What happens when clients are evaluated online? Exploring apparatuses of valuation in the individual transportation sector

Ulysses P. Pacheco Filho
Fundação Getúlio Vargas, ulysses.filho@gvmail.br

Follow this and additional works at: http://aisel.aisnet.org/confirm2017

Recommended Citation
Filho, Ulysses P. Pacheco, "What happens when clients are evaluated online? Exploring apparatuses of valuation in the individual transportation sector" (2017). CONF-IRM 2017 Proceedings. 43.
http://aisel.aisnet.org/confirm2017/43

This material is brought to you by the International Conference on Information Resources Management (CONF-IRM) at AIS Electronic Library (AISeL). It has been accepted for inclusion in CONF-IRM 2017 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.
WHAT HAPPENS WHEN CLIENTS ARE EVALUATED ONLINE? 
EXPLORING APPARATUSSES OF VALUATION IN THE INDIVIDUAL TRANSPORTATION SECTOR

Ulysses P. Pacheco Filho 
Fundação Getúlio Vargas
ulysses.filho@gvmail.br

Abstract 
The article discusses the importance of two-way online rating systems as one of the pillars of the sharing-economy, transforming strangers into trustable providers and customers. The article’s objective is to apply the concepts and practice based lens developed by Orlikowski and Scott (2014) to a two-way rating system by adding the provider evaluation of their clients. The article also explores the case study of usage of the rating systems by Uber drivers (the combination of drivers and riders in São Paulo, Brazil). By conducting semi-structured interviews, a practical usage of rating was explored focusing on its usage, importance, effects on riders, unveiling some unexpected usages of it.

Keywords 
sharing economy, trust, online rating, two-way rating, Uber, ridesharing, practice-based lens, materiality, performativity

1 Introduction
The sharing economy is a major shift and a challenge for the management class as they will no longer supervise employees under a permanent contract but independent providers Poitevin (2016). How to instruct, track and evaluate a crowd of casual workers you do not employ, and still deliver good quality and standardized service? How do we trust they will provide a good service? And how they trust the service will be paid? Is the algorithmic management the answer and the replacement of the management class? Is the new boss an algorithm? O'Connor (2016).

The sharing economy’s expansion depends on the ability to trust on strangers what can be consider counter-intuitive and against our education exemplified by the stranger danger buzzword developed over the past decade in education and the media like on Council (2014) or explore on Stokes (2009). That is the intention of the rating systems provided by online apps like Airbnb, TaskRabbit and Uber which reputation is based on numerical ratings (5 stars for example) linked to the profile of the apps users.

The evaluation or rating process is not new and has been using on different segments like hospitality (Michelin Guide) or movies (MPAA rating) but it has been transformed by the technology BOTSMAN (2016). The hospitality industry transformation with the introduction of the online evaluation (one way or only clients) is explored on Orlikowski and Scott (2014). The objective of this article is to apply the Orlikowski & Scott article’s concepts and practice based lens to a two-way rating system (clients and providers) by adding the provider evaluation of their clients. More specifically, we want to explore if ratings from the different providers can represent clients’ reputation and influence the subjective trust to other providers. How that would work? Based transitive trust patch detailed at Josang, Ismail, and Boyd (2007) that is illustrated on figure 1 can be explained as follows:
Provider 1 trusts Provider 2 that trusts Client 1 and Provider 2 refers Client 1 to Provider 1, then Provider 1 can trust in Client 1 based on Provider 2’s referral combined with his or her trust in Provider 2.

Figure 1: Trust transitivity principle adapted from Josang et al. (2007)

The practice usage of this kind of rating system will be analyzed using Uber as the case study. Uber was founded in March 2009 and has been present in about 530 cities with the same business model as on Freier (2016) and Uberwebpages (2016). It is probably the biggest and longest example of using online 2-way rating systems with over one million rides on a daily basis and over eight million users (more information at Nairi (2014) and at Streitfeld (2015). Due to its global coverage, studying Uber can be an advantageous form to understand and to understand the cultural differences and a potential maturity evolution of the rating systems. The article will be focus in São Paulo due to its capacity to represents a large portion of the Uber users. Uber Brazil is the third largest market for Uber after USA and India. And São Paulo is the second Uber’s busiest city after Mexico City according to Newcomer (2016).

The research question is What happens when clients are evaluated online? The fundamental issue is to discover if the apparatus of valuation is facilitating the trust between the players and how this is materialized on the relationship.

2 Online Ratings Systems in Practice

This article is based on Orlukowski and Scott (2014) that compares the evolution rating systems at the hospitality industry and its consequences. This work intention is to extend the concepts to the individual transportation industry and to explore the effects of the online evaluation of the clients by the providers. The effects provided by TripAdvisor’s peer to peer evaluation shown at Orlukowski and Scott (2014) would be comparable to the riders’ evaluation of the drivers.

One of the central concepts of this research is the performativity. Notice this is not related to performance but rather to what is enacted through the practices or through the intra-action (not inter) between agents. On this view, the world is not defined by the relations of entities with boundaries and properties but rather the entities that are defined by their relations. Their boundaries and properties are defined through their relations or practices. This represents a key change from studying the impact between people and technologies through the interaction of their properties and boundaries toward understanding the performative nature in
which people and technologies are enacted their boundaries and properties in practice. Performativity allows the composition of humans and technologies as inseparable components. These heterogeneous components do not precede their interaction but rather emerge through intra-acting. This assumption allows Barad (2003) to reformulate the notion of agency, detaching it from humans or technologies but as the “enactment of iterative changes to particular practices through the dynamics of intra activity” (2003, p. 827).

Therefore Barad’s view states that any description of reality could not be disconnected from the devices used to arrive at this description. As detailed on Boell and Cecez-Kecmanovic (2012), Barad calls this unity of devices and the whole background on which they make sense 'apparatuses'. The devices used for the processing of data, are only one part of an IS (Information System) and the output of an artefact can only be seen as potential information to users. Actual information are only those outputs that are meaningful and important to the users and that is a key point for this article. If not meaningful output, it is not information.

Orlikowski and Scott (2014) apply Barad’s concepts by analyzing how evaluation practices are transformed by moving on-line. Online reviews become ‘material-discursive’ products phase out the authority of established experts, reshape the usage and practices of evaluation, mostly by specific entanglements of matter and meaning.

The practice-based lens will be “examining the materiality of valuations, providing a way of understanding the differences we observed in terms of performativity. This lens explains both how valuations are actively produced in ongoing practice, and how their production is significantly reconfiguring everyday practices of the organizations being evaluated.” Orlikowski and Scott (2014). This socio-material lens allows to understand the Uber app’s usage on its environment and through the drivers’ “eyes”.

3 Methodology

A qualitative research approach is used on this article for its ability to provide better understanding of people experience and opinions about the rating system and the trust related to it. The experience, usage, opinions and emotions are the points to be understand and capture from the players of the sharing economy. Participant observations, interviews, supporting documentation will be used as qualitative method.

One of the most effective approaches to conduct qualitative research is the usage of interviews. The interview method allows us to deeply explore the relationships between the players and the apparatus regarding the rating by capturing of opinions, feelings and beliefs directly from the players Fontana and Frey (1994). It also provides us opportunities to discover or explore new topics or issues. That is the main reason to use semi structure interview which means that there is a set of topics to be covered but there was flexibility to discover and explore other topics.

3.1 Data collection

Interviews were done by the researcher as an Uber rider in São Paulo. There were 72 interviews during 2016 (representing about 482 Km and 1424 minutes). Out of them, 35 interviews were considered for this article as there specifically about trust and evaluation. After accepting to be part of researcher interview for an article about Uber rating systems, all drivers refused to have the interview recorded. The researcher used the notes done during and after the interview. The sampling of the drivers were done by the Uber algorithm that is
based on the proximity of the caller Uberajudaweb (2016). To assure the representation of the data, the Uber apps was used on different regions of the city at different times.

On the Appendix 1, there are the main questions and structure of the interviews. The players are defined as the riders (or clients or passengers), the drivers (or suppliers or partners) and Uber (facilitator). As Uber is not available for direct contact, documentation was collected from various newspaper and online media (Brazilian and international ones) and the Uber official information from its drivers’ and riders’ portals.

The interview was designed to take about twenty minutes, a typical ride time for a Uber as Sherpashare (2016). There are 4 sections: background about the interviewed, relationship with Uber, about the security on board and about their rating.

3.2 Data analysis
The researcher’s notes were used as the raw data. The 3-step process described on McLellan, MacQueen, and Neidig (2003) were applied (open coding, axial coding and conclusion). The purpose of this 3-step process is to describe but also to acquire new understanding of the phenomena. First, there were a data reduction phase with the notes data to search for the basic concepts described on the interviews. Analysis begins with identification of the themes emerging from the raw data, a process also defined as "open coding". Second step is called axial coding stage that consists of the re-examination of the categories identified on the first step. Data is reorganized on higher level concepts, grouping the concepts of the first phase. The discrete categories identified in open coding are compared and combined in new ways to assemble the big picture. After some interactions on phase one and two, we reached the conclusion phase were the higher-level concepts are presented and their relationships.

3.3 Results
Table 1, Appendix 2 shows the summary of the 35 interviews. Average ride was 7.7 KM costed BRL 24.00 (about us$ 6.6) with 20 minutes. There was only one woman driving and 34% were Uberblack type (a more luxury service than Uberx-Uberweb (2016)). The typical Uberx rider is driving for less than 2 months. Only 15% of them are not the car owner. Only 3 drivers will continue renting a car. The Uberblack riders are typically driven for longer time than Uberx ones (Uberx was launched on June 12th 2015 Junior (2016)), typically 9 months and all of Uberblack drivers are also the car owners.

The data analysis reduction brings us to 3 main classes: Financials, Work Environment and Job Opportunities. Financial are related with the earnings as a rider. The following open codes are on this class: car maintenance, car rental, gasoline price, number of rides, value of the km per ride, length of the ride, Uber payment method, daily value, daily quota, competition (Uberblack with Uberx) etc. Work environment is related the surrounding conditions where the drivers work and has the following open codes: traffic, security, number of working hours, number of working km, relationship with Uber and with the riders, 2-way rating, flexibility on working hours, etc. Job opportunity is related to the opportunities to continue or not to be a driver with the following open codes: economic crisis, unemployment, job offerings, stress, part time jobs, economic recovery. The summary of the finds is shown on the Figure 2.
The Uber driver’s life can be summarized as a balance of the financial, work environment and job opportunity main classes. They will continue driving if earnings are more than they need. For most of the interviewed is about to cover their fixed cost of living as they are unemployed. 2 out of the 35 are driving for extra money for extra activities like traveling or buying a new desirable item. The work environment is also important factor to have them driving. The positive side is the relationship with the riders that are classified as very good people to drive for. But the negative is related to the safety. The majority expressed real concerns about cash payment option released in July, 22 2016 Ubernewsroom (2016). That is behind the news on crimes that Uber drivers has been exposure to (Paulo, 2016a). Some of them are not accepting the cash riders but it is not well accepted as one driver mentioned that his colleague was put on hold due to high cancellation of cash rides. There has been reports of Uber drivers already quitting mainly to the financials class as stated on Paulo (2016b).

The majority of the drivers continue to look for a job while driving what is considered a temporarily job. Only 3 out of the 35 have the intention to continue to be a driver as part time activity even after finding another job. They are related to have an extra money for travel, leisure with the kids, etc. i.e. non-fixed cost items that should be cover from other job than driving. 3 of them mentioned that can be driving for more time as the spouses’ cover the fixed cost of living. 2 out of the 3 are micropreneuers with their own company and they see driving as a cash support while their microcompanies are not producing enough cash.

The rating systems belongs to the working environment class is being perceived as the real, simple and effective feedback from the “boss” Uber if they are doing right to maintain the “job”. Although all of the drivers report that there was no single example of drivers that were suspended only by the value of the ratings. There were reports of Uber requesting information about anonymous client comments on car cleanliness, driving safety, etc. by email only. A phone call or our human direct interaction is not possible. On that sense, the rating is the unique online communication between Uber and drivers.
None of the interviewed are using the rider classification as the unique point to reject rides. Half the interviewed did not know how to find a rider classification on the Uber app after the ride started. 10 of them did not know that the rider rating is shown on the request for the ride before the acceptance of the ride as a clear indication that it is not a main item for the drivers. None of the interviewed or anybody they know had been deactivated by Uber due to their rates although they have been told they would be Uberlegal (2016). There were reports from drivers not been able to provide service for 24 or 48 hours due to other items like the number of ride cancelations. None report rating values as the cause of the deactivation.

The unexpected finding is related the usage of the rider’s classification to avoid the potential risky rides. 7 of the riders reported that 5-star clients are potential risk if combined with dangerous area destination and cash payment. The combination of the 3 elements is a strong case for a ride cancelation. The logic behind it is that 5-star riders are most likely new users. On that sense, what was supposed to be a good indication to accept the ride is a red flag for a potential robbery. The stress is even higher as the information about the destination and payment method are only provided when the rider is close to the pick-up location. One the drivers reported that he normally gives 4 -star rate to a non-risky or common new clients although it can be a 5 star one to help the rider not being reject by colleagues.

4 Conclusion

Despite of being designed to provide greater trust for Uber drivers, the online evaluation system has not been used much. The interviews revealed that only a small portion of the drivers used the online rating system to choose customers. However, this theoretical lens allows the identification of one unexpected trigger to the increase of usage of the rating system due to the increase of drivers assaults after the release of cash payment (available on some countries only). This was not the original proposal of this tool that only this practice-based lens would capture. Due to the fact that well-rated users and new users got maximum marks, 5 star users have been considered suspicious. If combined with cash payment and destination to dangerous areas, those 5 star users are considered potential problems subject to ride cancellation as those pieces of info are only provided when drivers are close to the riders (android version) or even when the rider is on board (IOS version). As described on the interview findings, security that is part of the working environments, is one of the fundamental requirement for being drivers. Due to that some drivers intentionally give low notes to new users who do not represent risk to avoid being confused with criminals and have difficulty obtaining the services. Some of the drivers also reported that have been cancel all 5 star clients as the remaining pieces are only provide vary late to be cancel. Those are some unplanned uses of the apparatus of valuation.

This article shows the another advantage of the application of the theory lens developed by Orlikowski and Scott (2014) when applied to the client’s evaluation from providers: the possibility to identify the triggers of the usage of online evaluation specially for providers to choose client. The interviews indicate that the immaturity of this sector in Brazil (about 2 years) can be a direction to be explored compared to the use of rating in the more mature markets like USA where drivers are intentionally avoiding low rate riders like in Campbell (2016).

References


5 Appendix 1 - Interview questionnaire

- Background:
  - Occupation before,
  - How long partnering for Uber
  - Experience working on transportation – where and for how long?
- Relationship to Uber:
  - How do you get to be a partner for Uber?
  - How do you enjoy being a driver?
  - Would you recommend it?
  - Would you continue to be a driver after the current crisis? What if you receive an offer to come back to your previous job?
- Security
  - What do you think of the cash payment system?
  - Do you feel safe on Uber?
- About Rating
  - What do you think of the Uber rating system? Do you care?
  - Is it important to you that you have a high rating? What if not?
  - How do you receive feedback from Uber? How do you respond to that?
  - Who is the perfect party for you?
  - Have you refuse rides or partners only due to the rider’s rating?
  - What makes a client or driver to be a non-5 star one?
  - Do you ask to have a high rate after the riding?
  - Do you ask how was the ride to the rider?
### Appendix 2: Summary of the riders’ interview

<table>
<thead>
<tr>
<th>Driver id</th>
<th>Date</th>
<th>Start time</th>
<th>Delta S (km)</th>
<th>Delta t (min:seg)</th>
<th>Price (BRL)</th>
<th>Uber type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13/12/2016</td>
<td>12:04</td>
<td>6.92</td>
<td>27:22.0</td>
<td>17.89</td>
<td>uberx</td>
</tr>
<tr>
<td>2</td>
<td>13/12/2016</td>
<td>06:56</td>
<td>4.49</td>
<td>11:32.0</td>
<td>9.76</td>
<td>uberx</td>
</tr>
<tr>
<td>3</td>
<td>09/12/2016</td>
<td>08:04</td>
<td>4.57</td>
<td>16:52.0</td>
<td>12.62</td>
<td>uberx</td>
</tr>
<tr>
<td>4</td>
<td>08/12/2016</td>
<td>19:07</td>
<td>5.50</td>
<td>16:16.0</td>
<td>24.53</td>
<td>uberx</td>
</tr>
<tr>
<td>5</td>
<td>07/12/2016</td>
<td>18:57</td>
<td>14.50</td>
<td>38:40.0</td>
<td>49.26</td>
<td>uberblack</td>
</tr>
<tr>
<td>6</td>
<td>06/12/2016</td>
<td>06:55</td>
<td>4.09</td>
<td>12:07.0</td>
<td>16.01</td>
<td>uberblack</td>
</tr>
<tr>
<td>7</td>
<td>30/11/2016</td>
<td>18:24</td>
<td>12.67</td>
<td>45:04.0</td>
<td>48.83</td>
<td>uberblack</td>
</tr>
<tr>
<td>8</td>
<td>30/11/2016</td>
<td>08:02</td>
<td>14.48</td>
<td>38:03.0</td>
<td>55.28</td>
<td>uberblack</td>
</tr>
<tr>
<td>9</td>
<td>29/11/2016</td>
<td>06:58</td>
<td>4.28</td>
<td>11:31.0</td>
<td>19.75</td>
<td>uberblack</td>
</tr>
<tr>
<td>10</td>
<td>22/11/2016</td>
<td>18:44</td>
<td>5.94</td>
<td>28:09.0</td>
<td>25.16</td>
<td>uberx</td>
</tr>
<tr>
<td>11</td>
<td>22/11/2016</td>
<td>08:47</td>
<td>4.22</td>
<td>16:24.0</td>
<td>19.98</td>
<td>uberblack</td>
</tr>
<tr>
<td>12</td>
<td>08/11/2016</td>
<td>20:12</td>
<td>5.94</td>
<td>18:07.0</td>
<td>12.54</td>
<td>uberx</td>
</tr>
<tr>
<td>13</td>
<td>08/11/2016</td>
<td>06:59</td>
<td>4.41</td>
<td>12:33.0</td>
<td>19.28</td>
<td>uberblack</td>
</tr>
<tr>
<td>14</td>
<td>01/11/2016</td>
<td>10:19</td>
<td>4.35</td>
<td>14:20.0</td>
<td>10.59</td>
<td>uberx</td>
</tr>
<tr>
<td>15</td>
<td>24/10/2016</td>
<td>17:24</td>
<td>12.15</td>
<td>45:17.0</td>
<td>41.33</td>
<td>uberblack</td>
</tr>
<tr>
<td>16</td>
<td>21/10/2016</td>
<td>15:23</td>
<td>10.51</td>
<td>34:23.0</td>
<td>35.94</td>
<td>uberblack</td>
</tr>
<tr>
<td>17</td>
<td>21/10/2016</td>
<td>17:41</td>
<td>36.89</td>
<td>43:52.0</td>
<td>105.36</td>
<td>uberblack</td>
</tr>
<tr>
<td>18</td>
<td>17/10/2016</td>
<td>16:18</td>
<td>14.21</td>
<td>45:17.0</td>
<td>36.81</td>
<td>uberx</td>
</tr>
<tr>
<td>19</td>
<td>07/10/2016</td>
<td>09:45</td>
<td>3.44</td>
<td>14:07.0</td>
<td>10.94</td>
<td>uberx</td>
</tr>
<tr>
<td>20</td>
<td>06/10/2016</td>
<td>13:06</td>
<td>4.39</td>
<td>16:50.0</td>
<td>11.15</td>
<td>uberx</td>
</tr>
<tr>
<td>21</td>
<td>04/10/2016</td>
<td>09:52</td>
<td>14.03</td>
<td>12:14.0</td>
<td>37.32</td>
<td>uberx</td>
</tr>
<tr>
<td>22</td>
<td>27/09/2016</td>
<td>06:45</td>
<td>4.44</td>
<td>12:05.0</td>
<td>12.01</td>
<td>uberx</td>
</tr>
<tr>
<td>23</td>
<td>20/09/2016</td>
<td>07:00</td>
<td>4.80</td>
<td>14:46.0</td>
<td>19.54</td>
<td>uberblack</td>
</tr>
<tr>
<td>24</td>
<td>16/09/2016</td>
<td>09:32</td>
<td>2.51</td>
<td>06:08.0</td>
<td>7.36</td>
<td>uberx</td>
</tr>
<tr>
<td>25</td>
<td>13/09/2016</td>
<td>06:51</td>
<td>4.35</td>
<td>14:58.0</td>
<td>12.42</td>
<td>uberx</td>
</tr>
<tr>
<td>26</td>
<td>02/09/2016</td>
<td>09:58</td>
<td>12.63</td>
<td>11:07.0</td>
<td>30.07</td>
<td>uberx</td>
</tr>
<tr>
<td>27</td>
<td>30/08/2016</td>
<td>20:49</td>
<td>6.20</td>
<td>15:24.0</td>
<td>15.29</td>
<td>uberx</td>
</tr>
<tr>
<td>28</td>
<td>30/08/2016</td>
<td>10:18</td>
<td>3.35</td>
<td>21:40.0</td>
<td>12.66</td>
<td>uberx</td>
</tr>
<tr>
<td>29</td>
<td>27/08/2016</td>
<td>12:11</td>
<td>8.71</td>
<td>18:28.0</td>
<td>19.84</td>
<td>uberx</td>
</tr>
<tr>
<td>30</td>
<td>26/08/2016</td>
<td>09:05</td>
<td>4.31</td>
<td>15:03.0</td>
<td>12.37</td>
<td>uberx</td>
</tr>
<tr>
<td>32</td>
<td>19/08/2016</td>
<td>12:29</td>
<td>7.82</td>
<td>12:50.0</td>
<td>17.06</td>
<td>uberx</td>
</tr>
<tr>
<td>33</td>
<td>16/08/2016</td>
<td>08:41</td>
<td>4.36</td>
<td>13:33.0</td>
<td>12.05</td>
<td>uberx</td>
</tr>
<tr>
<td>34</td>
<td>04/08/2016</td>
<td>08:36</td>
<td>4.52</td>
<td>15:58.0</td>
<td>19.21</td>
<td>uberblack</td>
</tr>
<tr>
<td>35</td>
<td>09/08/2016</td>
<td>08:40</td>
<td>4.47</td>
<td>20:32.0</td>
<td>14.05</td>
<td>uberx</td>
</tr>
</tbody>
</table>

|      | Total      | 269.04     | 12:07.20     | 837.25           |
|      | Average    | 7.69       | 0:20.47      | 23.92            |

Table 1: Summary of the drivers’ interviews in São Paulo