

Whom to Trust?

Assessing the Role of Profile Pictures on Sharing Economy Platforms

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Abstract. Trust in other users is one of the crucial factors in building and sustaining relationships on peer-to-peer markets and particularly in the Sharing Economy. Consequently, providers of Sharing Economy platforms focus on promoting trust by e.g. implementing reputation systems or user profiles. In order to better understand the impact of profile pictures on the perceived trustworthiness of user profiles, as well as booking intentions on Sharing Economy platforms, we propose and discuss a research model based on field data from Airbnb. We plan to test our model based on two separate online surveys in future research

Keywords: C2C, booking intention, sharing economy, trust

1 Introduction

In recent years a phenomenon often referred to as the “Sharing Economy” has experienced a rapid and strong growth. A new generation of peer-to-peer market platforms like Airbnb, Blablacar, Uber, etc. report substantial increases in profits as well as in numbers of users and even challenge the traditional industries [1, 2].

The peer-to-peer platform Airbnb is a prime example for the success of Sharing Economy market platforms. Since its foundation in 2008 the platform has mediated more than 25 million overnight stays all over the world [3] and is estimated to be worth about \$13 billion [4]. However, recent publications in media and science support the supposition that Sharing Economy offers are not yet attracting the full potential customer base worldwide [2, 5].

Trust is one of the most crucial factors for the success of an e-commerce platform and therefore plays a key role in research on e-commerce (see e.g. [6] and [7], or [8], [9] and [10] in a C2C context). Consequently many peer-to-peer Sharing Economy platforms providers have already established means of increasing trust towards their platforms. Insurances and professional support, but also safety notices are often provided for both customers and providers to overcome initial concerns of potential users. As on peer-to-peer market platforms trust not only towards the platform, but also towards the individual transaction partner needs to be established [11] (especially in the context of overnight stays) [12], user profiles with different verification concepts and rating systems (i.e. reputation systems) as well as means of communication are also

usually implemented. The role of reputation systems, profile pictures, and the interaction of both have already been investigated in a general as well as peer-to-peer e-commerce context and in experimental settings in the context of online gift giving [13–19]. However, the actual role and impact of profile pictures on Sharing Economy platforms in the field and especially the resulting implications on booking intentions have not been investigated so far. In order to shed light on how trust is formed during booking decisions on a Sharing Economy platform, and if those decisions can be predicted by the trustworthiness of a profile picture, we plan to conduct an experimental online survey based on profile data from Airbnb Germany. In particular, we propose the following research question (RQ):

RQ: How does the trustworthiness of profile pictures and names on Sharing Economy platforms influence the perceived trustworthiness of user profiles and also the booking intention?

The remainder of this short paper is structured as follows: In Section 2 we introduce our research model and hypothesis. Furthermore we present a brief summary of related literature. Section 3 comprises the current preliminary description of our experimental design. Finally, in Section 4 we discuss our expectations regarding the contribution of our study and give a short outlook of our future research.

2 Research Model and Related Literature

Based on the literature presented in the introduction section, we derived the following research model (see Fig. 1). Our model focuses on the perceived trustworthiness of user profiles, the trustworthiness of corresponding profile pictures and names, and the influences on the booking intentions towards the respective offer on Airbnb.

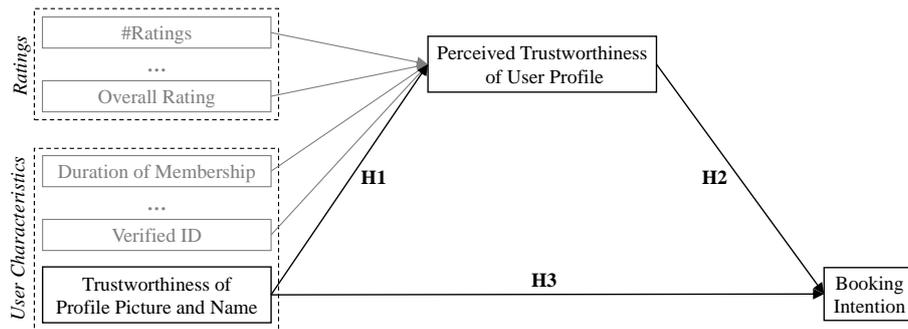


Fig. 1. Research Model

Furthermore we consider a set of existing ratings and user characteristic variables in our model, which correspond to the information users would be able to collect from the Airbnb website (depicted in grey).

Previous studies have shown that the mere presence of profile pictures and names can be beneficial regarding the formation of trust and reciprocity based exchange in an experimental market, and also that the presence of names that are regarded as likable or trustworthy in another context can influence trusting behavior [16, 20]. Furthermore the influence of seller photos and reputation scores on trusting and purchasing behavior has been demonstrated in a standard trust game [15]. Consequently we expect the trustworthiness of profile pictures and names to positively influence the perceived trustworthiness of user profiles in our setting.

H1: *The trustworthiness of profile picture and name has a positive influence on the perceived trustworthiness of the user profile.*

As described in the introduction, trust plays a key role in e-commerce regarding the formation of users purchasing or booking intentions and attitudes. This has been shown not only in the context of traditional e-commerce [7] but also in studies that focused on C2C market settings [9, 11, 21]. In line with those findings we also hypothesize that the booking intention in our experimental setting is positively influenced by the perceived trustworthiness of the respective user profile.

H2: *The perceived trustworthiness of a user profile has a positive influence on the booking intention of other users.*

Derived from the influence of facial dynamics on the choice of interaction partners in situations with financial stakes [22] we furthermore expect a direct positive effect of the trustworthiness of profile pictures and names on users' booking intentions that occurs independent from the trustworthiness perception of the whole user profile.

H3: *The trustworthiness of profile picture and name has a positive influence on the booking intention of other users.*

In addition to the hypotheses that were subsequently presented, we also expect several additional effects resulting from the rating and user characteristics variables that were collected on Airbnb (depicted in grey). Other studies based on Airbnb data support that supposition [23–25]. Within the scope of this short paper however, we focus on the three main hypotheses **H1-H3**.

3 Experimental Design

As a basis for our study we chose a dataset of 88 offers from Airbnb Germany, including profile pictures and names as well as information about ratings and user characteristics. Our sample comprises data from Airbnb offers in Berlin¹ which correspond to the following search criteria: Place – Berlin-Kreuzberg, Date – none, type of the room – private room, and price range – 41€-58€. From the resulting set of search results, we

¹ Berlin is one of the cities with the highest number of overnight stays in accommodation facilities in Germany according to a study of the German Tourism Association [26]. Since we plan to raffle overnight stays in the target city of our study in order to incentivize participation, Berlin should consequently serve as an appropriate travel destination.

propose to consider the following attributes for each listing: the price for one night, the total number of text reviews, the total number and average value of overall reviews, the average rating of all existing rating categories (accuracy of description, communication, cleanliness, location and check-in), ID verification, response rate and time, and duration of membership. Furthermore, we plan to work with the provided profile pictures and names².

In two separate online surveys, we want to firstly determine the trustworthiness of profile pictures and names provided by different users and secondly determine the perceived trustworthiness of the profiles as well as the corresponding booking intentions. We plan to use ORSEE³ [27] as a recruiting tool for participation. Consequently, we are able to realize a complete between-subjects design for our two surveys. We assume that participants from our pool are already inherently motivated to truthfully answer to our survey. However, we also plan to provide an incentive for truthful participation in the surveys, by raffling Airbnb overnight stays in Berlin. All participants will be informed about the fact that the winner’s accommodation will be determined by her specification of booking intentions or perceived trustworthiness of profile picture and name, respectively.

Survey 1: In the first of our two surveys, a group of participants from our pool will be asked to rate profile pictures from our dataset that are labeled with the host’s name with respect to their trustworthiness. After an introductory briefing and instruction about the survey, the participants will receive an overview of all profile pictures to be rated. Hereby we want to avoid anchoring as well as order effects and make sure that the participants are able to establish an overall personal ranking of the different pictures before evaluating each by itself. Afterwards, derived from the approach of [28], participants will be shown separate profile pictures and names in a randomized order, which they have to judge on a 7-point rating scale, running from 1 (extremely untrustworthy) to 7 (extremely trustworthy).

Survey 2: In the second survey, a different group of participants will be asked to judge the trustworthiness of a stylized Airbnb user profile, including picture, name and reputation scores, according to the same procedure as applied in survey 1. In addition to that, we will inquire the booking intention of the participants by three items adapted from [29]. Fig. 2. depicts an exemplary stylized Airbnb profile for survey 2.



Fig. 2. Information Display in Survey 2

² Pictures of the offered rooms were also considered but were deliberately excluded from our experiment, in order to reduce complexity.

³ ORSEE is an online recruitment system for economic experiments, which was introduced by Ben Greiner [27].

4 Discussion and Outlook

We proposed a research model, which is designed in order to investigate the impact of the trustworthiness of profile pictures on the perceived trustworthiness of user profiles and booking intentions. Within our model we concentrate on three main hypothesis (**H1-H3**), which primarily focus on profile pictures labeled with names and will be tested based on the two presented online surveys. However, further information like pictures of offered rooms are available on Airbnb Germany. In line with recent research that focuses on field data in the context of B2C markets [30], we expect that pictures of C2C offers, such as rooms on Airbnb, also play a significant role regarding the formation of booking intentions in the Sharing Economy. In a first attempt we consciously eliminated the pictures of rooms from our surveys to reduce complexity. Nevertheless, we are aware of this abstraction and are planning to consider the potential influence of those pictures on booking intentions in future studies.

We furthermore plan to ask the participants of our surveys for specific background information (like forename, gender, age, etc.). This data will be used for further analysis of our findings, e.g. for investigating possible cues to trust [31] that might occur between the person to rate and the rating person or for the identification of structural discrimination [24].

With our future work we want to contribute to a better understanding of the role of profile pictures and their impact on the perceived trustworthiness of profiles on Sharing Economy platforms. From an IS point of view, this might help Sharing Economy platform providers to promote trust between users, e.g. by offering profile picture guidelines or even evaluation services to their user base.

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