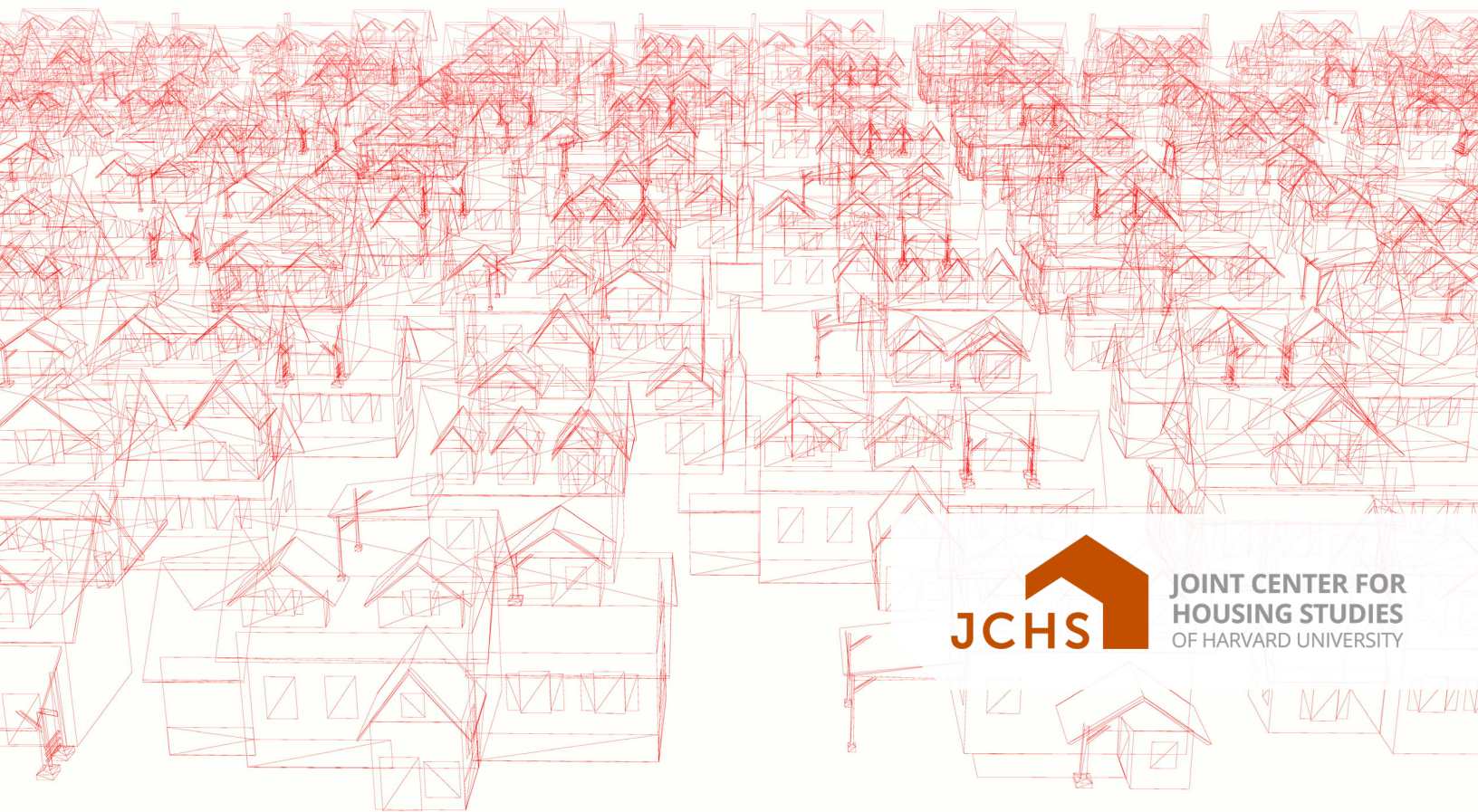


BRINGING DIGITALIZATION
HOME SYMPOSIUM

The Digital Entrepreneur's Future Impact on the Housing Cycle

JANUARY 2023 | ROBERTO CHARVEL



JOINT CENTER FOR
HOUSING STUDIES
OF HARVARD UNIVERSITY

Joint Center for Housing Studies
Harvard University

The Digital Entrepreneur's Future Impact on the Housing Cycle

Roberto Charvel (MatterScale Ventures)

January 2023

This paper was presented as part of “Panel 2: How Is Digitalization Changing Investments in Housing?” at the symposium “Bringing Digitalization Home: How Can Technology Address Housing Challenges?”, hosted by the Harvard Joint Center for Housing Studies in March 2022 and funded by Qualcomm. Participants examined the changes that digitalization—the use of automated digital technologies to collect, process, analyze, distribute, use, and sell information—is spurring in the way housing is produced, marketed, sold, financed, managed, and lived in.

©2023 President and Fellows of Harvard College.

Any opinions expressed in this paper are those of the author(s) and not those of the Joint Center for Housing Studies of Harvard University or of any of the persons or organizations providing support to the Joint Center for Housing Studies.

For more information on the Joint Center for Housing Studies, visit our website at www.jchs.harvard.edu.

“Software is eating the world,” wrote Marc Andreessen, cofounder and general partner of venture capital firm Andreessen Horowitz in a 2011 Wall Street Journal article; it is not by chance that software is also eating the way that housing is produced, marketed, sold, financed, managed, and lived in.

Digitalization alone is not the driving force behind the changes in housing and real estate. The driving force is innovation brought to the sector by the fresh approach of entrepreneurs fueled by venture capital. Digitalization is a tool or language used by new players who utilize software platforms to change the ways we interact with the world.

Through this two-day symposium, I was impressed to see the academic interest in how technology is changing the world around us. There were many well-thought-out analyses that showed concern about the ways that new companies have not fulfilled their full potential in helping to make housing more affordable for all. Thanks to these articles and discussions within the academic world, I am optimistic that the future will be a better place, rather than a polarized world where drifting from truth and science is ever more prevalent.

However, the seminar was relevant from another angle as well. I have been a lecturer in business schools for fifteen years. Unlike other participants, I have only published cases or academic articles in practitioners’ journals, and my experience with academia is clearly biased by the things I learned in business schools.

Authors conducting research at business schools trust entrepreneurs and the funds backing them. In the business world, entrepreneurs are the heroes of the economy. Real entrepreneurs change industries, create jobs, and create the same or more output with fewer resources. Being regarded as heroes of the economy does not mean that entrepreneurs do not need to be regulated, but I believe it would be more positive if academics came from a place of trust, or at least gave entrepreneurs the benefit of the doubt.

One of the symposium’s participants correctly pointed out that online mortgages can help democratize access to financial services, but that this objective has not been realized to its full potential. Digitalization of the mortgage industry has given users more information, decreased transactional costs, and improved other types of services that benefit all parts in the process.

Papers from Rocio Sanchez-Moyano and Vanessa Perry support these ideas, and as Laurie Goodman from the Urban Institute notes:

Digitalization is here to stay; whining does no good. We need to figure out a public policy framework that captures our societal goals, while recognizing the tradeoffs we are making. Digitization won’t create equality, and, in some cases, it may even widen the gap.

Are the new startups or entrepreneurs at fault that the whole market and historical interventions in the market give us a suboptimal outcome when it comes to making housing more affordable?

From other presentations, I learned how the single-family rental (SFR) model, which I feel exemplifies the best of digitalization's effects, can have a negative impact in local communities and create fears of increased numbers of evictions. As someone financing new business models, I believe that the SFR is a triumph of making housing accessible to people who decide to live in areas lacking an adequate number of rental units, mostly in the suburbs. SFR uses technology to market properties, select tenants, document leasing transactions online, provide online rental payments, and support maintenance needs using a decentralized work force.

All these technological uses decrease transactional costs and provide a larger number of options to people who cannot buy a house or who decide to rent. One of the criticisms to this business model is that large companies threaten tenants with evictions in a more credibly way than landlords owning only one unit. This does not make SFR operators evil; they are enforcing their rights to evict like small landlords can.

The previous example is not definitive. Digitalization can help some players in the market and can have unintended consequences, like any other tool. However, digitalization and entrepreneurship should not be the scapegoat; the real problems around access to the housing market are not created by new startups. The real problems are income inequality; NIMBYism; regulation that opposes density; and the belief that homeownership, not rentership, is a higher social good. In other words, human interactions and the narratives that we adopt, not technology, are the root causes of housing problems.

Of course, digitalization can make things worse, but I argue it has a net positive impact in the housing market. Consider Rocket Mortgage, the largest mortgage provider in the US. Rocket Mortgage has an online platform that helps people acquire or refinance their homes. The company became the largest player in the US by providing a tech-based process that enables less human interaction than banks require. This process shortens decision times, makes it easier for customers to get a mortgage, and perhaps combats discrimination as it helps avoid an interaction with a potentially prejudiced bank officer who may decide not to provide a mortgage to a qualified applicant.

Over their history, online mortgage platforms have saved billions of dollars for their customers, created jobs, and made the US financial system more competitive. On the other hand, some may say that the fact that Rocket Mortgage and other online platforms provide so many mortgages has helped fuel the price increase in housing in the US, which may be true as well.

The bottom-line question is: Are we better off with a digital mortgage provider that saves users money but that, over time, helps home prices to increase? I believe so. Home price increases are driven by the increase in demand that is fueled by buyers with pre-approved mortgages, but this increase in demand is clearly not the main reason prices are increasing. Home prices are increasing because there is not enough supply to keep up with the American dream of owning a detached house. In addition, housing affordability is not so much a real estate problem as it is an income inequality problem.

I was surprised to hear that OpenDoor, Compass, Zillow, and other successful young companies were repeatedly described as agents that create more problems than solutions. How can they create more problems if millions of people use them and are willing to pay a commission to them for their services? Entrepreneurs using digital platforms are not the enemy, just like landlords are not trying to extract illegal benefits from their tenants. There is always bad behavior in any community, but it would be naive to think that all are acting in bad faith.

Entrepreneurs are looking for ways to get around existing restrictions and create value for users without breaking the law. If they break the law, they need to be punished like any other citizen, but if they do not, they are a great channel for venture capital to subsidize new ideas and business models that can help us transform the world.

Apart from my approach to PropTech and entrepreneurs, which differed from the approach of most of the participants in this symposium, I also believe that several of the panelists confused Wall Street with entrepreneurship. They used the term “Wall Street” as a way of describing the greed of the financial world when referring to entrepreneurs. Financiers and entrepreneurs are very different, just as Wall Street is very different from Silicon Valley.

The academic world needs to get closer to PropTech, not just criticize it from the sidelines. I know first-hand that entrepreneurs would be more than happy to fund research that can help them and the communities they serve benefit from academia’s rigorous thought process. This activity could help bridge the two worlds, creating better business solutions and avoiding further polarization.

Imagine a very real reverse scenario. Meta, formerly known as Facebook, is without a doubt a company that needs to be regulated. It has been the preferred tool for groups trying to profit from disinformation and polarization. A lot of Meta’s bad reputation comes from the impact of Cambridge Analytica’s use of personal data gathered without consent for political advertisement. The origin of Cambridge Analytica stemmed from methods described in a research paper published in 2013 by psychologists David Stillwell, Michal Kosinski, and Thore Graepel from the University of Cambridge. They reported that “by examining which posts or pages a user liked on Facebook, it was possible to accurately

predict sensitive information such as sexual orientation and personality traits,” as described by Elisabeth Gibney. This research fueled the creation of Cambridge Analytica, the now-infamous marketing company that helped elect President Trump.¹ Stating that digitalization is a negative force in access to housing is analogous to stating that research such as that of Stillwell, Kosinski, and Graepel is not a good idea as it can create more companies like Cambridge Analytica.

In the previous paragraphs I have tried to shed a positive light on PropTech and entrepreneurs. Change is never easy, as Jose Luis Garcia del Castillo y López reminded us. In his presentation he put forward the idea that systematization of the architectural process began in 1445 with the creation of the concept of *lineamenta*, which disrupted the lives of builders who had not learned the new technical requirements. The digital world is similarly disrupting the analog world in the way we interact with the housing cycle. Some players will struggle to survive, and there will be unintended consequences; nonetheless, more likely than not, the outcome will further efforts to address economic, social, and environmental challenges like housing affordability, discrimination, and climate change. Entrepreneurs will continue to try to tackle challenges that are of the utmost importance in the world and provide a potential payout to those who will succeed.

¹ Elisabeth Gibney, “The scant science behind Cambridge Analytica’s controversial marketing techniques,” *Nature News Explainer*, March 29th, 2018, <https://www.nature.com/articles/d41586-018-03880-4>.