

Dr. Stephanie L. Woerner Research Scientist Center for Information Systems Research (CISR) MIT Sloan School of Management woerner@mit.edu cisr.mit.edu, @SL_Woerner

Research Team Dr. Kristine Dery (lead) Dr. Stephanie L. Woerner Dr. Peter Reynolds

This research was made possible by the support of MIT CISR sponsors and patrons.

MIT MANAGEMENT



AIS SIGGIS 2017: Locational Big Data and Analytics: Implications for the Sharing Economy

Dare to Share: Making data sharing a competence in the sharing economy

Thursday, 10 August 2017 © 2017 MIT Sloan CISR

Sharing economy: big and growing



Five primary sharing economy sectors: peer-to-peer finance (e.g., Venmo, Square Cash), online staffing (e.g., TaskRabbit, fiverr), peer-to-peer accommodation (e.g. Airbnb), car sharing (e.g., Uber, Lyft), and music and video streaming (e.g., Spotify, Vimeo)

Generates \$15B in global revenues = 5% of traditional rental sectors

By 2025, same five sharing economy sectors could generate \$335B

Challenges to growth:

- Major regulatory and fiscal issues
- Maintaining uniqueness and authenticity while scaling

Partnering with traditional organizations, both private and government, is an opportunity to grow

Sources: 2014 PwC report (http://www.pwc.co.uk/issues/megatrends/collisions/sharingeconomy/the-sharing-economy-sizing-the-revenue-opportunity.html)

Partnering between traditional enterprises and sharing economy businesses



Transactional (many examples)

- Levi's partners with Yerdle to distribute unsold merchandise
- Patagonia partners with iFixit to write repair manuals for clothing
- Chateau and Hotel Collection partner with Airbnb to sell room inventory

New business models (few successful examples)

• Partnerships that share data, drive new customer insights around customer needs and provide new products and services to address these needs

Example: City of Boston / Uber partnership offered possibility of new services, more efficient infrastructure planning and ways to support some of the city's most disadvantaged citizens

Sources: M. Wright, "Yerdle, Shifting Mindsets and the Sharing Economy," Unzipped, September 14, 2015 (http://levistrauss.com/unzipped-blog/2015/09/yerdle-shiftingmindsets-and-the-sharing-economy/); N. Gloudeman, "How Yerdle and Patagonia are boosting the sharing economy," GreenBiz, April 15, 2014 (http://www.greenbiz.com/blog/2014/04/15/yerdle-patagonia-collaborative-economy); J. Bluff, "Mending the World – One Seam at a Time," November 26, 2013 (http://fixit.org/blog/5620/patagonia-ifixits-perfect-partner/); G. Sell, "Airbnb announces first European hospitality collaboration with Châteaux & Hôtels Collection," *Boutique Hotel News*, Dec. 12, 2016, (http://www.boutiquehotelnews.com/home/news/2016/12/16/airbnb-announces-first-european-hospitality-collaboration-withchâteaux-hôtels-collection/)

City of Boston and Uber







Partnership: Possibility of new services, better use of infrastructure, more efficient infrastructure planning, and ways to support some of the city's most disadvantaged citizens

Data at the zip code level is not granular enough for infrastructure decision making





51 zip codes in the City of Boston

Population per zip code varies from 0 (post office boxes) to 28,000 people

"While the data has been very useful in understanding the growth of and their service profile in the City, we've not had a lot of big success in putting the data to use in a more planning-oriented context."

-Jascha Franklin-Hodge, CIO, Boston

Sources: Zip code map (https://www.cityofboston.gov/images_documents/ZipCodes_tcm3-47884.pdf) and quote (https://www.boston.com/news/business/2016/06/16/bostons-uber-partnership-has-not-lived-up-to-promise)

Sharing, especially data, in a partnership always difficult



Whoever controls the ecosystem controls the data and establishes the rules for partnering and transacting

Need to negotiate which data to share, at what granularity and when

Value embedded within the data hard to determine up-front

Requires trust, established by repeated behaviors over time

What capabilities do organizations need to build?



Partnering capabilities Identify what your organization is willing to share and negotiate what is required for all parties to succeed

Analytic capabilities Able to meaningfully store, integrate and manage large data sets and make them available with the right level of quality, currency and privacy, as well as use that data to provide insights

Test and learn capabilities Recognize value from data may be more emergent than known, need to experiment and improvise