Papers

Venture capital, startups and commercial real estate: Innovation potential in a bespoke industry

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ABSTRACT

This paper provides a high-level overview of technology-driven investment in the commercial real estate sector. Following a brief description of the US commercial real estate industry, it addresses how early-stage investors and entrepreneurs are developing technologies that directly affect the real estate environment. In particular, within the context of the financing market for commercial real estate, it examines key considerations that must be addressed in order for technology strategies to have a transformational impact.

Keywords: commercial real estate (CRE), startup, technology, venture capital, finance, lending, proptech

INTRODUCTION

The role of technology in commercial real estate has become a ubiquitous topic in industry discussions. The line between real estate and technology has never been blurrier. Disruption, innovation and efficiency are themes that are at the forefront of commercial real estate businesses. Whether a firm focuses on the space markets, capital markets or a combination of the two, companies are closely monitoring technological developments in an effort to remain competitive and anticipate the possibility of secular market changes.

One reference point affecting and affected by how the commercial real estate market evolves is the role of startups and early-stage investors. Because these entities are putting financial and human capital at risk in new ventures focused on technology, they serve as a bellwether for industry change.

Entrepreneurs and venture capital investors are increasingly turning to the built economy for new business opportunities. The terms ‘proptech’ and ‘fintech’ have become part of the business lexicon, often used in the context of innovation in real estate and financial services, whether it be commercial or residential lending.

This paper provides a high-level overview of technology-driven investment in the commercial real estate sector, and addresses how early-stage investors and entrepreneurs are

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developing technologies that directly affect the real estate environment. In particular, within the context of the financing market for commercial real estate, it examines key considerations that must be addressed in order for technology strategies to have a transformational impact.

OVERVIEW OF US COMMERCIAL REAL ESTATE

US commercial real estate is integral to local communities and the global economy. Fundamentally, commercial real estate consists of income-producing properties where people live, work and play. The major income-producing commercial real estate (CRE) property types are office, retail, multifamily, industrial and hospitality. These various properties are essential to the operation of all types of businesses, and they are each unique in how they operate, compete and serve the needs of various different end users. For example, apartments provide multifamily rental housing to more than 18m households in the US. This and other property types help form the infrastructure of communities across the US.

The CRE market consists largely of institutional participants, as owners and operators of income-producing real estate, as well as the institutions providing debt financing for properties. From a debt perspective, the US$3.31tr[1] in commercial mortgage debt outstanding represents diversified sources of capital. Providing liquidity to this crucial market are banks, life insurance companies, commercial mortgage-backed securities (CMBS) conduits, real estate investment trusts, debt funds, pension funds, and the government-sponsored enterprises (GSEs) and the Federal Housing Administration (FHA).

Mortgage bankers in the US serve as intermediaries across these capital providers to the owners of real estate, making loans and delivering financing that enables the acquisition, refinance, construction and improvements to real estate. Annual origination volume in the commercial real estate finance sector was US$530bn in 2017[2] and will likely be in that range for 2018, looking at incoming data. Varied business models and funding sources contribute to a competitive lending market. The diversification among capital sources enables risk to be dispersed across numerous market participants and financing structures.

In addition to the above market participants, the CRE industry delivers a host of services that serve owners, lenders and intermediaries. These include sales brokers, leasing brokers, appraisers, legal counsel, rating agencies, accountants, research and data providers, environmental consultants and title insurance companies, to name a few. Each and every one of these parties plays a role in how properties are built, owned, operated, financed or serviced and, as such, can be viewed as part of the manufacturing process of commercial real estate. This ecosystem is where an entrepreneur's (or early-stage investor's) thesis of disruption, innovation and/or efficiency can be developed into a potentially successful business plan. Thus, the importance of understanding the complexity, fragmentation and adaptability of the industry landscape cannot be overstated.

VENTURE CAPITAL AND COMMERCIAL REAL ESTATE

Venture capital (VC) firms are viewed as engines of innovation. Their seed capital is geared toward the development of new business models and processes with high-reward potential. At the same time, their target investments are high-risk, and a vast majority of startups fail.[3] Much has been written about the modern venture capital industry, including the qualities that are valued by VC firms in portfolio companies. These often include strong leadership/management and the potential for scalability in the industry — in effect, whether 'Moore's Law' can apply to that sector. This suggests that industries undergoing rapid change or disruption are more likely candidates for high-growth startups.[4]

The last few years have seen significant startup formation in commercial real estate, along with greater venture and early-stage investment in them. An estimated US$12.6bn of venture capital flowed into the proptech sector in 2017, up approximately 50 per cent according to MetaProp, an investment advisory business.[5] In its 2018 year-end report, CREtech reported that US$9.8bn of venture capital was invested in real estate tech in 2018. While the overall volume decreased (as did the average investment size), the number of deals increased from 347 in 2017 to 509 in 2018.[6] Venture capital firms and startups are targeting the proptech sector (which revolves around the property itself and frequently focuses on the operations of real estate as a business) because it represents the intersection of many large and established industries.

Beyond the management and financing of the real estate as a business, the logistics involved with features and amenities for tenants (households in apartments or businesses in retail complexes, for example), ensuring tenant security and privacy, the impact of new mobility platforms, the growth of energy and sustainability solutions — all present opportunities to reframe and find new ways to monetise the numerous elements of managing real estate as a business. Owners of real estate are typically the primary customers for such technology, with the tenant/occupant often being the end beneficiary.

Subsectors that have benefitted from a nexus to real estate include the following: the Internet of Things (IoT); construction management and financing; property and facilities management; virtual space visualisation; transportation and mobility; co-working and flexible office configuration; and numerous forms of data collection and predictive analytics.

Notably, many of these venture funds or newer technology companies are backed by or have limited partners (LPs) that are well-established, vertically integrated CRE services firms or owners of real estate. Media outlets continue to highlight proptech companies to watch.[7] The proliferation of proptech startup companies has yielded a number of 'unicorns'[8] with substantial current valuations.

Two attributes stand out with regard to venture capital firms that are active investors in CRE startups. First, many of the principals tend to have direct real estate experience and expertise. This is crucial, as selling into the real estate industry is a unique challenge that requires credible industry experience. Second, the funds themselves often tend to be backed by, or affiliated with, existing commercial real estate enterprises, whether CRE services firms or institutional owners of real estate. These strategic investors/partners often can assist with business development and sales for the startups in which the fund invests. Both of these characteristics underscore that subject-matter expertise in real estate is perceived as valuable to both the evaluation and operation of CRE startups.

The view that the business of commercial real estate is primed for technological innovation is based on the convergence of several driving factors.

DEMOGRAPHIC AND ECONOMIC TRENDS

The Millennial generation is numbered at over 71m in the US, and is expected to overtake the number of baby boomers in 2019.[9] Characteristics and preferences within that demographic have influenced housing demand, favouring rental housing that, in turn, has benefitted the multifamily rental sector. Other broad-based preferences can be tied to the breadth of technology use.

Anecdotally, there is often greater familiarity among younger generations to newer technologies, particularly those they experienced in their formative years. As the influence of Millennials and generations that follow increases by way of employees, owners, lenders and service providers in the commercial real estate industry, implications for technology use and innovation are sure to follow.

Developments in other sectors have opened up questions about the collateral impacts of such business trends in the real estate environment. Industrial properties as an asset class have benefitted from the growth of distribution centres, while conversely, segments of the retail sector have been hurt by the steady rise of e-commerce. Similarly, the market for office space has shifted considerably with trends such as 'co-working', while hospitality feels impacts from 'shared economy' business models.

There is a widely held perception that commercial real estate is ripe for the adoption of transformative technology. This would suggest to some that business opportunities at the intersection of technology and real estate have significant upside and/or are currently undervalued. Market perception of this upside is pushing many entrants to try to provide innovative products and solutions to move the industry forward with new technologies.

CRE FINANCE — TRANSFORMATION POTENTIAL IN A BESPOKE INDUSTRY

While proptech companies are garnering significant industry attention, there have been fewer headlines — albeit with exceptions — in the financing sphere within commercial real estate.[10] Yet, the size and scope of the CRE debt market warrants serious examination of the potential for innovative technologies to transform this sector. For the typical, institutionally owned commercial property, the majority of the economic value of the property consists of debt. And as noted above, the aggregate mortgage debt outstanding for CRE is US$3.31tr, and the sector recently has generated more than US$0.5tr in annual loan originations.

Perhaps the overarching reason why transformational technologies have not gained as much traction in the lending sector of CRE is its *bespoke* character. Commercial real estate finance is a business-to-business market and exhibits heterogeneity in property type, unique sources of cash flow specific to the property, location-driven market conditions and property-specific management of real estate as a business.[11]

Likewise, while the data points reviewed in the financing process are similar across capital providers, the financing of CRE is a more customised operation, both in purpose and process. Loan sizes are larger (relative to single-family residential mortgages) and vary greatly in size — from less than US$1m to several hundred million dollars or more. The scale of capital that is placed at risk, therefore, makes it more challenging to commoditise commercial mortgage loans and deploy economies-of-scale strategies.

Nonetheless, technology is playing an increased role in CRE lending and has potential to make transformative change. The startup activity discussed above, and proprietary technologies being developed at established firms, could shift the landscape.

Importantly, technologies that can address certain defining characteristics of the business of CRE finance have a greater potential for transformational impact on the CRE market. These defining characteristics include the following:

- **While there are clearly efficiencies to be gained, the current system largely works**: There is ample market liquidity at this time and credit performance remains strong. Therefore, technology with the potential to disrupt a functioning operation will naturally be viewed with scepticism by management unless it provides a clear path to value. The value proposition is inherently difficult to provide by a third party who generally may not be familiar with a company's systems and culture from the inside. Technologies that make the system work better have a more understandable potential to thrive, as less disruptive changes that, say, increase efficiencies are more easily understood and are welcomed from a business enterprise perspective;

- **Core attributes of commercial mortgage loans**: CRE mortgages are large, longer-term (eg multiple year floating interest rate, 10 years with fixed interest rate with longer amortisation periods), secured loans backed by income-producing properties. The nature of this loan product must be understood by any innovator in the space;
- **Bespoke nature of CRE lending**: The customised nature of CRE lending is due to the fact that loan amounts are higher, and the number of loans smaller, as compared to other lines of business for financial institutions. For instance, a bank might find more success scaling a technology solution for smaller credit card loans or auto-lending business lines, but find it more challenging for CRE lending, given less homogeneity of loans and collateral. All real estate is also 'local'; thus, location and regional market dynamics (that have an impact on the tenants in the property and the resulting cash flow) are critical in assessing the credit risks of CRE;
- **Capital source diversity**: Different capital providers have unique business purposes for transactions. Life insurance companies, for example, are, in part, motivated by their asset liability match (ALM) objectives vis-à-vis annuity or other products that are sold to policyholders. Differentiated business purposes lead to unique organisational structures, business cultures and systems that are not necessarily conducive to one-size-fits-all technology solutions.
- **Relationship-driven transactions**: Each CRE loan is a high-stakes deployment of capital for a large dollar amount. Counterparty trust, whether technology-facilitated or not, will remain critically important. Successful technologies will recognise and address this characteristic of the CRE finance business.

Overall, cost and time can be barriers to technology adoption in commercial real estate finance. There is the price of a new product; then there is the less quantifiable cost of implementation, which may require changes to systems, organisational structure, procedures and culture. These costs are not taken lightly and should be understood and analysed with care by those proposing new technologies in the space. Similarly, time is the other material variable in executing on new technologies within CRE lending. Traditional technology startup runways are typically shorter than the time necessary for meaningful adoption in the CRE space, which places pressure on startups to perform quickly.

CONCLUSION

Given the distinct economic and structural characteristics of the venture capital, technology and commercial real estate finance industries, the interplay among them will continue to evolve and shape the space where they intersect. As technology-focused firms seek to sell into this vertical, many of the companies at the forefront of commercial real estate are also recognising the role of technology and making sizeable, anticipatory bets.

The adoption of broad-based technology solutions in commercial real estate finance in particular often involves multiple parties with more tailored interests. To the extent that the core attributes of the commercial real estate finance environment are taken into account, innovative technologies and ventures have the potential to deliver transformative change to a large sector that is tied closely to the US and global economies.

Author's note

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(8) A unicorn generally refers to a startup company that is valued at US$1bn or more. See Lee, A. (November 2013), 'Welcome to the Unicorn Club: Learning from Billion-Dollar Startups', TechCrunch, available at https://techcrunch.com/2013/11/02/welcome-to-the-unicorn-club/?guccounter=1 (accessed 22nd January, 2019).

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(10) Notably, the residential mortgage sector is highly focused on fintech and the transformation that is taking shape with certain market leaders and technology providers.

(11) This differs significantly from the single-family residential lending business, which is a consumer-facing business that is also subject to greater regulation. The distinction between the commercial and residential markets is critical in assessing whether certain technologies have growth potential or not.