CRE Productivity Pales in Comparison to Finance and Manufacturing. Here's why.

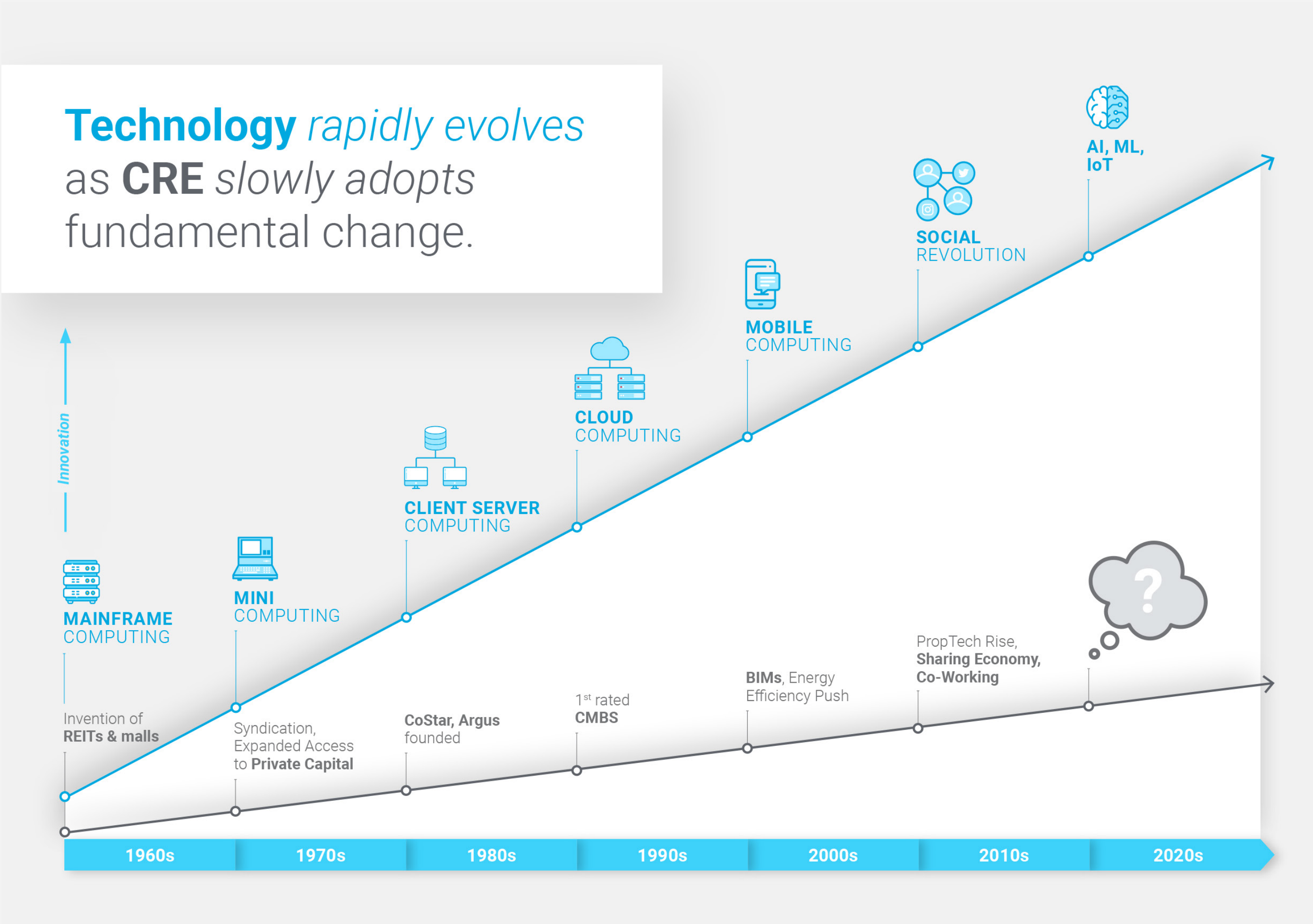
A view into CRE's relationship with technology innovation and adoption in comparison to other high-skilled industries - and why it's time to join the bandwagon.

A social distancing era may initially feel like an odd time to reflect on the productivity of labor in commercial real estate (CRE). However, now more than ever, leaders must honestly assess where the industry currently stands and where it is headed - and where individual organizations fall within the "new normal." As we cautiously emerge from our collective shelter-in-place, it is unlikely that the economy will snap right back to business as usual. While real estate did not cause the recession this time, the economic fallout of COVID-19 is on a scale and severity like nothing the industry has faced before, and all players will be forced to adapt to survive.

The Great Recession of 2008 changed real estate by correcting the market's speculative pricing, and serving up a much-needed dose of healthier underwriting standards across the board. Similarly, the 2020 pandemic will surely alter space usage and design, tenant-landlord relations, and more. During the past cycle, CRE began to use cloud software and embrace disruptive concepts such as the sharing economy. But the industry at large, especially the Development and Construction sectors, has been much slower than others to adopt modern processes and automation--even in simple functions like reporting.

This report takes a closer look at the factors that have stood in the way of innovation ramp-up in CRE, in the hopes that industry professionals, especially owners, developers, owner's representatives, and internal real estate teams, can draw inspiration for how to improve their company operations and leadership positions.

Commercial Real Estate, especially Development, is like a hybrid of Finance and Manufacturing. Since CRE is an investment class with many transaction services, it shares traits with the industry of Financial Services and subsectors of Banking, Securities, or Private Equity. Since CRE is in the business of building tangible products to technical specifications, it shares traits with Durable Manufacturing. But why are those industries able to adopt technology faster? Specifically, why does CRE lag behind other industries in implementation of software and automation, and have lower or negative labor productivity growth in comparison?



The Case for Comparing to Finance

Financial Services and CRE Development both have the attributes of (1) requiring regulatory know-how to conduct business, and (2) incumbency advantage. However, innovation is everywhere in Finance from software and hardware to products and business models.

Developers often point to the challenges of zoning, environmental, and tax complexity as to why the industry as a whole is unable to streamline or innovate. However, Financial Services is subject to an enormous amount of regulation as well, and has frequent and complex compliance audits. Regulatory burden doesn't have to freeze innovation.

How about incumbency advantage? The existing CRE players get the biggest deals and have the best relationships with government officials. The same is true in Financial Services--existing companies have lobbyists, market power, network advantages, and a built-in ecosystem of related products. Brand equity is even more integral for the client in Finance than in CRE. But how come upstarts like

Venmo can come out of nowhere, and we are suddenly depositing checks via camera-phone without a second thought?

Why has Finance adopted innovation in ways CRE has seemingly resisted?

Finance exists in an environment of highly competitive client services, and high client expectations, making it necessary to quickly adopt innovation, specifically in the form of software, predictive analytics, and forecasting. On the other hand, while the commercial real estate industry values relationships, it is accustomed to immobile assets and vertically integrated operations, answering to few outsiders. However, changes in business models and access to capital have created the relatively newer roles of Owner's Reps and Investor Relations, and managers must communicate to more and more stakeholders and investors instead of staying in a silo. Financial partners, and corporate owner/occupiers, who have become even more discerning or skeptical about financing new projects due to COVID-19, want more visibility about project status and how funds are being allocated. Opacity and lagging reporting will harm the perception of CRE professionals as a trustworthy financial steward of capital.

Moreover, the tenants - like end-users in Financial Services - are the lifeblood of cash flow and increasingly mobile. Again, as in the Great Recession aftermath, the tenants will have the market power and, in a modern twist, there is likely no coming back from the telework era. Multiple asset classes will undergo conversions or repurposing to meet the remote lifestyle expectations of the future of work. This impact will ripple through the "creation" side of CRE - investors, owners, developers, corporations and institutions - and force those professionals to adjust the way they themselves conduct business. As real estate teams must work remotely effectively, and face increased pressure for transparency about project statuses and results, modernized workflow processes will be essential.

Companies and workers will emerge from shelter-in-place with very different notions about office space, recreation and housing. All industry players are rethinking how they engage, communicate, share information and execute on projects with significantly fewer in-person touch points. As an owner, it will be hard to push aggressive year-on-year rent increases on multifamily tenants for the foreseeable future. For developers, it will be key to impress and reassure financial partners of one's ability to be a savvy steward of capital, pivot to meet market demand and continue to deliver attractive returns. In-house corporate real estate teams are already reconsidering expansion plans, while owner's reps are seeing clients pause and go back to the drawing board with their real estate strategy.

Across the board, every principal and stakeholder is facing pressure to tighten budgets and mitigate risk by accurately forecasting challenges and opportunities before they occur. Every stakeholder will demand increased visibility and real-time, meaningful updates on the investment and development process. CRE will have to rise to the expectations of transparency and forecasting that are already rampant in other, far more customer-centric industries, like financial services. With transaction activity highly uncertain and rent growth stalled for all but the strongest industrial assets, income instead of appreciation will drive returns for at least the rest of 2020. Therefore, real estate companies will have to nurture the client and investor experience and provide responsive, superior services to hold on to their top line.

Productivity Gains Compared Across *Industries*

EXHIBIT 1

TECH ERA		1990-1995	1995-2000	2000-2007	2007-2018
		Rise of Global Enterprise Software; Databases, spreadsheets	**Widespread Adoption of Networks;** PC Penetration	**E-commerce penetration,** supply chain inventory real-time management	**SaaS & Cloud,** AI, ML, IoT
INDUSTRY	**Durable Manufacturing**	4.5%	5.9%	4.5%	0.2%
	Financial Services	12.4%	14.6%	2.1%	0.7%
	Construction	**0.3%**	**0.1%**	**-1.1%**	**-0.2%**
	Real Estate Services (excl. Rental/ Leasing)	**1.6%**	**2.2%**	**2.8%**	**1.3%**

Data source: Bureau of Labor Statistics KLEMS Survey. Dataset: 1987-2018 Combined Sector and Industry Multifactor Productivity. Accessed April 21, 2020.

The Case for Comparing to Manufacturing

We turn to Manufacturing to glean further insight about CRE's slow-to-innovate reputation. Both Manufacturing and Development/Construction are (1) highly capital-intensive business models which mount a natural barrier to entry, and (2) known for having high switching costs and incentives to stick with current products or services.

The high start-up and hard costs of development and construction naturally limit the number of players at the table. In most markets, the industry is dominated by a handful of legacy operations and partnerships. Manufacturing tends to be fairly similar; there are many low-cost airlines but only five commercial aircraft makers in the world. Oligopoly dynamics don't halt innovation in Manufacturing.

CRE and Manufacturing are both prone to high switching costs. The classic assembly line would have to be completely stopped and machinery changed out to switch to making another product. But Manufacturing experienced a sea change in the 20th century to let go of the old paradigm, and found ways to combat the costs of excessive inventory pile-up or inflexible production processes. In contrast, bricklaying hasn't changed in hundreds of years, and modular construction or off-site assembly have not experienced widespread adoption in the US. Many real estate professionals still handle cost tracking, vendor management, and basic reporting across various Excel files and shared drives and have resisted moving on from the static nature of Web 2.0 (as referenced in Exhibit 1) and tedious, manual workflows still dominating the industry.

So why has Manufacturing been the golden child for adopting innovation?

We know the typical rejoinders--every job site is unique. Each building is different. All industries, especially capital-intensive ones, have a hard time breaking out of old norms. But Manufacturing is differentiated by a culture of tracking clear, easily measurable results via data.

Manufacturing's breakthrough innovations of the 20th century came from isolating sources of error and applying a persistent willingness to eliminate those errors. Thanks to the legacies of Kiichiro Toyoda and Six Sigma principles - intensively studying variances and striving for perfecting quality to the sixth standard deviation from the mean - Manufacturing's productivity and quality completely transformed. Manufacturing is taking the next step to implement Big Data practices such as predictive, preventive maintenance to save on costs.

The Development/Construction mantra is "On Time and Under Budget." But currently companies do not take the Six Sigma approach to the building and development life cycle--for anyone who has been on a job site, the idea of applying Six Sigma to real estate is probably laughable. By the time a project manager knows the job is over budget, it's often too late to prevent it--because of siloed information, lack of visibility, and reliance on error-prone manual workflows.

But the old ways don't need to persist. Manufacturing owners of the past tolerated or expected a certain amount of variance or inefficiency in their plants, but those standards would be unacceptable now. Demand for measurable results is coming to CRE. There's less room for volatility and error to eke out acceptable returns. CRE is facing an inflection point in the need to move from simply tracking data to gleaning insights from data as a basis for improving operations. A path forward to greater productivity, along with predictability, and transparency, is possible if the industry leverages data and automation the way Manufacturing and Finance have.

Adopting a manufacturing mindset that prizes predictability and streamlined workflows will mitigate risk for CRE professionals, especially during the uncertain times and volatile market swings we're seeing today. This mindset will help businesses achieve as much control as possible, by assessing new circumstances quickly and pivoting faster to salvage as much cost and time savings as possible. For example, think of how Anheuser-Busch began making hand sanitizer by mid-March, and sporting gear companies pivoted to making face shields within weeks of COVID-19's appearance in the US.

While manufacturers create physical products, in contrast to Financial Services, their transparent production processes facilitate this admirable responsiveness to market needs. Tracking historical data for benchmarking allows managers to make more informed decisions, predict seasonal shifts, and ramp up or slow down production without excess or under-supply - all familiar objectives for those operating in CRE and desiring more control over outcomes.

CRE's Unique Opportunity

It's not all doom and gloom. The advantage that CRE has over other industries is that its assets are unique and have staying power. The best real estate assets are vehicles for stories of life and revitalization. They are symbols of city pride or jewels of the waterfront and skyline. They are where people live, work and play. In contrast, financial services quickly become commodities and big manufacturing's uniformity leads us to crave unique, handcrafted goods.

For commercial real estate development, now is the time to capitalize on the proven methods employed by other high-skilled industries. The ability to achieve predictable outcomes is within reach for project teams with automation, technology and data at the ready. In order to remain competitive, teams will need to assess their current strategies and swiftly address any gaps in operations. Can your team be more efficient, productive and proactive? Are you leaving money on the table? Can you offer investors the transparency and visibility they crave? Are clients being poached by more forward-thinking and tech-savvy firms? Are your operations able to withstand large market swings? How are you putting your historical data to work? If Manufacturing and Finance have taught us anything, it's that once an industry experiences a technological revolution and paradigm shift, those that don't keep up are left far behind.

It's time to abandon the status quo - that Commercial Real Estate is a traditional industry that will never change - and to lean into the forces that drive innovation. While the industry should push itself to new heights during the best of times, it's even more critical to improve operations during uncertainty. Automation in documentation and reporting, data analytics, and forecasting models to help decision-making are already here, and being leveraged in sophisticated ways in other, similar industries. Real estate leaders should take advantage of this pause to fortify operations, weather the storm, and be ready to hit the ground running when markets inevitably rebound. Innovation will be the cornerstone of building the thriving real estate business and industry of tomorrow.