A taxonomy of business models used by sharing economy start-ups

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Summary

Our paper proposes a taxonomy of business models that are used by sharing economy start-up companies. To establish this taxonomy we create a business model framework, which can be used to analyze and compare sharing economy companies. This business model framework is derived from literature. Cluster analysis will be applied on the business model descriptions of up to 100 sharing economy start-ups from Berlin and around to build up the taxonomy. To validate the findings, case studies with selected companies from the sample will be conducted.

This paper will provide useful insights into the structure of the sharing economy sector in Berlin. Based on that, other researchers will be enabled to understand the business models used by sharing economy start-ups and can specify their research by choosing specific groups of the resulting clusters for further investigation.

The paper is part of a bigger research project that collaboratively analyses the sharing economy sector in France and Germany.

Introduction

Our paper contributes to the research of the sharing economy sector, which recently gained a lot of attention by media as well as in academia. As the academic discourse is lagging behind the economic trend, a thorough analysis of the current status, drivers and future developments should be provided by scientific research [Heinrichs 2013]. In this context questions on how different dimensions shape sharing economy’s business models [Schor 2014] and how they challenge traditional business models [Belk 2014] can be of particular interest.

In recent years business models have gained attention both from academics and business practitioners [Zott et al. 2011]. Business models explain how companies create and deliver value to their customers and how they make profit [Teece 2010]. Popular frameworks of how to formulate a business model have been described by Chesbrough and Rosenbloom [2002], Osterwalder [2004], and also by Johnson et al. [2008]. Especially, the Business Model Canvas, derived from Osterwalder’s Business Model Ontology [Osterwalder 2004], has become very popular among start-ups to formulate their idea of how to do business and to enunciate it to their stakeholders. This makes it a mutual basis both for business as well as research.

To gain insights into business models used by start-ups (also named new small firms or new business ventures) cluster analysis can be applied. Relevant research in this field has been published by Gartner et al. [1989], Birley and Westhead [1994] and also Smith [1998]. More recently this method has been also applied on big data start-ups [Hartmann et al. 2014].

The paper wants to close the research gap on business models used by sharing economy start-ups. More specifically, we want to know how a business model framework needs to be adopted to systematically analyze and compare sharing economy startups. Given that information, we also want to find out what clusters with similar business models exists within the sharing economy.
Research Design

Our business model framework is built on the Business Model Ontology as proposed by Osterwalder (2004). We choose this model, as it’s established within the scientific community and also widely known and used as Business Model Canvas within the start-up world. This makes it easier to bridge between academia and business while collecting the data and presenting the research. Taken from Osterwalder’s model, our framework consists of nine dimensions: product value proposition, target customer, distribution channel, customer relationship, value configuration, capability, partnership, cost structure and revenue model [Osterwalder 2004]. Variables that describe these dimensions are yet to be defined.

The sample is compiled through different sources. A survey with around 100 sharing economy companies conducted by the Berlin Senate is used as main source. Additionally, two more publicly available lists with companies from the sharing economy sector are added to that sample. Missing data to fill out the variables that describe the nine dimensions will be collected from website information, press articles and personal interviews with representatives of the companies.

After a coding process we will apply cluster analysis on the data. The aim is to discover groups of companies within the sample, which share the same business model. To remove possible strong correlations between the clustering variables, which would lead to overrepresentation of these variables in the analysis, a preliminary factor analysis can be applied to handle this issue [Mooi & Sarstedt 2011]. For example, this has been successfully done by Gartner et al. (1989) and also Birley and Westhead (1994) in a similar domain. We will choose the clustering algorithm experimentally, as there is no predefined clustering algorithm as such. It will be chosen based on the sample data, prospective preliminary processing (i.e. factor analysis) and intended result [i.e. predefined or open numbers of clusters].

Conclusions

With our empirical research we are looking for a general insight into the structure of the sharing economy sector in Berlin by building a taxonomy of business models that are used by sharing economy start-up companies through cluster analysis. Besides identifying different business model groups, we would like to understand how and to what extend the clustering variables influence these groups. As we are applying an exploratory method, we are not aiming for any acceptance or rejection of hypotheses.

Based on our findings subsequent research can compare the identified business model groups used by sharing economy start-ups with counterparts from traditional businesses in the same group. The groups can also be taken to compare them among each other and identify differentiating success factors. Furthermore, a more specific investigation in one of the resulting clusters can be part of future research.

Overall, the results of this empirical research will help other researchers to better understand the sharing economy landscape.

References


