

# Data Analytics for Digital Entrepreneurship: A Case Study on Airbnb

TREO Talk Paper

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## Abstract

The emergence and eventual ubiquity of Web 2.0 in the past few years has enabled the rise of the sharing economy, “a peer-to-peer-based activity of obtaining, giving, or sharing the access to goods and services, coordinated through community-based online services” (Hamari et al., 2015). More and more people are now connecting through the sharing economy platforms to supplement their income or to save money (Dillahunt and Malone, 2015). Those using the services of the sharing economy are referred to as consumers, and those who utilize the technological infrastructure provided by these platforms to offer services are known as micro-entrepreneurs (Sundararajan, 2014). Together, these two groups are usually referred to as “peers.”

Several forms of peer-to-peer (P2P) businesses have arisen through the communication facilities of the sharing economy platforms (Sundararajan, 2014). Such P2P businesses provide tremendous potentials to exploit abilities, aspirations, and idling resources of the public and to expand entrepreneurship among the grassroots (Cohen and Sundararajan, 2015). A main stream of these innovative businesses belongs to repurposing of owned properties as rental services (e.g., Airbnb). Consequently, a significant body of research on P2P rentals focuses on understanding why consumers are motivated to participate in this type of social exchange and what causes their intention to use such services again. Fewer numbers of studies, however, have investigated this phenomenon from the digital entrepreneurs’ perspective: how can a micro-entrepreneur use the features and affordances of these online platforms to improve their image and potential profit? This study seeks to address this question. We use a data analytic approach on a large dataset of Airbnb listings to provide a data-driven decision aid to P2P entrepreneurs. Our findings complement the extant literature and enable the owners to obtain a better understanding of customers’ perceptions of digital P2P platforms and therefore, optimize the way they use such platforms.

## References

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