User Reputation:

Building Trust and Addressing Privacy Issues in the Sharing Economy

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The sharing economy has been described as an economic model based upon the exchange of human or physical resources between two individuals, where a person who needs a good or a service can borrow or rent it from another who has it. Now, new online and mobile platforms have sprung up using this economic model, and the use of technological intermediaries to facilitate peer-to-peer exchanges has allowed the sharing economy to grow to a size and scale otherwise unimaginable.

The sharing economy offers an array of benefits for individuals. According to a recent study, 86% of U.S. adults familiar with the sharing economy agree it makes life more affordable, and 83% believe it makes life more convenient and efficient. This economic model may also effect a democratization of commerce, particularly as it revolutionizes how we conceive of part-time employment. Current part-time employment frequently limits employee flexibility, often requiring workers to stay on-call for a certain number of hours absent payment. Such practices can be particularly challenging for people with low incomes. With the new sharing-economy system, workers can aspire to higher wages and more flexibility, as they determine their own schedule and frequently serve as their own boss. The sharing economy also provides new opportunities for seniors, who may often face difficulties obtaining employment, to re-engage in the workforce.

But building and maintaining user trust is essential for all participants who take advantage of the connected sharing ecosystem. For a basic peer-to-peer exchange, a positive outcome can often be tied to each peer's reputation; buyers and sellers have to be able to trust in the benefit of an exchange. Nearly 69% of U.S. adults are hesitant to engage in the sharing economy until they receive a positive recommendation or other reassuring word-of-mouth. ⁴ This basic hesitation reveals the degree of trepidation that still exists with these platforms and suggests that how participants and society view reputation will be essential to the healthy functioning of this new ecosystem.

Trust challenges underlie every peer-to-peer exchange. Why would one trust a complete stranger to drive her from point A to point B? Or feel comfortable staying in a stranger's house overnight? In traditional large scale taxi or hotel services, providers build a reputation over time that customers can trust, such as through branding or via physical presence. Additionally, trademarks can be used to protect company's goodwill around products and services. Even as many sharing economy platforms have established themselves as powerful

¹PWC, Consumer Intelligence Series: The sharing economy (Apr. 2015), http://www.pwc.com/CISsharing

² Steven Greenhouse, Part-time Schedules, Full-time Headaches, The New York Times (July 2014), http://www.nytimes.com/2014/07/19/business/part-time-schedules-full-time-headaches.html?_r=0

³ Derek Thompson, Why Older Americans Have the Worst Long-Term Unemployment Crisis, The Atlantic (May 15, 2012), http://www.theatlantic.com/business/archive/2012/05/why-older-americans-have-the-worst-long-term-unemployment-crisis/257228/.

⁴ PWC**,** supra note 4.

brands, these sorts of mechanism are frequently lacking in the day-to-day peer-to-peer exchanges.⁵

Instead, trust is established through reputation management, which has become an important component of participating in the sharing economy. While platforms like Craigslist function without a reputation system – and can be incredibly privacy-friendly as a result, most entrants into the sharing economy offer systems where user reputation and user privacy can quickly become intertwined. Specifically, platforms must understand the relationship among identity, anonymity and obscurity, and reputation that will facilitate user trust.

Due to the importance of establishing some degree of trust among users, there is a strong incentive for sharing economy platforms to build and offer reliable and effective reputation systems. Yet, these systems are fueled by user data, frequently requiring the platform to retain considerable amounts of user data. As a result, some of the steps needed for users to build and maintain their reputation on a sharing economy platform can create privacy challenges. Platforms need to offer a degree of transparency in how users can access their information. They also can offer users obscurity vis-à-vis other users to the extent possible to enhance privacy. Properly designed reputational systems can protect user privacy by withholding or limiting access to the user's actual identity until a transaction takes place. Poorly designed reputational systems, especially those that lack transparency, can inadvertently lead to users being barred from participating in the market ecosystem as when negative reviews pile up without clear notice and ability to respond.

This survey aims at looking at how different peer-to-peers services approach reputation management and the mechanisms currently provided by various platforms to address user reputation and access and delete information.

Building Reputation

Today, trust relationships online can be founded upon persistent online profiles. Profiles encourage and promote trust through a variety of different factors such as photos, verified contact details, and positive ratings from the community. Ratings and peer reviews, however, are increasingly the most important trust factor. According to one study, 75% of people trust peer

⁵ Sharing economy platforms, in some respect, provide the referral mechanisms and networking opportunities that small businesses need to build a customer base.

⁶ Eric Goldman, Regulating Reputation, in The Reputation Society (2012).

⁷ The importance of reputation management can be lost on users who do not understand how the platform's reputation system works – or that it can be a two-way exchange. See, e.g., Hasam Masum et al., Introduction: Building the Reputation Society xviii in The Reputation Society (2012). See also Maureen Dowd, Driving Uber Mad, N.Y. Times (May 23, 2015), http://mobile.nytimes.com/2015/05/24/opinion/sunday/maureen-dowd-driving-uber-mad.html.

⁸ Chronos & BlaBlaCar, Trusted Online Communities: Signs of a Better Future (2012), available at http://www.betrustman.com/.

⁹ John Henry Clippinger, An Inquiry into Effective Reputation and Rating Systems, in The Reputation Society (2012).

reviews and have become the foundation for how individuals evaluate "holiday destinations, restaurants, consumer goods, even people." Reviews have become an essential proxy for individuals evaluating the likelihood of a desirable outcome and, consequently, deciding where to place their trust.

A. Common mechanisms to build and understand reputation

Review systems are the most common mechanism to build reputation in the online sharing economy. After an individual has purchased an item, used a service, or rented a good, he or she will report on the overall experience.

How a review system is implemented can vary greatly from one platform to another. At a basic level, reviews could consist of a general comment that the user can write, multiple questions that can be answered on a spectrum of satisfaction, or some type of rating-based scale-system to be determined by the platform. Depending on the review system that is offered, the level of precision and clarity will differ. Five-star systems may not be as precise as a ten-star system, and a five-star system that offers users the ability to add comments may provide more clarity than a star-system alone. Written comments also potentially offer a detailed explanation on the quality of the overall experience and what was good or bad about it. How these systems generate – and users understand – reputation can vary depending upon what sort of reputation dialog that platform supports and what sort of access users have to this information.

In addition to what options users are offered to *provide* reviews, platforms also differ on what level of access is offered to the any resulting reputation information. Platforms generally process reputational information – and make it available to users – in (1) an identified format, (2) an anonymous format, and (3) a hidden format.

Hidden formats completely bar users from viewing his or her own reputational information. This format raises the not only privacy concerns but presents reputation building as an opaque process. Users are provided with limited access or control, frequently lacking the ability to change, challenge, or address incorrect or critical information. Hidden formats can also challenge user efforts to build reputation as users lack necessary information to adjust their behavior to conform to the system norms. While hidden formats are the most effective at protecting commenters from retaliation by the subject of the review, platforms can use proper de-identification or aggregation of reviews to protect sources. Alternatively, platforms can take measures to ensure that subjects of poor reviews can no longer transact with the commenter.¹¹

¹º Id.

¹¹ TaskRabbit Support, Can I Leave a Review for my Client?, https://support.taskrabbit.com/hc/en-us/articles/204409560-Can-leave-a-review-for-my-Client- (last visited May 15, 2015).

Anonymous and identified access formats give users a degree of access to reputational information on peer-to-peer platform, and many platforms offer some combination of anonymous and identified information.

In general, anonymous comments can be an effective format for platforms with frequent member transactions. The sheer number of comments or reviews can make checking commenters' personal information impractical and any individual interaction could hold little reputational value to other members. An anonymous format is also practical when reviews are limited to a simple grading scale, which increase the probability of members leaving feedback by reducing comment costs. Simple grading scales often suffer from subjective standards and biases, generated by an overrepresentation of uncommon user experiences. For this reason, platforms should explicitly inform members of how the ratings are used and provide guidelines for evaluating other members.

Identified access offers users access to reviews and comments that might include some degree of personally identifying or individualized information about the reviewer. Identifying comments generates reputational value in two ways. First, the identification provides the subject with context to the transaction, which allows for effective response. Second, it can encourage trust in the platform and among the members.

These categories of reputation formats are also tied to whether a system employs an open or verified rating system. Platforms must consider both how their systems are implemented and what access is permissible in a way that is both appropriate to fit their service model and that maximizes the veracity of user's resulting reputation.

An open input format allows any user on a platform to leave reputational comments about another user. An example of this sort of open input model is the ability of anyone to leave a review for anything on Amazon, whether or not they have actually purchased the item.¹³ Open inputs are susceptible to trolling behaviors, and the need to grant users the ability to challenge or address comments is greatest as this model imposes no inherent reputation controls, such as the authorization of comments or verification of the relationship.¹⁴ Amazon mitigates these concerns by allowing its users to judge — and review the helpfulness — of other user's review, which requires considerable scale to effectively implement.¹⁵ Further, Amazon also highlights verified reviews.

¹² A third category: authorized inputs allow the subject of reputational comments the ability to either screen or takedown comments. These systems are rare, though can be seen in Airbnb's solicited references. Airbnb, How Do References Work?, https://www.airbnb.com/support/article/173 (last visited May 15, 2015).

¹³ General Review Creation Guidelines, Amazon, http://www.amazon.com/gp/community-help/customer-reviews-guidelines (last visited May 15, 2015).

¹⁴ Suw Charman-Anderson, Fake Reviews: Amazon's Rotten Core, Forbes (Aug. 28, 2012), http://www.forbes.com/sites/suwcharmananderson/2012/08/28/fake-reviews-amazons-rotten-core/.

¹⁵ About Customer Reviews, Amazon, http://www.amazon.com/gp/help/customer/display.html?ie=UTF8&nodeId=201077870&pop-up=1 (last visited May 15, 2015).

Indeed, many of the most popular and frequented platforms in the sharing economy rely on verified inputs. Members are required to use the good or service prior to reviewing their peers. Verified inputs can reduce trolling or other efforts to game a system, artificially boosting reputation, by increasing the costs to members who engage in these behaviors. ¹⁶

In addition to these broad systems, many platforms also provide and stress different guidelines and mechanisms for processing comments and reviews that can either improve their veracity or offer additional insight into the user. Airbnb, for example, requires reviews abide by its community-review guidelines.¹⁷ These guidelines even emphasize privacy considerations, highlighting to would-be reviewers the importance of not leaving personally identifiable information in a review, such as a person's last name or address.¹⁸ Airbnb also offers star-ratings and aggregated scores.¹⁹ Other platforms offer users a dashboard where they are given different review options, including the ability to submit public and private reviews. Private reviews can be hidden from other users and shared exclusively with the platform itself.²⁰

The strength and relevance of a user's resulting online reputation will vary based on these differences, and the type of review system offered by a platform. Successful online marketplaces have scaled, because they have created well-designed reputation systems appropriate to their industry sector that allow users to identify trusted community members to interact with. But practices vary widely across the sharing economy. Additional communication challenges also emerge based upon whether a platform relies on desktop websites, mobile apps, or both. Mobile apps may be more convenient but are faced with space and format restrictions. These limitations hinder the integration of a precise review system within an app compared to a full-featured website.

B. Reputation via Identity

Our online identities will have an increasingly important and ubiquitous role in tomorrow's economy, starting with the sharing economy. Trustworthiness of an individual's online social identity can be measured through many factors, such as number of social connections, frequency with which the person interacted with others, time during which the person has been active on-line, and the richness of the person's social networking activity.²¹ The more meaningful the activities that

¹⁶ Chrysanthos Dellarocas, Designing Reputation Systems for the Social Web in The Reputation Society (2012).

¹⁷ Airbnb, How Do Reviews Work?, https://Airbnb.com/support/article/13?topic=203 (last visited May 15, 2015).

¹⁸ Id. A host needs to receive star ratings from at least three guests before their aggregate score appears.

¹⁹ Id

²⁰ TaskRabbit Support, How Do I Leave a Review?, https://support.taskrabbit.com/hc/en-us/articles/204411660 (last visited May 15, 2015). Further, should a Tasker negatively review a client, that client will no longer have the option to hire that Tasker in the future. TaskRabbit Support, Can I Leave a Review for my Client?, https://support.taskrabbit.com/hc/en-us/articles/204409560-Can-I-leave-a-review-for-my-Client- (last visited May 15, 2015).

²¹ Lenny Zeltser, Why On-line Social Identity and Reputation is a Big Deal (Feb. 14, 2015), https://zeltser.com/social-identity-reputation.

can be observed, the more trustworthy the person's social identity can be presumed to be.²²

A key challenge facing these platforms is how best to combine these sorts of identity-based reputation systems with tools to protect individual privacy.²³ At a basic level, each user in a peer-to-peer wants to know as much information as possible about the other to trust in a positive outcome, yet both users also have an interest in disclosing as little information about themselves as they can and to remain anonymous to the extent feasible. Frequently, platforms attempt to address this dynamic by offering some degree of anonymity or obscurity, though this presents challenges for building and developing reputation.

Craigslist, by its nature, has implemented one of the most extensive obscurity solutions. For example, to reduce the amount of spam and scams circulating on Craigslist, the service has implemented a two-way email relay. This protects the privacy of the user's actual email address, as no one's actual email address is displayed when the user placing the post chooses the "2-way e-mail relay" option. ²⁴ It also prevents scammers and spammers from using Craigslist to harvest email addresses. However, Craigslist also lacks any sort of user reputation mechanism.

Other platforms present alternative approach to limiting what sort of personal information is shared between parties. Uber, for example, implements phone number masking, while TaskRabbit's platform ensures that all communication between clients and Taskers is done entirely through the TaskRabbit platform. TaskRabbit absolves the need for either party to exchange contact information: Taskers can chat with clients using in-app chat messaging and in-app call functions. A client's phone number is never displayed, and the client's actual location – or the location of the task – only becomes available after an assignment. Until that time, Taskers only see a generalized location. ²⁵

But while these obscurity mechanisms offer privacy protection and can be useful for many sharing economy platforms, they hamper reputation development. Many platforms stress the importance of online identity and offer social-network integration. These features can be designed to improve the user experience, but they also serve as a common reputation building mechanism. Peer-rental services

²² Id. It is conceivable that these activities could eventually be converted into some sort of reputation score, creating an online analog of the credit score for the sharing economy.

²³ See John Henry Clippinger, An Inquiry into Effective Reputation and Rating Systems, in The Reputation Society (2012) ("Verifiable identity is absolutely essential to building a reputation system. The downside is that a persistent identity can also be used for surveillance and control by third parties and bad guys.").

²⁴ Craigslist, How Can I Post Anonymously and Still Receive Responses?, http://www.craigslist.org/about/help/faq (last visited May 15, 2015). When Craigslist visitors view and reply to a posting, their email is directed to pseudonymous string letters and numbers @sale.craigslist.org. On the other end, the seller similarly receives a pseudonymous email from @reply.craigslist.org.

²⁵ TaskRabbit Support Center, Does The Tasker See My Phone Number, Email, or Address?, https://support.taskrabbit.com/hc/en-us/articles/204411650-Does-the-Tasker-see-my-phone-number-email-or-address- (last visited May 15, 2015).

such as Airbnb, RelayRides, and Lyft integrate with Facebook to let owners and renters check to see whether they have friends (or friends of friends) in common.

This sort of integration not only can make these services easier to use, but users are often relieved to learn that they have friends in common with other users on the sharing platform. Social-media and social-network integration can make "people generally more comfortable meeting new people using technology."²⁶ Nonetheless, using social media information in other contexts can present a privacy trade-off, even as it improves trust or efficiency in peer-to-peer exchanges. To improve user privacy without diminishing the benefits of this type of integration, platforms could explore offering and displaying common links and interests from a social media profile without linking the user's identity to the platform, should the user not wish to. In this way, users could take advantage of the ability to see any friends they have in common with other users on a peer-to-peer platform without giving away their precise identity.

Social network integration not only enhance trust through shared relationships, but increasingly, information gleaned from social networks can provide an easy way to demonstrate one's reliability and good reputation, which can be highly valuable to new users on a platform. Coming into a service with a clean slate, new users necessarily have no reputation to put forward; social networks provide a form of preexisting reputation that can transfer to a sharing economy platform, eliminating barriers to entry and offering a reputational shortcut.

This sort of integration with social networks can also serve as a form of identity-verification tool. Verified identification is created "to build trust in the community." Airbnb, for example, encourages users to connect online profiles curated by Facebook, Google, or LinkedIn to their Airbnb account. While some platforms propose social-network integration, others make it a requirement. In order to become a Tasker on TaskRabbit, it is required, among other things, to be connected with Facebook or LinkedIn. TaskRabbit explains:

TaskRabbit is a social experience and we want to cultivate a connected and accountable community. We also use Facebook or LinkedIn to determine your presence in this digital age and utilize this as a platform to connect to an active social network. Please know that we do not use any of your information on Facebook or LinkedIn and will never share, post, or use your information on either of these platforms.²⁹

The Economist, All Eyes on the Sharing Economy (Mar. 9, 2013), http://www.economist.com/news/technology-quarterly/21572914-collaborative-consumption-technology-makes-it-easier-people-rent-items.

²⁷ Airbnb, What Is Verified ID?, https://www.airbnb.com/support/article/450 (last visited May 15, 2015).

²⁸ Other outside, offline forms of identity can also be used such uploading images of government-issued ID.

²⁹ TaskRabbit Support Center, What Do I Need to Be a Tasker?, https://taskrabbit.zendesk.com/entries/21571049-What-do-l-need-to-be-a-Tasker- (last visited May 15, 2015).

But there is no such requirement for users seeking only to be clients. The current landscape of peer-to-peer exchanges frequently demonstrates information asymmetries between service users and service providers.

Maintaining Reputation: Privacy Challenges of Rating Systems

These different reputation models can present a number of large practical challenges, including some that raise important broad ethical and privacy issues. However, this survey is limited to some of the privacy challenges that appear with regard to reputation and account management. Because these systems rely on information provided by service users and providers, they can implicate individual privacy. Access rights – and accuracy and correction of reviews – are key elements in how reputation is built and monitored in a peer-to-peer system; they also raise considerations of how platforms are implementing basic Fair Information Practices with regards to user-generated data in the sharing economy.

To understand how platforms implement access and correction capabilities, we surveyed a variety of peer-to-peer market leaders in different sectors ranging from transportation, hospitality, retail goods, and other services — such as house cleaning or construction. We largely relied on documentation available in-app or online, such as terms of services, privacy policies, and more public-facing help guides and frequently asked questions some services offer. ³⁰ We specifically evaluated (1) the transparency of the platform's reputation system, (2) the level of user access to their reputational information relative to countervailing interests of the platform's chosen reputation model, and (3) the relative ability of users to dispute or challenge negative reviews or other potentially inaccurate information. We also looked at what options users and service providers had to completely delete their account with a sharing-economy platform.

We recognize that some platforms have different service models and, as a result, access and challenge rights for users may be impractical, unnecessary, or impossible. Our survey suggests that practices vary considerably across the sharing economy, which could raise important questions about privacy and fair treatment of users.

³⁰Where information was unavailable, we attempted to reach out to each platform through public-facing contact information.

i÷ii÷i	i÷ii÷i	Access Rights	Challenge & Correction	Account Deletion
Transportation	lyR	Drivers provided with daily/weekly aggregated ratings based on their past 100 drives. Passengers have no formal access.	No ability to challenge or respond to ratings.	No clear guidance as to how to permanently delete account information.
	Sidecar	Drivers and passengers are provided access to an aggregated rating inapp.	User can post comments.	Account information may be permanently deleted by contacting customer support.
	UBER	Drivers provided with weekly aggregate rating. Passengers can request their aggregated rating by contacting the company.	No ability to challenge or respond to ratings.	Account information may be permanently deleted by contacting customer support.
Hospitality		Users have access to both comments and star rating system. Displayed and directly accessible on profile page.	Option to reply directly to a review left by another user.	Option to delete account directly in app. Possibility to reopen the account by contacting customer support.
	② HomeAway∙	Users have access to both comments and star rating system. Displayed and directly accessible on profile page. Only travelers can leave reviews.	No ability to challenge or respond to reviews.	No clear guidance as to how to permanently delete account information. Option to deactivate account via profile.
	<u>Couchsurfing</u>	Users have access to both comments and three-level rating system. Displayed and directly accessible on profile page.	Option to reply directly to a review.	No clear guidance as to how to permanently delete account information. Options to close account suggest account deactivation rather than deletion.
Retail Goods	Etsy	Users have access to both comments and star rating system. Displayed and directly accessible on profile page.	Option to post a public response to a review of three stars or less only. Only one public response allowed.	No clear guidance as to how to permanently delete account information. Options to close account suggest account deactivation rather than deletion.

Retail Goods	Naighbar@oods	Users have access to both comments and three-star rating system. Displayed and directly accessible on profile page.	Option to reply to a review.	Account information may be permanently deleted via the website.
	ebay	Users have access to both comments and three-level rating system. Displayed and directly accessible on profile page.	Option to reply directly to a review.	Account information may be permanently deleted via the website.
Services	TaskRabbit	Users have access to both comments and two-level rating system. Taskers can only see public reviews. Client cannot see reviews about them.	No members can respond.	Account information may be permanently deleted by contacting customer support.
	Instacart	No rating system in place.	No rating system in place.	No clear guidance as to how to permanently delete account information.
	Zaarly	Users have access to both comments and two-level rating system. No guidance as to how the review system works precisely.	No clear guidance.	No clear guidance as to how to permanently delete account information.

A. Accessing your reputation

Many platforms offer both users and providers considerable insight and transparency into their peer-to-peer reputation. On many services both sides of the peer-to-peer exchange can see how they are being evaluated, peruse critical and positive reviews, and see their individual numerical or star-based ratings. Yet, transparency of the review process can vary.³¹

Platforms focused on the transportation and services sectors frequently restrict access or bifurcate what information is available to users and providers. Uber and Lyft, for example, were previously criticized for not providing their passengers with any insight, let alone access, into how they are rated by drivers.³² That said, other providers like SideCar do allow access to aggregated ratings, and Uber recently

³¹ David Streitfeld, Ratings Now Cut Both Ways, So Don't Sass Your Uber Driver, N.Y. Times (Jan. 30, 2015), http://www.nytimes.com/2015/01/31/technology/companies-are-rating-customers.html.

³² Dara Kerr, Should Uber and Lyft keep passenger ratings secret?, CNET (Sept. 25, 2014), http://www.cnet.com/news/should-uber-and-lyft-keep-passenger-ratings-secret/.

implemented a system through which passengers can easily and clearly see how they are rated and is in the process of rolling out the feature.³³ While the transportation providers have received the brunt of attention focused on this issue, similar information asymmetries exist on platforms like TaskRabbit and Zaarly, which offer users the ability to find providers willing to clean their homes, deliver their laundry, and otherwise perform basic errands.

Uber's recent update allowing passengers to see how they are rated suggests a growing trend by many platforms to increase access and transparency. These efforts should be encouraged. While it is true that certain peer-to-peer business models may rely on reputation to a lesser degree, at minimum, platforms should be providing more transparency and insight into how users and provider accounts are matched, monitored, and if necessary, rated and evaluated.

B. Responding to criticism

Once you have access to your reputation, how can you ensure its accuracy? In general, most platforms – if they offer users and providers access to their reputation – address accuracy concerns by allowing individuals to respond to negative reviews, or otherwise rebut feedback that could hurt their reputations.

The system provided by Airbnb, which has been at the forefront of curating accurate reviews for user perusal, is illustrative.³⁴ Reviews left on Airbnb are based on completed stays, tackling the issue of artificial reviews where no proof the transaction exists.³⁵ Airbnb provides review guidelines and rarely removes or alters reviews if found in violation of those guidelines. The platform's default position is not to delete, censor, or edit user reviews, explaining that it values "free speech, transparency, and clear communication" and the trust that comes "from honest conversation."³⁶

Users cannot change or remove reviews on their Airbnb profile left about them by other Airbnb community members. But they have the option of posting a response to a review left about them.³⁷ Review responses appear directly below the initial review on both a user's Airbnb profile and any Airbnb listing to facilitate anyone who views the review easily viewing the user's response. Users have the option of reporting both reviews and responses for violations of the platform's review guidelines by contacting Airbnb, in which case Airbnb may remove or edit a review or response.

³³ Uber, Protecting Privacy: Our Commitment (Jan. 30, 2015), https://blog.uber.com/privacy-review. See also, Hogan Lovells, Review and Assessment of Uber's Privacy Program (Jan. 2015), https://blog.uber.com/wp-content/uploads/2015/01/Full-Report-Review-and-Assessment-of-Ubers-Privacy-Program-o1.30.15.pdf (encouraging the service to "enhance its consumer access, inquiry, and complaint practices by creating an automated process for account deletion and by providing consumers with easier access to their rider rating such as through a consumer's profile page.").

Seth Porges, The Strange Game Theory Of Airbnb Reviews, Forbes (Oct. 17, 2014), http://www.forbes.com/sites/sethporges/2014/10/17/the-strange-game-theory-of-airbnb-reviews/.

³⁵ https://www.Airbnb.fr/support/article/262

³⁶ Airbnb, What Are the Airbnb Review Guidelines?, https://www.airbnb.com/support/article/262 (last visited May 15, 2015).

³⁷ https://www.Airbnb.fr/support/article/367?topic=203

Other platforms encourage users and service providers to contact that platform directly to dispute ratings and reviews. TaskRabbit, for instance, concedes that negative ratings and reviews are "usually permanent part of a Tasker's profile," but appears to handle negative review on a case-by-case basis in the event individuals contact them.³⁸ While these sorts of ad hoc mechanisms to either correct mistakes or dispute reviews are better than nothing, they frequently leave individuals without any clear understanding of how to address perceived reputational slights.³⁹

C. Accuracy of your reputation

While access-and-correction rights give users and service providers an opportunity to keep tabs on their reputation, a larger challenge is ensuring the accuracy and reliability of the resulting online reputations. Online rating systems have been criticized as inherently flawed, because many users do not provide an honest rating – either because they are afraid of repercussions or because they have ulterior motives. Critics suggest peer-to-peer ratings are "insincere" because "[t]he majority of customers give 5 stars across the board, reserving one-star scores for only the most egregious experiences. There's hardly any middle ground. Absent any meaningful differentiation between "good" and "bad" users, reputation systems can be accused of completely failing to solve the problem of trust.

One study compared ratings left by users on Netflix and on BlaBlaCar, a European car-sharing service. It explained that on Netflix:

There is every reason to believe that the ratings are independent and honest: the rater can offer an opinion freely, having no reason to expect reward or punishment for any particular rating. The rater also has an incentive to give a rating that matches their actual opinion, as it enables Netflix to recommend movies that better match their tastes. 43

On the other hand, collusion and fear of retaliation are the reasons why there are so few review below five-stars on some ride-sharing platforms. This reciprocity fear has also been observed and studied in the eBay reputation system, where critics contend that permitting direct feedback "distorts the production and content of reputation information in a market, hampering trust and trade

³⁸ TaskRabbit Support Center, I Want to Dispute a Negative Rating, https://support.taskrabbit.com/hc/en-us/articles/204409690-l-want-to-dispute-a-negative-rating- (last visited May 15, 2015).

³⁹ Some platforms provide little transparency or guidance on how users or service providers can respond to criticism or address their negative reputations. The Handy Help Center, for instance, provides no information about how reputation and trust are maintained on the platform. See, e.g., Handy, https://www.handy.com/help (last visited May 15, 2015.

⁴⁰ Tom Slee, Some Obvious Things About Internet Reputation Systems, Whimsley (Sept. 29, 2013), http://tomslee.net/2013/og/some-obvious-things-about-internet-reputation-systems.html.

⁴¹ Kat Kane, The Big Hidden Problem With Uber? Insincere 5-Star Ratings, Wired (Mar. 19, 2015), http://www.wired.com/2015/03/bogus-uber-reviews/.

⁴² Slee, *suprα* note 32.

⁴³ Id.

efficiency."⁴⁴ One solution put forward by Airbnb has been to implement reviews as a sort of "double-blind submission" where neither party in the exchange can access their reviews until both have submitted.⁴⁵

D. Deletion of your data

Finally, we evaluated how sharing-economy platforms allow users and service providers to quit their peer-to-peer service. Individuals should always have the option to delete their data from a service within a reasonable amount of time should they wish to exit a service. But some platforms make this simple process difficult, if not impossible.⁴⁶

Frequently, sharing-economy platforms do not allow users to delete their information, but rather, only allow users to deactivate their public profiles or otherwise suspend their use of the service. For example, Couchsurfing provides guidance to users for how "hide or delete" their profile, which merely allows users to deactivate their accounts. ⁴⁷ It does not appear that a user's profile can ever be fully deleted. Similarly, should an individual wish to close their Etsy account, they are informed that closing an account "will not free up your email address, username, or shop name for re-use on a new account," suggesting Etsy maintains this information indefinitely. ⁴⁸ Other platforms provide no clear guidance on how to close their accounts.

These sorts of policies may be justified as limiting the ability of individuals to game the system, by repeatedly wiping negative reputations clean. But they present a significant privacy issue nevertheless.

⁴⁴ Gary Bolton et al., Engineering Trust: Reciprocity in the Production of Reputation Information (Mar. 2012), http://ben.orsee.org/papers/engineering_trust.pdf.

Seth Porges, The Strange Game Theory Of Airbnb Reviews, Forbes (Oct. 17, 2014), http://www.forbes.com/sites/sethporges/2014/10/17/the-strange-game-theory-of-airbnb-reviews/.

⁴⁶ We evaluated data deletion policies and public-facing communication and frequently found a lack of clarity about what information a platform was retaining. A full list of statements as of May 27, 2015, is on file.

⁴⁷ Couchsurfing Help Center, How Can I Hide or Delete My Profile? (Jan. o6, 2015), https://support.couchsurfing.org/hc/en-us/articles/200640880-How-can-I-Hide-or-Delete-my-profile-.

⁴⁸ Etsy, Closing Your Etsy Account, https://www.etsy.com/help/article/53 (last visited May 15, 2015).

Important Concerns

This survey reveals that while many platforms in the sharing economy rely on and offer reputational systems for users and service providers, the mechanisms by which these systems are implemented and individuals have access and control over personal information can vary widely. Platforms can be much more transparent about their practices in this regard. Due to the importance of review or scoring systems – and personal information – to the success of the sharing economy, companies have a responsibility to be transparent about issues involving access, correction, and deletion. As these services become increasingly essential to a wide audience, transparent criteria for access and participation in these markets will be increasingly important to ensure fair treatment of consumers.

This article has focused specifically on the privacy issues related to reputation and peer-to-peer trust. But sharing economy raises many broader privacy issues for platforms themselves. Indeed, the modern sharing-economy model has shifted from traditional peer-to-peer to a three-party model as platforms now play an indispensable part in connecting individuals. While platforms need to have good and reliable reputational systems in place in order to create trust between users, they also will have to ensure their users trust them. It is very likely that, as this model grows, users will rely on the platform's reputation in addition to user reputation alone. Though these issues are beyond the scope of this survey, the future reputation of the sharing economy, when it comes to privacy, will necessitate addressing them sooner rather than later.