CHECKING IN AT THE BATES MOTEL? EXPLORING THE FEEDBACK LOOP BETWEEN AIRBNB HOST AND GUEST

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Abstract
Recent improvements in communication, information and connectivity technologies have made new business models possible. Peer-to-peer platforms, collectively known as the sharing economy, have emerged as alternative suppliers of goods and services traditionally provided by long-established industries. Airbnb was founded in 2008 and enables people to book accommodations from a mobile phone or tablet, without involving a third party like travel agency or hotel manager. This implies that technology can replace customer service. This paper was guided by our research question: How is the interaction between Airbnb hosts and guests, and can the feedback loop be trusted? Drawing on some concepts of the “Market of Lemons theory” we wanted to investigate the potential positive and negative reinforcements of the feedback loop, which are enabled by the technological platform used by Airbnb. We interviewed current hosts and guests of Airbnb during the summer of 2017. Our findings indicate that both guests and hosts are reluctant to express certain negative experiences in the feedback loop, and that they are unaware of the consequences. This study confirms both the inflation of the rating with five stars, and the positively skewed written reviews. Our conclusion of this explorative study indicates that the feedback loop is not as trustworthy as users believe, especially when it comes to minor and high severity issues; while issues of medium severity seems to be reported. This study should be interesting to existing and potential hosts and guests of Airbnb and similar services, as well as researchers of the sharing economy.

Keywords: Sharing economy, technological platform, feedback loop, Airbnb, customer trust, “Lemons problem”

1. INTRODUCTION

“Technology changes. Economic laws do not”. Shapiro & Varian (1999 p. 2) discussed information as product and service, and how reproduction of information was inexpensive and thus easy to copy by competitors. The sharing economy, typically represented by Airbnb and Uber, goes even further. These companies do not own a single room, or a single car. They rely on the technology to provide the information and promotion to its customers, and on the network effect that is self-reinforcing. The technology in question is the peer-to-peer platforms. The emergence of peer-to-peer platforms, collectively known as the sharing economy, has received considerable attention during the last years (Belk, 2014; Gansky, 2010; Magnusson, Ask, Nilsson, & Polutnik, 2016). Online platform companies are growing rapidly, enabling consumers to both obtain and provide, temporarily or permanently, valuable resources or services through direct interaction with other consumers (Ertz, Durif, & Arcand, 2016). These companies use advanced technology and peer-to-peer platforms, which have enabled the individuals to make use of under-utilized goods and services via fee based sharing platforms.

Consumers have so far diligently adopted the services offered by Airbnb and the company is growing rapidly. In Norway, 10% growth on Airbnb accommodations resulted in a drop of 0,4% monthly revenue for the hotel industry (Jordet & Lehne, 2016). One reason for this, besides lower cost and a large variety of types of accommodation, is the feedback loop (Stemler, 2017). In general, customers tend to trust the recommendations from peers over traditional commercials by the vendor. Research also reveals that companies like Airbnb has considerably fewer employees than traditional companies, which, according to Magnusson et al (2016), is a common trait of companies in the sharing economy. As of June 2017, Airbnb

has approximately 3200 employees, 150 million users (both hosts and guests) and 3 million listings spread out in 191 countries (http://expandedramblings.com/index.php/airbnb-statistics/). Listing is a term used for the properties owned by the hosts (Zervas, Proserpio, & Byers, 2014).

The technological platform, and the hosts and guest themselves, provide the advertisement and the recommendation for rooms. When the Airbnb guest completes the stay, both guest and host rate each other by using the technological platform. Each party provides a star rating and a written review about each other, which is known as a feedback loop (Stemler, 2017). The guest gives a rating of 1-5 stars on attributes such as: cleanliness, communication, location, value for money, check in, and the overall experience. In addition, the guest writes a review of the host which will be publicly available. The host gives a rating of 1-5 stars on cleanliness, communication, observance of house rules, and a thumbs up/down for recommendation to future hosts.

“When this circularity of action exists between the parts of a dynamic system, feedback may be said to be present” (Ashby, 1957 p. 53). Feedback comes with disadvantages: “It can create dynamic instabilities in a system, causing oscillations or even runaway behavior. Another drawback, especially in engineering systems, is that feedback can introduce unwanted sensor noise into the system, requiring careful filtering of signals” (Åström & Murray, 2010 p. 3).

In the Airbnb case, the sources of “noise” can be multiple, since the system is built on the hosts’ and guests’ mutual feedback through the technological platform. Some intriguing questions arise: can technology really replace customer service, traditionally provided by a third party, such as a travel agency or a hotel manager? Building on Shapiro and Varian’s statement, we claim: “technology changes, human nature certainly does not”. Despite technological advancements people still have feelings, and a strong perception of what is considered right and wrong behaviour (at least when it comes to business transactions and customer service). However, previous research has shown that technology creates a buffer between the people, facilitating unwanted behaviour such as spamming your e-mail account, harming your PC with malicious code (such as virus), challenging your privacy (Zittrain, 2008) and digital piracy (Hill, 2007) to flourish. For example, most of the people who illegally download a book would not dream of stealing a physical object in a bookstore, and people who “bully” in the comments section in blog posts would probably not dare to repeat the words in a face-to-face situation. Airbnb can be seen as a faceless organisation (Bozic, 2017) which can challenge customer trust. In this paper, we narrowed our scope down to the following research question: How is the interaction between Airbnb hosts and guests, and can the feedback loop be trusted?

2. RELATED RESEARCH

We divided our search for related research in two main blocks. Our first search was conducted during spring 2017 and included two filters. First, we consulted the databases IEEE, ACM and Google Scholar with the search words sharing economy and digital innovation. Second, due to the fact that the sharing economy is a relatively new phenomenon, a timeframe for this particular search word was set to 2008 and 2017 in order for the search engine to return up to date and relevant articles. We conducted our second search during summer 2017 by using Google Scholar. The search words included Airbnb, feedback loop, and trust mechanisms. We have structured our findings according to our two main blocks, before we point to limitations of the extant literature.

2.1 The sharing economy and digital innovation

Belk defines sharing as an “act and process of distributing what is ours to others for their use and/or the act and process of receiving or taking something from others for our use” (Belk, 2014 p. 126). People have probably been sharing their assets for thousands of years, but advanced technology and peer-to-peer platforms have enabled individuals to share goods and services on a completely new level. The sharing economy remains, according to Eckhardt & Bardhi (2015) a growing industry, disrupting mature industries through an alternative take on the underlying ownership of production.
Value creation and capture in traditional business models are relatively well understood. Strategic management theories and practices have developed robust rules that have focused on leveraging physical and tangible resources (Bharadwaj, El Sawy, Pavlou, & Venkatraman, 2013). The sharing economy, according to Magnusson et al. (2016), utilises the crowd and makes it possible for companies to reach into a pool of potential resources that they do not need to own themselves. With new ways of taking advantage of the resources in the crowd, companies become decreasingly dependant of ownership of goods, and in terms of employees. Eventually, this will lead to a decrease in company size (number of employees), and new methods for management needs to be established. According to (Bozic, 2017) this sometimes results in faceless organisations where the customer’s trust can be challenged. Research also shows that there is a strong correlation between the emergence of the sharing economy and the use of technology (Hamari, Sjöklint, & Ukkonen, 2016). This brings us over to digital innovation and platforms:

The term digital innovation implies a focus on product innovation in line with (Yoo, Henfridsson, & Lyttinen, 2010). A necessary condition for digital innovation is that the new combination relies on digitisation, for instance, the encoding of analogue information into a digital format. The digitization makes physical products programmable, sensible, addressable, communicable, memorable, traceable, and associable. Yoo et al. (2010) further state that there are three unique characteristics that separates digital technical innovations from earlier technologies; reprogrammability, homogenisation and self-reference. Reprogrammability allows a digital device to perform a multitude of functions: calculating distances, word processing, video editing and web browsing. Homogenization concerns making all data accessible by digital devices. Any digital contents can be transmitted, stored, displayed and processed using the same technical devices and networks. Digital data originate from heterogeneous sources and can easily be combined with other digital data to deliver various services that dissolves product and industry boundaries. Finally, self-reference means that the digital innovation requires use of computers. Thus, the dispersal of digital innovation construct positive network externalities that further stimulates the formation and availability of content, digital devices, networks, and services (Hanseth & Lyttinen, 2010).

The sharing economy has two kinds of network effects: direct and indirect (Smichowski, 2016). The direct network effect concerns how the value for an individual user depends on how many other users there are of the product or service. The indirect network effect does not concern the users direct interaction, but rather the feedback loop, where: “as a platform gains more users, it can collect more user data, leading to better insights into consumers and their needs, which can be used to improve quality, attracting even more users” (Sokol & Comerford, 2016 p.12).

2.2 Defining the feedback loop and a brief presentation of The Market of Lemons

“The term feedback refers to a situation in which two (or more) dynamical systems are connected together such that each system influences the other and their dynamics are thus strongly coupled.” (Åström & Murray, 2010 p. 1). Over time, this creates a feedback loop. Based on the definitions by (Ashby, 1957), we note that in the Airbnb feedback loop, the review of the guest and the host will have an influence on each other for future actions.

Thierer, Koopman, Hobson, & Kuiper (2016) claim that the feedback loop is a solution to George A. Akerlof’s theory of the Market of Lemons (Akerlof, 1970). The lemon is a metaphor for a used car in poor condition, which the seller would promote to an ignorant buyer as an equal to a used car in good condition. This is due to asymmetrical information (Akerlof, 1970 p. 490), meaning that the seller has more information than the buyer when it comes to the actual state of the used car. Over time, the buyer will only have knowledge of cars in poor condition, and the seller will continue to promote used cars in poor conditions because there is no demand for good cars, thus making the market to suffer for both seller and buyer of used cars. “As a consequence, sellers of higher-valued cars exit the market, and only lemons are offered. The market may eventually collapse because of this ongoing adverse selection process” (Thierer et al., 2016 p. 836). While Akerlof suggested guarantees, branding, and licensing as solution, Thierer et al. argue that a feedback loop will promote trust between buyer and seller. They further argue that Akerlof underestimated the buyers’ strong incentive of collecting information before purchase. We note that today, information is easier to collect than it was when Akerlof published his theory. For instance, customers’ purchase of cameras on Amazon is highly influenced by the reviews from previous customers (Archak,
Ghose, & Ipeirotis, 2007). If a camera received reviews including words such as “horrible” or “worst camera ever”, it would soon lead to a collapse in sales for that model. Interestingly, if a camera was referred to as “best camera ever”, it would also hurt sales. This study indicates that customers both seek, and value, the feedback from fellow customers, and that they also possess a healthy scepticism towards over-appraisal, even if it apparently comes from peers.

Returning to Thierer et al.’s study, they claim that Akerlof also underestimated the forces of a good reputation of certain sellers to provide high-quality products, which again promotes trust for the buyer. Thierer at al. conclude that the feedback loop, and platform technologies that are enabled by the Internet, can facilitate the creation of more effective, and largely self-regulating markets that provide more information to more individuals than before, thus solving the lemons problem. However, several researchers disagree with this conclusion. For example, Stemler (2017) argues that three requirements must be met in order for a feedback loop to work: (1) it must accurately represent the quality of past transactions, 2) it cannot be manipulated by fraudulent reviews; and 3) users must be able to interpret the feedback information. Stemler also argues that all three requirements are vulnerable, which “may have a cascading error effect on the performance of the computational algorithms” (p. 688). Sources of errors include: reporting bias, fear of retaliation, reciprocity bias, herding effect, fake reviews, “cold start” (also known as the chicken and egg problem), and confusing presentation of data. We will return to these requirements and sources of errors in our discussion.

A large number of publications include the concept of trust when discussing the feedback loop. The definition of consumer trust has several origins, and academia has not reached one universal understanding. Xie & Peng claim that the concept of trust contains both belief and intent, thus it comprises “…both consumers’ overall evaluation of corporate trustworthiness and their corresponding trust intent” (Xie & Peng, 2009 p. 573). An experiment conducted by (Seeger, Neben, & Heinzl, 2017) emphasised that transparency is efficient when customer trust is challenged. Although this study was about a business-to-customer (B2C) transaction, it can still apply to our study. For example, it can indicate that Airbnb should be somewhat transparent about how their algorithms work. A study by Backmann et al. (2015) provides six trust repair mechanisms for organisations: Sense-making, Relational, Regulation and Control, Ethical Culture, Transparency and Transference. Restoring organizational trust first requires a process of sense-making to establish a shared understanding or accepted account of what happened, how and why (Bachmann, Gillespie, & Priem, 2015). The relational mechanism include, for example, public apologies, punishment, and compensation to victims. Regulation and control is supposed to prevent future violations, and ethical culture embedded in routines and procedures create a safeguard against unethical behaviour. Transparency is usually about sharing information about the organisation’s decision-making processes, procedures, functioning and performance to the public. While research has proven transparency to build trust, it is tempting for an organisation to conceal faults and failures, thus presenting only the positive information, and withholding the shortcomings. Finally, transference is about how trust can be transferred from a credible, trusted actor or institution to a discredited actor or institution. Transference sometimes require a broker or a third party. Backmann et al.’s conclusion is that none of the six repair mechanisms will offer a better solution than the others, and that a combination of more than one is usually needed. The critical literature review by (Bozic, 2017) concluded that customer trust repair is a nascent research field and that more studies are needed, especially from the individuals’ perspective.

2.3 Limitations of extant research
Summing up this section, we make two observations. First, although sharing has been around for many years, advanced technology and peer-to-peer platforms has enabled individuals to share goods and services to a further extent than previously. The sharing economy is a growing industry that is disrupting the industries through an alternative take on the underlying ownership of production (Eckhardt & Bardhi, 2015). According to Magnusson et al., (2016), this results in a decrease in company size (number of employees), and a shift towards more project based and freelancing way of doing business. Second, we found few qualitative studies on the feedback loop. According to (Åström & Murray, 2010) it is important for researchers to develop “…an understanding of dynamics and a mastery of techniques in dynamical systems”. There is a particular call for research on the individual level when it comes to consumer trust;
preferably outside the laboratory settings (Bozic, 2017) and the feedback loop in the sharing economy (Stemler, 2017).

3. A PRESENTATION OF AIRBNB

Airbnb’s own website informs: “Founded in August of 2008 and based in San Francisco, California, Airbnb is a trusted community marketplace for people to list, discover, and book unique accommodations around the world — online or from a mobile phone or tablet. Whether an apartment for a night, a castle for a week, or a villa for a month, Airbnb connects people to unique travel experiences, at any price point, in more than 65,000 cities and 191 countries” (Airbnb, 2017).

Airbnb receives a percentage of the cost from the guest, and a percentage of the income from the host. As of 2014, this amounted to 9-12% from the guest, and 3% from the host (Zervas et al., 2014). Regarding the prize, the host is free to decide. Airbnb will make recommendations for the host, based on prices on similar listings in the neighbourhood. In November 2015, Airbnb launched a function called «Smart pricing» (Vanian, 2015) that will recommend fluctuation prices in the weekend, and if there is a high demand due to for example a concert or other large events nearby. However, the host is free to disregard these recommendations from Airbnb.

A large part of Airbnb’s success is due to its feedback loop (some researchers also refer to this as a recommendation system or reputation system). Airbnb’s business model is currently operated with minimal regulatory control (Zervas et al., 2014), meaning that the technological platform is responsible for creating trust and conduct bookings between host and guest. The Airbnb platform will track virtually every digital action between the host and guest from the search history, booking, correspondence, to the reviews (Thierer et al., 2016). The algorithm supervises all activities. For example, if a host and guest make bookings repeatedly between each other, Airbnb will be alerted and check if the bookings are real, or fake in order to accumulate positive, but fabricated, feedback.

According to Stemler (2017) the sharing economy consists of four elements: a platform, microbusinesses, excess capacity, and high-powered information exchange. In our case, the platform consists of the technology such as the Internet search engines and Airbnb’s computational algorithms. The platform connects hosts and guests, mainly through the Airbnb application. The microbusinesses are the hosts, whose excess capacity are a spare room, a house, a cabin or similar. Finally, the high-powered information exchange is manifested as the feedback loop between hosts and guests. Figure 1 below illustrates the four elements.

![Figure 1: Our illustration of Airbnb’s platform and the feedback loop](image)

As mentioned above, the platform will request both the host and the guest to provide feedback to each other. The host and the guest can choose the sources of notifications from Airbnb, which is carried out through the Airbnb application. The Airbnb application can be downloaded free of charge and provides two different views; the role of host, and the role of guest. Figure 2 illustrates the Airbnb application from the perspective of the host (the perspective of the guest is very similar):
In addition, the platform can be extended with SMS and/or e-mail. Each host and guest is required to use the Airbnb application, but SMS and e-mail are optional. If a guest or host has not provided feedback within one day, the Airbnb platform will send multiple reminders for up to two weeks (https://www.airbnb.no/help/article/13/how-do-reviews-work). As soon as both guest and host have provided feedback to each other, both parties will be able to read each other’s review. Once published, this feedback will be publicly open to everyone, with or without a user account on Airbnb. If a host or a guest disagrees with the review, the rules are as follows: “You can respond to reviews, but you can't delete them. To promote trust and transparency in our community, we won’t censor, edit, or delete reviews unless they violate our content policy. If you think a review written about you is false or exaggerated, you can write a response that will show up directly below the review and be visible to other guests and hosts” (https://www.airbnb.com/help/article/32/can-i-delete-or-respond-to-a-review-i-disagree-with?).

4. METHOD

In this paper we report from an empirical study based on qualitative interviews. (Åström & Murray, 2010) state that the strong coupling between the dynamic systems (in our case: guest and host) makes analysis challenging. In our case, we also noted that some guests had also been hosts and vice versa. Consequently, we decided to interview the participants from either a guest or a host perspective.

4.1 Data collection

We conducted semi-structured interviews between June and August of 2017. The participants were chosen based on two criteria. First, we wanted to include people who had been either hosts or guests of Airbnb at least once. The second criterion was a matter of convenience (Oates, 2006), where a researcher selects respondents who are “convenient for them because they are easy to reach or willing to help” (p. 98). Our first attempt was to randomly choose hosts in Oslo through the Airbnb website, but nobody responded to our e-mail enquiry. Therefore, we approached acquaintances, who we knew had used Airbnb. From there, we applied a snowball sampling, meaning that our first participant made suggestions about new participants. We also posted a request on a student-page on Facebook, where we could reach Master students of our university college, and one student responded. All interviews lasted about 30 minutes. They were recorded and transcribed afterwards. We keep the respondents anonymous by referring to them as respectively Host/Guest with a number (see more details in table 1).
The interview guide was derived from the extant literature as presented in the previous section. Our questions for the guest and the host were somewhat similar for two reasons. First: many hosts are also guests and vice versa, and second: we believed that similar questions would facilitate our data analysis.

**Questions for the guest:**

1. How old are you?
2. What is your main profession?
3. Why did you become an Airbnb guest?
4. How many nights have you spent as an Airbnb guest?
5. Can you please describe a specific positive and/or negative experience?
6. If a host gives you feedback that you perceive as unfair/wrong, how do you react?
7. Have you sometimes given a feedback that was not quite true? If so, why?
8. Have you ever decided not to accept an accommodation that have been given negative feedback from other guests? If yes: why?
9. How “bad” must the feedback be, before you do not accept an accommodation?
10. Do you trust the feedback system? And the input provided by previous host/guests?

**Questions for the host:**

1. How old are you?
2. What is your main profession?
3. Why did you decide to become an Airbnb host?
4. How many guests have you had as host?
5. Can you please describe a specific positive and/or negative experience?
6. Have you sometimes given a feedback that was not quite true? If so, why?
7. If a guest gives you feedback that you perceive as unfair/wrong, how do you react?
8. Have you ever decided not to accept a guest that have been given negative feedback from other hosts? If yes: why?
9. How “bad” must the feedback be, before you do not accept this host?
10. Do you trust the feedback system? And the input provided by previous host/guests?

Table 1 below sums up our participants and the output. All of our participants, except for guest number 1, were from Norway. Guest 1 was German speaking and from Europe (we do not know exactly which country).

<table>
<thead>
<tr>
<th>Participants</th>
<th>Type of interview</th>
<th>Age</th>
<th>Main profession</th>
<th>Number of nights/guests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guest 1</td>
<td>Face-to-face</td>
<td>23</td>
<td>Master’s student</td>
<td>20-25 nights</td>
</tr>
<tr>
<td>Guest 2</td>
<td>Face-to-face</td>
<td>27</td>
<td>Manager of pizza chain</td>
<td>12-15 nights</td>
</tr>
<tr>
<td>Guest 3</td>
<td>Face-to-face</td>
<td>27</td>
<td>Student of public relations</td>
<td>30-55 nights</td>
</tr>
<tr>
<td>Guest 4</td>
<td>Face-to-face</td>
<td>31</td>
<td>Social worker</td>
<td>10-15 nights</td>
</tr>
<tr>
<td>Guest 5</td>
<td>Face-to-face</td>
<td>25</td>
<td>PhD research fellow</td>
<td>3 nights</td>
</tr>
<tr>
<td>Host 1</td>
<td>Face-to-face</td>
<td>31</td>
<td>Lecturer and administrator</td>
<td>ca. 150 guests</td>
</tr>
<tr>
<td>Host 2</td>
<td>Telephone</td>
<td>32</td>
<td>Volunteer worker at Plan International</td>
<td>Not available</td>
</tr>
<tr>
<td>Host 3</td>
<td>Skype</td>
<td>26</td>
<td>Master’s student</td>
<td>10 guests</td>
</tr>
<tr>
<td>Host 4</td>
<td>Face-to-face</td>
<td>37</td>
<td>HR manager</td>
<td>ca. 100 guests</td>
</tr>
</tbody>
</table>

Sum: 9 participants

Table 1: Overview of our participants

In addition to the interviews, we examined the Airbnb’s websites and community. We put ourselves in the role of both host and guest. First, we took the role as guests, and pretended to search for listings. We studied the feedback from previous guests to see how this affected our options. Second, we took the role as hosts, and studied the feedback from previous guests on various listings. This way, we could also study feedback provided by other “fellow hosts”. In order to compare with the more traditional hotel industry, we studied the feedback given by guests on Tripadvisor. On this website, there is no feedback loop, as only the guests provide assessment. In addition, we searched for blogposts about experiences from Airbnb host and guest.
We acknowledge that blogposts can be somewhat biased and perhaps written in affect, and may not be providing the whole truth.

4.2 Data analysis
Our data are mainly qualitative, and we applied techniques from (Miles & Huberman, 1994) to analyse the data material. The techniques included reducing the material into a matrix, which facilitated comparisons and a search for patterns. In addition, we looked for themes by clustering frequent issues within each question of the interview guide. Since this is an explorative study, we deliberately kept the transcripts as unrefined as possible, meaning that we included all hesitations, laughter, and discontinued sentences provided by each participant. Once we had scheduled the interview, all respondents demonstrated great interest and enthusiasm in terms of sharing their experiences. They provided answers to all of our questions, taking their time to reflect and discuss the themes of each question.

5. RESULTS AND DISCUSSION
This section is guided by our research question, which is: How is the interaction between Airbnb hosts and guests, and can the feedback loop be trusted? The first part of the research question is organised by Stemler’s (2017) three requirements to well-functioning feedback loops: (1) the feedback loop must accurately represent the quality of past transactions, 2) it cannot be manipulated by fraudulent reviews; and 3) users must be able to interpret the feedback information. The second part of the research question is discussed according to (Smichowski, 2016) and (Bozic, 2017).

5.1 The feedback loop must accurately represent the quality of past transactions
According to Stemler (2017), in order to accurately present the quality of past transactions, the feedback loop should avoid the following sources for error: reporting bias, fear of retaliation, reciprocity bias, and the herding effect.

Reporting bias deals with the problem of too positive reviews. Our data support this claim. In our case, seven of our nine participants admitted that they had provided too positive reviews. The typical explanation was that they wanted to “protect” the other party. One participant even said: “I do not want to betray the host” while another participant admitted to be “coward and lazy”. However, they do notify the host face-to-face about minor problems, such as dusty rooms, or noise in the apartment. Guest 3 first mentioned the dirty apartment in the review, but regretted the honesty later. The reason was that the apartment was cheap to rent. Overall, we note that there is a somewhat correlation between the price of the accommodation and the expectation of the conditions. If cheap, our participants expect less. Host 3 reflected that the Airbnb’s system can force positive feedback from both parties, despite (or perhaps due to) Airbnb’s rule that hosts and guests cannot see each other’s feedback before both have provided. We believe that the rule of simultaneous reviews (Stemler, 2017, p. 691) was implemented in order to increase the amount of feedback. After all, Airbnb relies on the feedback loop, and by “holding the feedback hostage” (our expression), it motivates users to provide the mutual feedback. Simultaneous reviews overlaps with the act of retaliation. When Airbnb was first launched, they did not have the rule of simultaneous reviews. Guest 2 described one experience before the rule was implemented: “I cleaned the whole apartment and I expected a good review. I only got one word: ‘Good’. This made me retaliate, but only in the sense that I provided equally short review”. Our data do not indicate any other acts of retaliation.

Stemler’s third source of error, reciprocity bias, is for example manifested by a waiter in a restaurant adding a candy with the check, or, writing a smile and their name on the check. Similar techniques may increase positive reviews on Airbnb, and, Airbnb’s website frequently provides hosts with tips and tricks on how to increase guest satisfaction. We also note that hosts provide advice to each other. For example, one host on the Airbnb website tells that after she placed a comments box in the room, she “...hardly had any negatives in my review now that the guests have addressed them directly at me”.

Finally, the herding effect may lead to unconscious bias based on information about prior reviews, and may lead to inflation. Our data do not directly support this effect. Rather, our participants wanted to investigate potential hosts/guest even though they had received a negative review. They wanted to make up their own
mind, and a comment was: “People have different perceptions and come from different cultures”. Host 1 told us that he or she had accepted two guests that had previously received negative feedback and two stars only, but that they turned out to be “two very nice girls”. However, prior to accepting the two guests, Host 1 had used the Airbnb platform and asked them to write more about themselves and their plans for the stay.

Airbnb originated in the US, where the culture is somewhat different from the European in terms of direct, constructive criticism. We believe that the Norwegian mentality has traditionally been more reserved. Can this explain why our participants (of which eight were Norwegian) refrain from providing negative feedback? Or, is it because they are afraid that they might hurt the Airbnb community? All of our participants, especially those who were guests, were all very positive towards the concept of Airbnb. The main motivation for both host and guests were monetary. In addition, our results revealed that our guests also valued the personalised experience as well as the social aspects. For example, three of our guests mentioned the possibility of talking to the host and getting “…personalized information from a local.”

5.2 The feedback loop cannot be manipulated by fraudulent reviews

Stemler states that in the sharing economy, your reputation will be your most valuable asset. Two related issues are the writing of fake reviews and the “cold start”, (also known as the chicken and egg problem, which in this case means that in order to get a reputation, you have to have a reputation). It can be tempting, especially for the host, to write fake reviews in order to get the bandwagon rolling (Hanseth & Lyttinen, 2010). Host 3 told us that since she was new in the role of host, she used the function called Instant Booking. Instant Booking lets guest book a place without any approval from the host, meaning that booking happens automatically on the Airbnb platform. This function can jump-start the reputation of a new host. Host 3 also reflected that this would probably work as long as she did not have any negative experiences.

All of our participants in role of guests agreed that the star rating does not provide value, but that it rather serves as an attention-grabber, especially if the rating is below 3 stars. They clearly stated that it is the written review that really provides value. The majority of the hosts stated that they would seek extra information if a potential guest had none, or very few, previous reviews. Most of the times, the hosts would communicate with the potential guest through Airbnb platform. Other possibilities include googling the person, which happens outside the Airbnb platform.

All of the guests informed us that they omit to report slightly negative feedback, such as noise and dusty apartments. The typical reason is that the guests do not want to betray the host (expression used by Guest 2). When we posed the question: “Do you trust other people’s feedback”, the majority of the participants quickly and clearly stated “Yes”. We note that the guests demonstrated reluctance towards publishing negative review in the feedback. However, they preferred to notify the host directly on these minor issues, outside the feedback loop. Guest 4 clearly stated that she would not have accepted an apartment if previous feedback revealed dust. Interestingly, when she stayed in an apartment with dust, she omitted this from the feedback. Similarly, all hosts have provided “false” feedback in the sense that it has been too positive. What is interesting is that all four hosts also state that they trust the system, due to “the large number of feedback that exists for each guest”.

As mentioned in section 3, the Airbnb platform has been automated with algorithms that will flag suspicious activities and forward to a team of 80 (as of 2014) trust and safety managers. Suspicious activities include money-laundering, fake positive reviews and payments outside the Airbnb system (Tanz, 2014). This study does not go further into the technological platform. However, our data did not show any trace of our participants doing money-laundering or money-exchange outside the platform. Neither did we find any evidence of faking positive reviews in the sense that they are fabricated. Rather, they refrained from including certain negative feedback, especially of low and high severity. Of course, it can be discussed which issues that should be considered severe or not, and we address this in the next section.

5.3 The users of the feedback loop must be able to interpret the feedback information

Although the input of the feedback loop appears to be trustworthy and correct, users still need to accurately interpret the information. Stemler claims that humans tend to have different interpretation based on how the information is presented. The existing research reveals that users will prefer a small amount of positive
feedback, over a large amount of slightly negative reviews. Our findings are inconclusive regarding this aspect. What we do see, is that our participants tend to read the most recent reviews only. Guest 1 admitted that she browsed 4-8 reviews, or just the first page, without bothering to scroll further down the website. Guest 3 informed that the amount of scrolling and investigation would highly depend on his travelling companions: his girlfriend is fastidious, while his friends are not.

The majority of our respondents demonstrated a high degree of reflection about negative reviews. For example, Guest 3 told us that when a guest had left a negative comment about long distance from the apartment to the public transportation, Guest 3 had made a small investigation in order to make his or her own decision. Our participant had looked at the profile picture of the ‘negative reviewer’; found that it was an elderly person; and made the calculation “elderly person equals poor walking condition”. Guest 3, being a relatively young person (27 years old) made the conclusion that the long distance was unproblematic for him or her. Our respondents informed us that they use both the platform, and other channels such as Google and Facebook, in order to conduct their investigation.

People will have different interpretation of the information, and they are likely to have a different opinion of what is considered a bagatelle, or a severe issue. From our data analysis of the nine interviews we were able to create three classifications:

- Dusty apartments and the guest arriving late are considered issues of low severity
- Hosts having a dog, or other inaccurate descriptions are considered issues of medium severity
- Growing marijuana in the apartment is considered an issue of high severity

We noted that only the medium severity issues were reported. Does this mean that low and high severity issues will escape the feedback loop? Unfortunately, our data material is too narrow to draw a conclusion, but future research can investigate our proposed classification framework, which is illustrated in figures 2 and 3 below. Figure 2 is from our guest’s perspective, and figure 3 is based on our host’s perspective:

![Figure 2: Illustration of trustworthy feedback versus degree of severity of issues: Guest perspective](image)

None of our hosts reported any issues of high severity, but the same illustration can be made:

![Figure 3: Illustration of trustworthy feedback versus degree of severity of issues: Host perspective](image)
We note that both guests and hosts have similar concerns. Both guest and host dislike dust and untidy rooms, but this is perceived as low level of severity. Regarding medium level of severity, one guest told us that there had been a dog in the apartment, and she chose to include this in the written review “...because sometimes people are scared of dogs.” Also, one host told us about a guest having used the washing machine without permission, and then hung clothes all over the apartment to dry (while renting one room only). The host reported this in the review. Our interviews only revealed one issue of high severity from the guest’s perspective, and that was the marijuana farm in the apartment. We continue this issue in the next section, which discusses the second part of our research question: can the feedback loop be trusted?

5.4 Can we trust the feedback loop, and what happens if the feedback loop collapses?
Although our findings reveal many sources of error to the feedback loop as described by Stemler (2017), we do not believe that the Airbnb feedback loop will collapse any time soon, at least not on the organisational level. And even if it should, a platform can survive without a feedback loop if the product or service has a high enough quality to attract new users, according to (Smichowski, 2016). However, it can be interesting to discuss whether the feedback loop can potentially collapse on the individual level, meaning for the host. Each host is, after all, a microbusiness, as described by Stemler (2017).

We dare to claim that most business transactions go well and as long as they do, most consumers are content and the issue of trust is reinforced. It is when a business transaction goes wrong, that trust is being put under stress. None of our participants had encountered any severe negative experiences, perhaps apart from this: guest 3 told us that the host grew large amounts of marijuana in the living room in the apartment in Berlin. Our participant had noticed the smell throughout the stay, but did not report on the feedback loop, nor did he confront the host directly. We noted that the participant laughed while telling this story. It can be debated whether growing marijuana in an apartment is severe, but our participant was not offended. Of course, people have different ways of reacting towards such a “surprise”. Regardless, we ask whether the guest/host have a responsibility of reporting illegal activities. The Airbnb community offers guidelines for house rules and contact information. If Guest 3 had reported the marijuana, what would have happened? Would he have had to spend the vacation at the police station? And would Airbnb have banned this host? At a traditional hotel, complaints are addressed to the front desk, and the front desk will take the action further. One explanation can be the microbusiness aspect of the sharing economy. Our respondents, both hosts and guest, showed great loyalty and concern about other individual hosts and guests. In addition, some of our participants had also been both guests and hosts. Perhaps this dual experience can affect the positive skewedness? Related to this, who has the most “power”? Despite the feedback loop, allowing the host and guest to assess each other, we think that the guest holds some power over the host. Several of our guest-respondents mentioned that “there are always more similar listings in the neighbourhood.” Thus, we conclude that negative review will be worse for the host, than for the guest.

The Airbnb application will provide tips for the host on how to increase the possibility of getting positive reviews. Examples include meeting the guest face-to-face upon arrival, and follow-up during the stay. As pointed out by (Tanz, 2014), if hosts and guests meet face-to-face it will positively affect the feedback loop. The Airbnb platform analyses all data from the feedback loop and provides advice to the hosts. For example, the analysis revealed that hosts who greets the guest in person, or sends a message during the stay tended to get more positive feedback. (Interestingly, we note that there is no similar advice for guests.)

Our data do not show any signs of broken trust – all of our respondents were positive. However, if a guest or host should lose trust, the re-occurring advice from extant research is transparency, see, for example, (Bachmann et al., 2015; Seeger et al., 2017). Trust can be broken on the microbusiness level (the feedback from host and guest), but also on the Airbnb level (the platform and the algorithms). We acknowledge that algorithms are part of a company’s competitive secret, however, we believe that the application of General Data Protection Regulation (GDPR) from May 25th, 2018, will have some influence on such algorithms. We do not pursue the issue of transparent algorithms versus competitiveness in this paper, but we encourage future studies to do so, as we also point to in our limitations section.
5.5 Summing up our discussion
Summing up, our paper confirms Stemler’s three requirements to a large extent: our participants show reporting bias and reciprocity bias, but less fear of retaliation, and we did not find trace of the herding effect. Our participants do not post false reviews, however, they admit to omit negative feedback. All of our respondents demonstrated a sound degree of personal interpretation of both positive and negative review. The feedback loop has several sources of errors from both host and guest, and a lot of interaction takes place outside the feedback loop (see table 2). Our data do not provide any insights regarding serious issues, but, when it comes to minor aspects, our study reveals that the feedback loop is not trustworthy. Regarding serious issues and illegal activities, existing literature informs that Airbnb places great resources in the algorithms, which may serve as counterbalance to people’s incorrect feedback.

<table>
<thead>
<tr>
<th>Interaction taking place within the platform</th>
<th>Interaction taking place outside the platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search history</td>
<td>Googling the host or guest for additional information</td>
</tr>
<tr>
<td>Booking and correspondence</td>
<td>Comment’s box in the home, use of SMS and phone calls</td>
</tr>
<tr>
<td>Feedback in the form of written reviews regarding issues of medium level of severity</td>
<td>Face-to-face feedback on the spot regarding issues of minor level of severity</td>
</tr>
</tbody>
</table>

Table 2: Interaction between host and guest, within and outside the Airbnb platform

5.5 Limitations of the study and suggested future research
Our paper has several limitations. First, our study included nine participants. Although we noted a somewhat saturation of our collected data, we would have liked to include more respondents. Second, our interviews indicate that both host and guest have some tolerance of minor negative aspects, typically lack of cleanliness. Apart from the marijuana incident, none of our participants had encountered any serious issues. It can be interesting to investigate how serious issues are pursued in the feedback loop, or by Airbnb. Third, future studies can investigate if, or how, it is possible to repair broken trust in the feedback loop. Fourth, the emergence of GDPR may eventually enforce a person’s “right to be forgotten”, which may influence the rule of not being able to delete feedback. Consequently, future studies can include how the Airbnb’s algorithms work, both from a technical and business process perspective.

6. CONCLUSION
This paper has responded to the outspoken call for more research for trust on the individual level, and the feedback loop in the sharing economy (Bozic, 2017; Stemler, 2017). Our study was guided by the following research question: How is the interaction between Airbnb hosts and guests, and can the feedback loop be trusted? The current rule by Airbnb prevents the host and guest from seeing each other’s feedback before they have both provided one. This does not seem to affect the interaction, rather, our data show that both the hosts and the guests are reluctant to report negativity on the feedback loop. The typical reason is that they are very positive to Airbnb as a concept, and that they want to protect each other’s reputation. Our findings indicate that the feedback loop can be somewhat trusted when it comes to medium level severity issues, but less regarding small and high level severity issues. The latter are typically dealt with outside the feedback loop. We propose a classification framework as illustrated in figures 1 and 2, however, more research is needed before a sound conclusion can be drawn. Although we do not think that the accommodations provided through the Airbnb platform will turn into lemons (Akerlof, 1970) anytime soon, we argue that the feedback loop is subject to more studies.

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REFERENCES


