base (e.g., older, lower-education). Male users are more eager to share and are less afraid to engage strangers. Platforms should promote measures to counter gender biases in sharing, specifically by improving perceived security for female users. Platforms could expand their user base by reaching beyond these divides and facilitating the participation of older, less educated and female users.

Age- and education-related hurdles can largely be countered by offering easy to understand and convenient service interfaces. Also signaling quality and trustworthiness through seals or guarantees can alleviate fears. Some services collect data to optimize their offers that are not strictly necessary for a transaction. Limiting the requested data to the necessary minimum may make it easier for insecure beginners to sign up to a service. Once they are familiar and content with the service, consumers may still be able to provide more data voluntarily.

Addressing the gender-divide largely rests on providing security measures and alleviating fears in terms of interacting with strangers. Reputation mechanisms may help in this regard, but could be geared towards signaling a safe environment, possibly through seals or special endorsements.

### ***5.3. Sharing economy platforms should not oversell their offer***

For most consumers, sharing is all about having a low-cost, fun experience. Reciprocity benefits tend to be low, especially on large, commercial platforms. Platforms should be transparent about the benefits they offer and should avoid misrepresenting their business model.

Our study results show that the main attraction of sharing platforms for consumers lies in being able to save money compared to traditional services. 57% of survey participants declared that their main motive to engage with sharing platforms is economic. Social and environmental motives were also present, but they were rated as far less important when compared to instrumental motives.

Younger consumers, interviewed during focus groups, are quick to point out that it takes a certain frame of mind to engage with the sharing economy, namely to be open and willing to interact with strangers on a regular basis. However, they also remarked that sharing services were preferred to mainstream ones because they were, essentially, cheaper.

Finally, our survey findings show that reciprocal interaction is quite low on sharing platforms, 73% of consumers and 52% of providers declare that they have never (or just once) repeatedly exchanged with a peer on a platform. In essence, consumers do enjoy a certain level of “authenticity” in their sharing experiences, but are not willing to engage in long lasting social interaction. Because of this, it is crucial that platforms do not oversell their offer in terms of reciprocal interaction or social and environmental responsibility. Honestly marketing the relative advantages may help avoid disappointments – especially in case of large, international platforms that feature a high degree of professionalism.



#### ***5.4. Sharing economy platforms should invest in social capital***

If platforms want to facilitate reciprocal exchanges and the establishment of interpersonal bonds, they should ensure fitting processes and practices. While reputation mechanisms support transactions among strangers, they do little to establish lasting bonds. Users frequently make initial experiences with sharing in the company of others or via a proxy. Facilitating shared use may make it easier for non-users to gain access to the sharing economy.

If facilitating reciprocal exchange and the establishment of interpersonal bonds is more than a marketing slogan, platforms need to ensure adequate processes and practices. Current reputation mechanisms are tailored to allow transaction between strangers, however they are not, on average, conducive to long-lasting bonds. However, niche or small-scale platforms have better performance in this regard.

The main purpose of sharing platforms is facilitating the creation of a reputation in order to allow the exchange of goods and services between participants. Human beings need, usually, long term face-to-face contacts in order to establish a trust relation. Sharing platforms are able to sidestep this process, streamlining trust generation through algorithmic intermediation. However, there is an inverse correlation between the amount of information available through algorithmic ratings and the chances that users engage in long term interaction among themselves.

Consumers often have first contact with sharing platforms along with friends and acquaintances (i.e., booking a ride together) because they provide a familiar element and improve perceived personal comfort when dealing with strangers. This is especially true for female consumers and for services that require extensive contact between consumer and provider (e.g., car-sharing). Furthermore, diffusion of sharing platforms within smaller communities (such as rural or suburban communities) tends to be driven by word of mouth marketing, with experienced users acting as ambassadors for the platform in the larger community.

These two caveats imply that participation on platforms in any local area or social group might be boosted by engaging directly with local communities. For example, offering group discounts or sponsoring platform ambassadors might work as promotion strategies to establish trust and ease entry to a sharing service.

### ***5.5. Sharing economy platforms should take responsibility***

Platforms should promote financial benefits for all. Currently, higher-income consumers are most likely to enjoy financial benefits, but lower-income users could especially benefit from financial advantages in sharing offers. Platforms should address barriers to access particularly common among lower-income users. Some providers, especially in car-sharing, tend to be low-SES and rely on sharing for a living. Aside from the question of whether these users can be categorized as employees or not, services should ensure fair and sufficiently secure working conditions.

Platforms should promote financial benefits for all users and avoid any discrimination. Currently, higher-income consumers are most likely to enjoy financial benefits, but lower-income users could especially benefit from financial advantages in sharing offers. Even if users from different socioeconomic and ethnic backgrounds join sharing platforms, those from less privileged groups still face several challenges both as consumers and providers. It is important that users are not discriminated for their profile's information and photos.

A solution could be to reduce the importance of the photo in the profile or to provide several additional and accessible means to convey information about a provider's reliability and personality, for example a link to external social media accounts. Another solution could be to offer additional visibility to users providing less popular services – for example apartments or rooms located in less well-known neighborhoods. This could be achieved through a dedicated section on the homepage or in the app.

Platforms should also consider that some providers, especially in car-sharing, tend to be low-SES and rely on sharing for a living. Aside from the question of whether these users can be categorized as employees or not, platforms should ensure fair and sufficiently secure working conditions. Platforms should ensure that pricing is transparent to both providers and consumers, so that they are able to make informed decisions (e.g., on tipping).

## 6. Recommendations for Educators

### ***6.1. Educators should support digital literacy***

Educators should support the development of Internet skills, especially for sharing providers. Providers have lower skills than consumers on average. On the other hand, providers with higher skills see more benefits from participation in the sharing economy, especially financial, and reciprocate more.

The importance of fostering digital literacy within formal education, as well as within out-of-school education initiatives, is nothing new for educators. Our recommendations join the call for more digital literacy education by stressing two important issues: the continuing significance of Internet skills for digital inclusion and the increasing relevance of a critical understanding of digital platforms.

Internet skills and web know-how, which were assessed in the survey through a measurement tool established in the scientific literature, turned out to be crucial factors. Skills influence not only what users do, but also the outcomes they obtain from their participation in sharing economy platforms. Survey data shows that Internet skills are positively related to sharing self-efficacy and to benefits derived from sharing. Highly skilled users have a more enjoyable experience and get higher economic and social outcomes. Yet, Internet users diverge for their level of Internet skills. Research found that also among young people there are great differences in terms of skills, with those from lower socioeconomic backgrounds struggling more. Therefore, the fact that “Millennials” is the age group who most use sharing economy platforms, should not take away the attention from Internet skills. Furthermore, providers of sharing economy, on average, have lower levels of Internet skills than consumers have. To a certain extent, this is an unexpected finding, but it certainly calls for an increased level of attention among educators.

Internet skills are a complex concept including several different dimensions. Educators should take into consideration the multifaceted nature of Internet skills, which keep being redefined as the web itself change and develop. Although the web is increasingly ‘handy’, thanks to user-friendly apps for example, Internet skills are still of utmost importance for a safe and effective participation. Indeed, educators should promote skills both for reducing damages, such as privacy threats or unjust behavior by the platforms, and for increasing opportunities, such as the chances of engaging in exchanges. Furthermore, survey results suggest that digital literacy education initiatives should be held to promote a critical understanding of digital platforms. Important factors that should be examined and explored in an educative setting include: online privacy protection strategies, managing a digital identity and online reputation, comprehension of ratings systems and reviews mechanism, a critical understanding of platforms’ role in establishing offers’ visibility, norms, rules, profits, and forms of exchanges.

## ***6.2. Educators should reach out to lower-SES users***

Lower-SES users have less experience with the sharing economy, lack a clear understanding of its benefits, and show low levels of awareness. Reaching out to this demographic, in particular, could help spread sharing benefits more widely.

Specific education initiatives should be targeted directly to lower-SES users. Survey results clearly show that users from lower socioeconomic backgrounds have overall less experience with the sharing economy, lack a clear understanding of its benefits, and exhibit low levels of awareness. Reaching out to this demographic in particular could help spread sharing benefits more widely.

Educators that are already working with these groups, for example within vocational courses or initiatives for unemployed people, could propose a special informative ‘module’ regarding the sharing economy. This module would not consist, however, in a promotion of the most well-known sharing economy apps, such as Uber and Airbnb. Educators should be prepared to elucidate the original idea of the sharing economy and the advantages of engaging in sharing economy initiatives in general. They should offer a critical overview of the big players who are today operating online.

Furthermore, it could be useful to investigate what small scale sharing economy experiences are actually functioning at the local level (such as time banks) and inform about their existence and the advantages deriving from participation in such networks. These advantages are not limited to the material level (i.e., the content of what is exchanged), but include the possibility to establish social relations and build social capital, which could be particularly valuable for low-income and unemployed people.

### ***6.3. Educators should not forget the elderly***

Age still plays a key role in determining Internet (non-)use. To close the digital divide, outreach to the elderly is still necessary. While the sharing economy is a relatively new phenomenon and highly associated with mobile Internet access, one of the main preconditions to participate in sharing is Internet skills. Sharing is much more common among young European citizens. In fact, the elderly have little grasp of the opportunities and potential benefits of sharing platforms.

Accordingly, educational initiatives trying to bolster an inclusive European sharing economy should keep the elderly population in mind. Digital divide research has shown again and again that the age gap is the most significant element of the digital divide in the West. In that respect, sharing participation is just another element in a larger challenge.

However, this only raises the importance of addressing the age gap. Most current educational initiatives focus on bolstering digital competencies in school, which is undoubtedly important. Yet this does not address the most sizeable participation gap. Outreach efforts towards the elderly are necessary to let this large (and growing) segment of the population benefit from digital opportunities.

Of course, platforms can contribute to this effort by providing user-friendly, readable, barrier-free user interfaces. However, creating self-confidence and fostering skills cannot be left to service providers alone.

#### ***6.4. Educators should create awareness for sharing benefits***

The main motivation to participate in the sharing economy is its financial benefits. Beside the economic outcome as an individual factor, 'sharing instead of owning' is touted as a principle beneficial on a societal level of (ecological) sustainability. Through education, users can learn and be supported to strive for both the societal and the individual benefits.

As our focus groups show, most millennial participants assume that there are beneficial societal outcomes of the sharing economy. At the same time, our survey shows that economic benefits most strongly drive sharing participation. Yet, even if social or ecological sustainability come as a side-effect of the economic, individual-level advantages, they may still be aspired to.

Educators can support the society-level benefits of sharing by educating on the effects and side-effects of sharing. Of course, this presupposes that these effects and side-effects are actually known. More research is needed on these matters. Our survey shows that benefits from sharing are relatively vague even in the minds of those engaged in the sharing economy. It would be important to differentiate fact from fiction, here, and to avoid overly flattering narratives that do not paint an adequate picture of the phenomenon. Creating awareness for sharing benefits, thereby, does not mean uncritically promoting sharing, but rather creating transparency on different kinds of sharing, their opportunities, and potential downsides.

### ***6.5. Educators should inform about gender or ethnic bias on sharing platforms***

Female consumers or consumers coming from ethnic minorities may experience difficulties in accessing sharing platforms either because of safety issues or because they have difficulties in finding suitable partners. While platforms like to represent themselves as inclusive services, female consumers or consumers coming from ethnic minorities may experience difficulties in accessing sharing platforms. Minority or female consumers may be shunned as providers, leading to lower online evaluations and, as a consequence, a difficulty in finding transaction partners. Female or minority customers may be discriminated as customers, being harassed in the former case or, in the latter, being denied service on the bases of bigotry or mistrust.

Educators should, first of all, spread awareness of the existence of gender and racial discrimination on sharing platforms. However, platforms are very likely to have defense mechanisms to cope with the diffusion of discrimination and bigotry. As it happens, with social networks there's always the chance to report discriminatory behavior to some sort of central authority, so platforms have ways and means to ensure their compliance to non-discrimination good practices. Prospective minority users should be aware of their rights and of ways of protecting them, when confronted with discriminatory practices.

In the case of producers (e.g., Airbnb hosts or Uber drivers) discrimination may be more difficult to prove and, as a consequence, confront. In the case of providers, gender or racial discrimination will not lead to open harassment or downright refusal of the service, but to lower reputation and status. Educators may pay attention to this issue by outlining how, sometimes, lower reputations are not caused by the inability of a given provider to successfully deliver a service. Again gender and racial biases may be responsible for the lower reputation of a minority or female provider. Spreading awareness of this is probably the best way to ensure inclusive and open access of all to sharing platforms.



## 7. Recommendations for Policy Makers

### ***7.1. Policy makers should foster Internet skills***

Skills are clearly related to sharing self-efficacy and benefits derived from sharing (especially financial benefits). There is still a notable skills divide in Europe: older, lower-SES individuals have lower skills-levels. Accordingly, both access to and benefits from sharing are unequally distributed, with younger, high-SES individuals benefiting most. Internet skills can also encompass cognitive skills, such as the capacity to understand online reviews and reputation mechanisms. Low-SES individuals report particularly high barriers to sharing, partly because they lack requirements, but also because they are less aware of potential benefits and because they find it more difficult to access sharing services. By creating awareness and through education/training as well as by making access more convenient through common standards, regulators can help spread the benefits from sharing more widely.

Survey data shows that Internet skills are clearly related to sharing self-efficacy and benefits derived from sharing. Internet expertise is related with a more enjoyable experience and with higher economic and social outcomes. Furthermore, being skilled in using the Internet correlates with self-efficacy in sharing which means higher confidence in accessing the services offered by sharing platforms such as renting an apartment or catching a ride.

Policy makers should, on the one hand, keep promoting digital literacy initiatives aimed at such particular groups that are particularly difficult to target. On the other hand, policy makers should also solicit platforms to invest in digital literacy initiatives and take higher responsibility in the consequences of inequalities in the digital domain.

Furthermore, policy makers should consider that Internet skills do not merely consist of technical expertise and encompass also more refined forms of web know-how, such as the capacity to understand online reviews and reputation mechanisms, awareness of social media algorithms, and ability to successfully manage one's own digital identity and reputation. By promoting Internet skills, through education/training programs, as well as by increasing platforms' responsibility, regulators can help spread the benefits from sharing more widely.

## ***7.2. Policy makers should seize opportunities for rural development***

Sharing is mostly an urban phenomenon. At the same time, rural areas allow for less commercialized, more reciprocity-based forms of sharing. Here, sharing can even serve as a substitute in case of lack of public services. Sharing needs in rural areas can actually differ from those in urban centers. Well-established rural sharing services can make rural living more attractive, because urban centers tend not to provide the same level of reciprocity.

Sharing goods and services has a long tradition in rural communities. Due to lower population density, members in a rural community tend to be more familiar with each other. Familiarity generates social capital and trust, which in turn facilitates the willingness to share. This line of argument could lead to the conclusion that platform-mediated sharing is not a relevant phenomenon in rural areas. Instead, a number of arguments can be made that this form of sharing could be especially beneficial in rural areas.

First, the diversity and intensity of sharing could be increased if there was more transparency regarding those goods community members are actually willing to share. Such increased levels of sharing could help participants save on scarce resources.

Second, extending well-established sharing platforms from urban centers to rural areas may attract additional spending or investments to rural communities. Consumers may more easily become aware of and be moved to explore sharing opportunities in rural areas if they were well represented on the most commonly used online platforms.

Third, rural areas tend to suffer from a lower coverage of public services (such as bus or train connections, or snow clearing services). Facilitating sharing of those services and goods available in rural areas can compensate for gaps in public services and increase the quality of living in these areas.

### ***7.3. Policy makers should share locally***

The sharing economy is dominated by large, international services, particularly in ride- and home-sharing. Both local alternatives and sharing services from other sectors are little known. Regulators should take care to differentiate when regulating the sharing economy. Necessary rules or restrictions for international juggernauts may encumber the development of local alternatives.

Our survey data shows that consumers flock towards large-scale platforms: 73% of users employ Silicon Valley ‘unicorns’ such as Uber or Airbnb. That doesn’t mean that other platforms are unavailable. As our platform survey found out, other local or small scale niche sharing platforms do exist but enjoy little awareness or use. Furthermore, while definitive evidence is hard to come by, there’s the possibility that local and niche platforms are better able to promote strong reciprocity and local development of social capital. While large-scale sharing platforms are used by consumers as a substitute and usually as a cheaper way to acquire goods and services available on mainstream markets, local platforms seem to promote mutual support and connectedness between users to a larger extent.

As large scale platforms and niche/local ones are completely different entities, ‘one size fits all’ may not be the best approach when regulating sharing exchanges. Necessary rules or restrictions for international juggernauts may encumber the development of local alternatives, thus hampering their chance of delivering positive externalities for their user base.

Secondly, the phase within the lifecycle of platforms matters. While it’s unlikely that a small competitor may successfully out-compete sharing giants, there is the possibility that some small/local platforms in niche markets may enjoy diffusion and successfully compete at the EU level. Again rules that may be well balanced for large scale platforms may actually hinder the development of potential competitors.

Thirdly, several niche sharing platforms are actually local in scope, especially in sectors that rely on close physical proximity (e.g., foodsharing and time banks). In this case, regulation is better delegated to local regulatory bodies, as they can provide fine-grained regulation and are probably more aware of the context and of the consequences of their actions, as opposed to national and supra-national regulators.

#### ***7.4. Policy makers should consider non-commercial sharing***

Aside from the well-known commercialized sharing economy, sharing can encompass a wide variety of non-profits, social enterprises, local enterprises or cooperatives. Little is known about this side of the sharing economy. Research in this area deserves support. Also, policy makers may think about ways to encourage these less commercialized forms of sharing.

Cooperatives may well be better suited to promote providers wellbeing, and a more equitable redistribution of profits coming from sharing intermediation, as opposed to large-scale platforms. Again, there is evidence pointing out that mainstream sharing platforms tend to produce negative externalities in terms of job security and inequality (Slee, 2016). For example, digitally intermediated taxi coops can be a viable and equitable alternative to mainstream car sharing ventures. Proponents of the so-called platform cooperativism (Scholz, 2016) claim that this solution is able to provide a lower cost alternative, without defaulting to gig economy standards, when it comes to job security and remuneration.

Besides small scale empirical evidence, researchers are still pretty much in the dark when it comes to small scale sharing platforms' ability to foster positive social externalities, especially in the case of local governance equilibrium. Given that small/niche/no-profit sharing tends to be local in nature, local policy makers are in an excellent position to promote research efforts on this subject.

### ***7.5. Policy makers should account for professional sharing***

For some, especially in ride-sharing, providing sharing services is a full-time job. These workers may require new forms of work protection and new forms of social security. Policy makers need to find an answer to how to categorize and support providers without obstructing the opportunities provided by the sharing economy.

Out of the group of providers in the sharing economy participating in our survey, around 14% can be classified as professional sharers as participation in the sharing economy provides their main source of income. Together with those users who consider the income from sharing ‘a good way of supplementing my main income’, almost half of the providers see sharing as relevant for their economic situation. To date, the regulatory framework tends to struggle with this new form of labor.

Experts still debate whether professional sharers should be considered freelancers, employees or whether a new category is needed to adequately deal with this segment of the working population. Due to the relative ease of entry and exit, it proves difficult to organize professional sharers. Many professional sharers are quite young and presumably won’t stick to this work status for extended periods of time. Our survey shows that users tend to exit the sharing economy when they can afford alternatives – both as consumers and providers.

Of course, professional sharers are only one segment of a larger phenomenon in the digital economy. Thereby, finding an adequate regulatory response to professional sharers presumably implies embedding this debate in a more comprehensive discourse on new forms of work and their work conditions.

## 8. Conclusion

As discussed in the introduction, recommendations in terms of the (non-)participation in the sharing economy not only requires a clear understanding of the phenomenon and a differentiated analyses of antecedents, forms, and outcomes of participation, but also a normative framework to derive a perspectives for recommendations from.

To reiterate, given the scope of our research project, we propose that all parties involved should strive to foster a European sharing economy that is:

- *Participatory*: Barrier-free and open to all who wish to contribute to and benefit from mediated sharing. This should include both current and potential consumers, providers and platforms.
- *Privacy-friendly*: Respectful of privacy rights and conscious of the individual and shared responsibilities for robust privacy protection.
- *Empowered*: Fair to all parties involved in the sharing process, particularly the current and future user base. All platforms should behave ethically and with due regard for their power as intermediaries.

Given this normative perspective on the European sharing economy, we would like to conclude this report as well as Work Package 4 of the Ps2Share project by posing a number of:

### **Critical Questions on the Future of the European Sharing Economy:**

- Do network economies and economies of scale allow for a diversity of sharing platforms and services? What are the challenges associated with sectoral monopolies?
- What are the competitive advantages of first movers over newcomers – and what are the implications for the opportunities of smaller players?
- How can European sharing services distinguish themselves from global competitors?
- How can local or regional sharing services prosper side by side with international platforms?
- What is the delineation of the sharing “economy” and non-commercial sharing services?
- What is the role of providers working on sharing economy platforms? What level of security and protection can be offered to them? What are promising governance mechanisms to ensure beneficial working conditions?
- Can commercial sharing platforms actually create reciprocal social ties? Is there a “tipping point” in the commercialization of platforms that undermines the idea of “sharing”?
- How do digital sharing services relate to pre-existing non-platform sharing?
- How can sharing platforms facilitate participatory opportunities for older, lower-SES citizens and those with a lack of Internet skills?

- Can reputation mechanism effectively replace the symbolic capital of well-established, reputable providers? What are the challenges associated with an almost complete reliance of sharing transactions on reputation mechanisms?
- How can users make sense of reputation mechanisms? How can the transparency of reputational algorithms be improved?
- How can discriminatory effects of reputation mechanisms be countered? Can reputation metrics and the centralized structure of commercial sharing platforms be leveraged to counter gender, ethnic or age discriminations?
- How can regulation account for the vastly different faces of sharing economy - ranging from local non-profits to global quasi-monopolists?
- What level of responsibility should platforms take for the welfare of their provider base?
- Can commercial sharing services be sustainable at scale while maintaining an ethical pricing strategy?

We hope that these questions, brought up in the course of the theoretical and empirical work on (non-)participation in this project, will serve to intellectually challenge all parties engaged in the sharing economy, to contextualize the recommendations presented above, and to inspire future research initiatives.

Undoubtedly, with a phenomenon as dynamic as the sharing economy, ample opportunities for future research remain. May the varied findings of all the work packages of the Ps2Share project serve to answer some questions, provide some guidelines for those shaping the European sharing economy, and stoke the curiosity of those contributing to a better understanding of (non-)participation in digital sharing.



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