BANKING & FINANCE

Understanding Market Disruptors in Commercial Real Estate

December 15, 2016

Commercial real estate, like many other aspects of the economy, is experiencing innovations that are changing the industry. Economy Matters' "ViewPoint" looks at some of the highest-impact disruptors.

Disruptors
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Crowdsourcing networks
Vacation rental platforms
Ride-hailing services
Fintech/online banking
Data science
Automation
Autonomous cars/electric vehicles
3D printing

Rapid technological developments are upending traditional business models across industries. The commercial real estate industry is no exception. From E-commerce to sharing economy companies like Airbnb and Uber to online fintech companies, commercial real estate (CRE) firms are faced with adapting to the increasingly popular innovations of the recent decade. This article explores various CRE market "disruptors," how they have already affected the industry, and the potential effects to come.

Market disruptors

For our purposes, a market disruptor is an innovation that creates a new market or value network that disrupts the current market, improving efficiency and opportunity while potentially displacing products, firms, and partnerships. Typically, these disruptors originate outside the market from entrepreneurs who recognize an opportunity for enhancement in the market. Because technology is always evolving, so is the possibility of new disruptive innovations. *Disruptors are innovators, but not all innovators are disruptors*. The simple development of a new product will not necessarily bring about significant changes in the way a market works.

Themes
Cheaper
Faster
Safer
More efficient
More convenient

E-commerce

The impact of technological innovation in CRE markets is most evident in the changes that have occurred in the wake of the e-commerce explosion. The e-commerce platform has disrupted the dynamics of how we purchase and receive goods. As commerce has moved out of the mall and onto the internet, the demand for traditional retail space has fallen. At the same time, meeting customers' needs and expectations in the new e-commerce market is leading to changes in distribution models, which, in turn has increased the demand for warehouse space.

With the more recent onset of same-day or two-day delivery, consumers are wrapped up in the "need it now" mentality. This is causing retailers to adapt to the changing demands through new supply platforms. A concept called the omni-channel is especially important for bricks and mortar companies that are trying to compete with the innovative and speedy delivery services provided by firms such as Amazon. Using the omni-channel concept, firms can offer consumers numerous, easy channels through which they can purchase products. Adopting these types of arrangements will require companies to enhance their logistics. In a recent study of retailers, approximately 37 percent said they were beginning to consider shipping goods from retail locations (rather than industrial centers) to provide same-day delivery options to their nearby client base. If the demand for significantly reduced delivery times becomes the norm, new retail space may need to include an industrial element to house additional stock.

The sharing economy

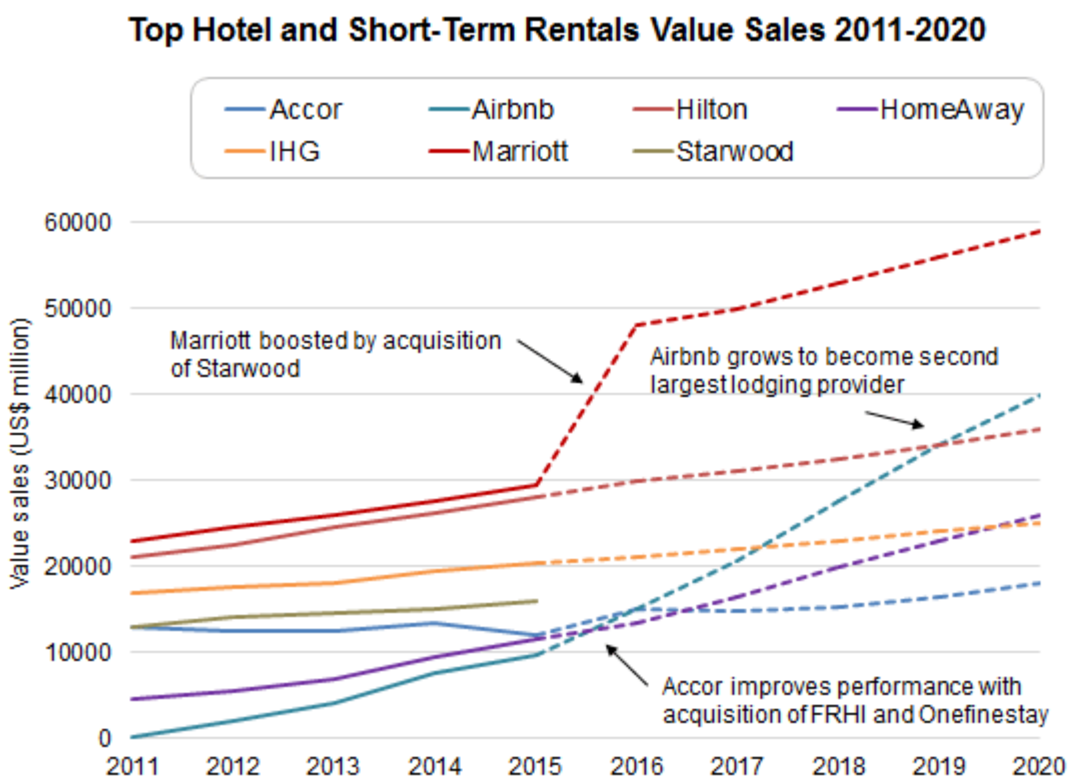
The sharing economy, also called the collaborative economy, is a peer-to-peer economic model in which individuals rent or purchase goods and services from other individuals in a mutually beneficial manner, typically through online marketplace platforms. Examples of sharing economies are alternative financing, vacation rental, and transportation platforms. Let's take a closer look at how aspects of the sharing economy are shaking up CRE norms.

Crowdsourcing networks

Crowdsourcing networks are platforms that connect parties seeking funding with parties willing to provide funding, offering increased flexibility and opportunities for both. These networks provide developers in CRE with additional options for financing new projects, especially when compared to banks, which may have stricter lending standards and regulatory requirements. One such company, Fundrise, focuses on making CRE investment opportunities available to anyone by sourcing and underwriting deals. Another platform, Kickstarter, allows entrepreneurs to present startup and project ideas to a community of potential investors. These networks also include peer-to-peer lending platforms for consumers, such as Lending Club and Prosper. By going outside of traditional financial intermediaries, innovative deals can be considered and agreements reached in a more expedient manner.

Vacation rental platforms: Airbnb and Homeaway

Airbnb (founded in 2008) and Homeaway (founded in 2005) are the two most popular online marketplaces that specialize in travel accommodations, allowing people to list and rent places to stay. These companies use algorithms to help travelers find the best short-term rental to meet their needs. Since its inception, Airbnb has quickly become a major player in the travel accommodations market. Euromonitor International, a London-based global market research firm, projects Airbnb to be the world's second-largest travel accommodations provider, in terms of total room sales, by 2020.



Euromonitor International, Skift.com
Note: 2016-2020 are forecast. Agreed mergers at time of writing are taken into consideration, further consolidation can change forecast.

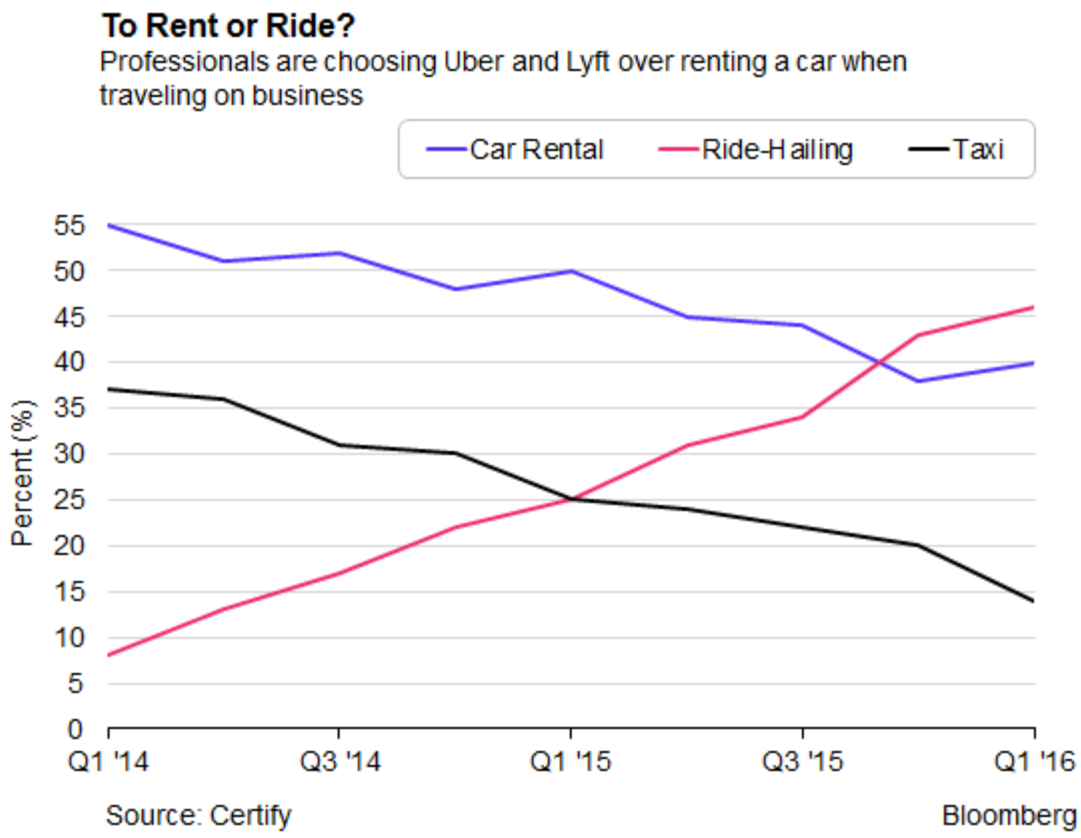
Airbnb's success doesn't stop at short-term rentals: the San Francisco-based company has also delved into longer-term rentals through sublets for monthly stays. Interesting consequences have come from Airbnb's popularity, from regulation to outright bans in some communities. Despite these roadblocks, Airbnb continues to move forward as a dominant market presence.

As Airbnb and Homeaway increase in in popularity in the travel and vacation rental space, hotel chains may see a decrease in room rentals. If demand for traditional hotel accommodations drops, hotel chains may be forced to limit new construction and reduce rates to stay competitive with alternative options provided by online rental platforms. It remains to be seen how much momentum these alternative accommodation companies will gain during the next few years. However, hotel companies are already considering the footprint of these short-term rental companies when looking at new developments.

Ride-hailing services: Uber and Lyft

Ride-hailing services such as Uber and Lyft seem to be challenging traditional taxi services. These companies, accessible through mobile applications, provide a quick and convenient way to arrange transportation.

Certify, the second-largest provider of expense software in North America, recently released data depicting the steady, strong increase in rider preference for ride-hailing means of transportation (see the chart). In just two years, ride-hailing services have grown from about 8 percent of total business travel car transportation to 46 percent, surpassing the already declining taxi rides and car rentals in the last quarter of 2015. Certify looks at business professionals in particular, but a very similar trend can be seen in personal transportation preferences.



As ride-sharing increases, it is possible that the amount of parking required will decrease. A reduced need for parking would allow for alternative land use. As new CRE developments are planned, developers may also have the opportunity to reduce construction costs and improve green space in some projects.

Uber: Key Data Points	
App availability	60 countries and 300 cities worldwide
Daily rides	One million
Total riders	Over eight million
Active drivers	Over 160,000
	Source: Uber

Technology-focused market disruptors

In addition to the effects of the sharing economy, other advancements in technology in recent years have expanded the capabilities previously known to businesses and consumers and are impacting the CRE industry.

Workforce expectations

Technological advances in communications allow employees to work efficiently from remote locations. Employees favor the flexibility provided by such arrangements and demand for off-site work is growing. As companies revamp their business models to accommodate employees, office space is being redesigned to foster more creativity and collaboration. As a result, the demand for traditional office space is falling.

Fintech/online banking

The fintech world, short for financial technology, has exploded within the past five years. Fintech refers to new applications, processes, products, or business models in the financial services industry that enhance consumers' access to data, debt, asset management, and other financial services. This innovation in financial services is creating a vast number of improvements (and challenges) in the financial industry. The adaptation of mobile applications by existing banks increases the ease through which customers interact with the bank, particularly to perform simple tasks such as depositing a check or transferring money. New financial entities that provide services similar to banks, with a fully mobile presence, are also being created. Access to equity, data, and asset management assistance has expanded dramatically and is available through a smartphone, allowing for a widespread disruption of activity in the financial industry.

Fintech disruptions may have consequences for the demand for bank branch space and other office space. Fintech startups do not need the same workforce as a traditional bank and likely favor creative-concept office layouts over standard layouts, also impacting the type of space needed.

Data science

Data science is an interdisciplinary field with the main goal of extracting knowledge or insights from data for analysis and to better inform decisions. As is the case in many (if not all) industries, data-driven analysis and models are being used to generate key conclusions within the CRE space. From this analysis, CRE-focused companies can understand market trends and develop new metrics to quantify particular market conditions. Analysts interpret the outcomes to inform decisions on the areas and types of development needed in the market place.

Automation

The Future of Employment, published by Carl B. Frey and Michael A. Osborne in late 2013, explores the "probability of computerization," the idea that technological advances could begin replacing certain types of jobs in today's society. The authors made note of three job performance aspects unique to human intellect which cannot be replaced with a computer: perception, creative intelligence, and social intelligence.

Surprisingly, the study revealed a high probability of automation for property association managers (81 percent), real estate sales agents (86 percent), real estate appraisers (90 percent), and real estate brokers (97 percent). So although real estate is for people (where we live, work, shop, play, store goods, etc.), according to this study, there is a high chance that humans could be replaced in part of the real estate equation. In terms of actual CRE space, computer replacement of human jobs would most directly affect the office sector, for obvious reasons. Not only could the demand for office space decrease, the functionality and internal design of the remaining space would likely need renovation.

Autonomous cars and electric vehicles

Both electric and autonomous cars continue gaining popularity. If this continues, the CRE space may need to adapt accordingly. Additional charging stations might be needed for electronic vehicles, increased passenger pick-up and drop-off lanes (at offices or retail spaces) may be called for, and—especially if coupled with implications from further development in the sharing economy —fewer parking spaces may be required.

3D printing

The concept of 3D printing, also known as additive manufacturing, is straightforward: successive layers of a particular material are set under the control of a computer to create an object. Plans for pretty much any object can be made with almost any material that can be inserted into a printer. As 3D printing becomes more readily available, how goods are produced could shift. New companies may emerge that specialize in 3D printing production, further reducing the need for retail space and significantly changing the way industrial space is used. These companies may look more like manufacturing plants: warehouse space filled with 3D printers and raw materials. In such a scenario, orders would come in via the internet, be produced by the printers, dropped in a box and shipped via a drone—talk about fast delivery!

Down the road, the only constant is change

The market disruptors explained here are but a fraction of all of the new and innovative changes occurring today. Supervised institutions should be aware that these changes are occurring and, *in some instances*, may want to reflect such considerations in their underwriting of CRE credits. A common theme with respect to the impact of technology on CRE is the change in property usage, which can already be seen as a result of e-commerce. As the necessity of face-to-face interactions with customers continues to decrease as new technologies enter the market, the potential for retail space to be overtaken by industrial space persists. Technology driven changes to company structures and workplace expectations are reducing the need for traditional office space and creating a demand for more creative- and collaborative-concept layouts. As innovation continues, the demand for traditional office space may continue to drop.

Shared or collaborative economies, enabled through network platforms, are also affecting CRE in multiple areas. Crowdfunding platforms are providing firms and individuals with a range of options for finance and investment, outside of the traditional banking sphere, giving impetus to more creative CRE endeavors that traditional lenders could/would not consider. In the hotel industry, alternative lodging options have introduced a new element of competition, which could result in reductions in room revenue and slower growth. Shared ride platforms, along with other technological changes like autonomous cars, may reduce the need for parking and allow more productive use of space. Although adapting to the rapid pace of change may be challenging, the opportunities provided are exciting, particularly to those firms that can quickly adapt.

Lauren Foley
Financial specialist in the Supervision and Regulation Division of the Federal Reserve Bank of Atlanta

References and Further Reading

Airbnb and Homeaway

- Hotels versus short-term rentals
- Airbnb data on sublets
- Blog post on Airbnb's economic impact
- *USA Today* article on Airbnb's valuation
- Article on apartment managers partnering with Airbnb

Uber and Lyft

- Article on growth of Uber among business travelers
- Data about Uber usage and revenue
- *New York Times* article on declining U.S. auto sales

Crowdsourcing networks

- Article on the sharing economy
- Data about Kickstarter
- Information about Fundrise
- Article about CRE and crowdsourcing
- Article about four potential CRE disruptors

Autonomous cars

- Article on tension between Uber drivers and driverless cars
- Article on a driverless future
- Article on autonomous vehicles
- Driverless technology's impact on trucking

Drones and e-commerce

- Article about Amazon.com's drones
- Article on logistics

3D printing

- Article on 3D printing

Fintech and online banking

- Article on integrating data and CRE
- Article on technology's impact on employment