

JUNE 20th, 2019 - 11th Edition

# Real Estate as a Service: All Change, All Change. Part 5: Ten Takeaways



Antony Slumbers

## News Contributor Series #11 Letter

In 1915 the great American poet Robert Frost wrote, in ‘A Servant to Servants’;

**“He says the best way out is always through.  
And I agree to that, or in so far  
As that I can see no way out but through”**

In this series of articles we have been discussing the fundamental changes taking place, in technology, society and the built environment. Often grouped under the heading of ‘The Fourth Industrial Revolution’, they represent an epochal change. Klaus Schwab, who coined the term, says ‘we live in a time of great promise and great peril’, where the digital, biological and physical world are being merged. 1915 was a similar time, so Frost’s words have resonance today: change is happening, there is no way to avoid it, so the only way forward is to embrace it and push on through.

In the first article we looked at how the very nature of demand for real estate is changing, in the second the technologies of today and tomorrow, and in articles three and four how all of this will impact on investors and landlords.

# Real Estate as a Service: All Change, All Change.

## Part 5: Ten Takeaways

In this final article I'd like to provide 10 takeaways that distil the key trends, drivers, mindsets and opportunities we have worked through.

### 1. #SpaceAsAService

Starting at the beginning, just about everything in real estate is being impacted by the rise of the notion of #SpaceAsAService. It is the #TrillionDollarHashtag, and it has two meanings. First, the ability to procure 'Space' in an on-demand manner, and secondly the provision of 'Spaces' that provide us with the 'Service' we require, as and when we need it. In other words, Space that is #FitForPurpose. This applies across all use classes, whether office, industrial, retail, residential or hotel. Each of us has 'Jobs to be Done' at any given time. It is incumbent on the Real Estate industry to provide us with the spaces and services we need to fulfil those 'Jobs to be done'. Not only will this improve the user experience of the places and spaces we inhabit, but will make more efficient and effective use of them. In doing so, it will enable us to charge considerably more for them. #SpaceAsAService promises a world where we consume less but better real estate. And both sides win. The zero sum nature of 'old' real estate is coming to an end.

### 2. The Workplace

The Workplace is changing, fast. We all know that, on average, offices are neither used very efficiently (often at less than 50% occupancy) or provide individual occupiers (our future customers in a #SpaceAsAService world) with somewhere they feel enables them to be productive. According to the Leesman Index, after 500,000+ interviews with individuals, only around 55% say their workplace adequately supports their personal productivity. Offices are a #DoubleFail. Mostly because they represent a 'System', whereas they are managed as a series of standalone components.

# Real Estate as a Service: All Change, All Change.

## Part 5: Ten Takeaways

To make offices work properly for our customers, we need to merge the knowledge, skills and mindsets of five currently separate industries. A great workplace requires great real estate skills, together with great technology, workplace, HR and hospitality capabilities. Workplace needs to be thought of as software, where we 'Build, Measure, Learn'. In real estate today we stop at 'Build'.

The 'Office as iPhone' is the goal: where a combination of Hardware + Software + Services working together, designed as one, provides an optimised user experience that will command a significant premium.

### 3. User Experience

Who becomes responsible for creating and curating great user experiences for our customers is currently a known unknown. There is no company today that merges those five areas above. This is virgin territory, up for grabs. Who will grab it? It could be Landlords, or FM or PM companies, or 3rd parties. Or perhaps companies will do it all themselves, at least the large ones. Either way, this new type of company will have a much stronger relationship with customers, and by owning this relationship, will move right to the top of the value tree. Quite possibly the landlord, currently very much King or Queen of the Castle, could find themselves relegated to just the low margin provider of commoditised 'dumb boxes'.

### 4. Valuations

Which brings us to the thorny question of Valuations. Across the industry the structural changes we are discussing will, inevitably, impact on valuations. Retail clearly needs a reset: all around us we see a rise in empty shops, and just waiting for the cycle to turn will not refill them.

# Real Estate as a Service: All Change, All Change.

## Part 5: Ten Takeaways

The retail market is now shaped like a barbell. Either you provide cheap, everyday items, that are not worth shipping to customers, or you provide a retail experience that entices people to visit, explore, engage and interact with physical environments. For everything in the middle, frankly, Mr Bezos has you covered. Retail spaces need to be better and/or cheaper. There are physical retailers out there, a great many of them, but at current price points they cannot afford to operate. Something has to give; at the moment vacant stores are taking the hit, but going forward it will be values. Either way, technology has much to offer to help retailers across the entire life cycle. Personalisation, optimisation, and localisation are the key words. Improve on any of them and you have a good business.

In the office sector a similar dynamic applies. Historically the sector has had bond like characteristics. Long Leases, with strong covenants = Bonds. Change to a #SpaceAsAService world and all that changes. The key stakeholder in this world is the Operator of space. It is the Operator who will maximise income, and much of that income will not be rent, but services in various forms. We are moving from valuations being bond like to valuations being business like. How much income can this asset generate, gross and net? And that changes everything.

Many real estate people say this cannot occur because without security of income offices will not get financed. As of today that may be true, but markets are dynamic and eventually they always adapt. If the customers of real estate do not want, or need, the product the industry is offering them, then sooner or later the industry will have to offer what they do want.

Given the reality of markets it is a solid bet that the office sector will look much more like hospitality within a few years. Within a decade the change is certain. Which is fine: the best Operators will manage their assets much better than most are today, and probably generate significantly higher income out of them. But, and it is a big but, yields are certain to rise to be more like they are in hospitality. The result? Office valuations will fall unless owners fully commit to adapting their business models so that they optimise for user experience. Offices that provide a great user experience will maintain or increase their value, those that don't face a severe financial penalty.

All of which is, of course, a perfect market for PropTech companies that help with any aspect of this change, to operate in.

# Real Estate as a Service: All Change, All Change.

## Part 5: Ten Takeaways

### 5. Merging of Use Classes

Increased utilisation of space is a prime area for PropTech companies to look at. Given the cloud, connectivity, and mobile computing (laptops, tablets, smartphones) for many of us where we work is optional. Go in to any central London hotel during the work and the ground floor will be awash with people working away. No doubt the same applies in most major cities, and beyond. All manner of spaces are now available on an on-demand basis for activities that are not their core. Restaurants that double as co-working spaces between serving periods. Residential buildings that sit atop flex space. Hotels that have members clubs with workspace. Parking lots that double as home for 'dark kitchens'.

Use Classes are merging; the driver is our 'weightlessness' - we can work anywhere. And we, as humans, actually like mixed use space. The division of cities into areas where we 'work, rest, and play' separately is a relatively new phenomenon. But it is dying out; Smart Cities will be mixed Cities. Technology has, as a second order effect, led to this change and technology, as a first order tool, will be at the heart of understanding how this will reshape the world around us.

### 6. Value of Data

**"Without data, you're just another person with an opinion."**

**W. Edwards Demming**

**Engineer, statistician, professor, author, lecturer, and management consultant**

Demming wrote this over 60 years ago, but it has never been more true. Everything we have discussed in this series of articles is predicated on having data to work with. The modern world does not work without good data. Rule No 1 is get to grips with the Four V's of your data: Volume, Variety, Velocity and Veracity.

To repeat: nothing works today without good data.

Any PropTech that helps people or companies with those Four V's is standing on solid ground.

# Real Estate as a Service: All Change, All Change.

## Part 5: Ten Takeaways

### 7. Artificial Intelligence

**Artificial intelligence, especially machine learning, is the most important general-purpose technology of our era.**

**Erik Brynjolfsson & Andrew McAfee (Harvard Business Review, 2017)**

General Purpose Technology' are the key words in the above. Like electricity, the internal combustion engine, and the Internet itself, Artificial Intelligence is a technology that will be available, and pervasive, throughout the entirety of business and wider society. It will impact everything. I have written much elsewhere about where in real estate AI has applications, but the bottom line is that it will be relevant in every area. If you take it that anything 'Structured, Repeatable, or Predictable' WILL be automated you will soon realise just how embedded in our lives AI will become.

Rule No 2, after sorting your data out (see above) is get to grips with what AI is, what it is not, where it might apply within your business, where the value is, and how to measure it. Truly, this is the most important technology of our age.

### 8. Digital Twins

All of the above leads towards the rise of Digital Twins, those technologies that allow you to simulate, in a virtual world, the real world. As use classes merge, data becomes ubiquitous, AI a commodity, and valuations increasingly driven by the operation of space rather than mere ownership, Digital Twins are going to allow sophisticated players in real estate to understand the dynamics of the build environment in a hitherto unimaginable way.

This technology is available, to an extent, today but it will take the wider digital transformation of the real estate industry to take hold before it really comes in to its own. It requires end to end digitisation, entire system thinking, to reach its full potential. Companies like the Softbank backed Katerra are trying to force the issue by becoming end to end operators themselves but they are outliers.

# Real Estate as a Service: All Change, All Change.

## Part 5: Ten Takeaways

Digital Twins are perhaps not the first priority for PropTech to adopt, but give it 10 and every leading real estate company will have Digital Twins at the heart of their business. Using a Model to explain how space is working, and a simulation to predict how it will adapt to any given input. Add on Virtual & Augmented, or even Mixed reality, and we have a set of tools that will give us no excuse if we don't create great spaces.

### 9. Micro Mobility & Autonomous Vehicles

We have not much discussed exogenous technologies that will impact dramatically on the built environment, but it is certain that micro mobility (such as the fastest growing technology of all time, the electric scooter) and autonomous vehicles will transform, in subtle and not so subtle ways, our cities.

Over 60% of car journeys in the US are less than 2 miles. It's that distance that's just a bit too long to quickly walk, but that really does not warrant a car journey, but that's what happens. Enter electric scooters, whose optimum range is under 2 miles. Then think what that means to where is considered a good location. Today, a mile from a main centre is off-pitch, because it takes too long to get from A to B. But on a scooter it's no time at all; suddenly the off-pitch becomes core. And voila, you have many areas in many cities that become ripe for regeneration. Simulate the impact using AI and a Digital Twin and a wealth of opportunities arise. This will happen.

Autonomous vehicles will have similar impact. Forget the idea that the centre of London, or Paris, or New York, or Tokyo will within a few years be devoid of anything but electric, autonomous cars. That will not happen. But there are endless use cases where an autonomous vehicle would be the optimum solution. It's not just about getting a human from one place to another, but getting something to that human. Delivery of something to your home, or work, is perhaps more likely than the delivery of you to a shop or restaurant. A drone is also an autonomous vehicle, and whilst the idea of drone delivery in the West is largely scoffed at, in China it is already commonplace. Given the right use case, and the right environment, these technologies will take hold fast. With AV's we do not have to wait until they are perfect; good enough will be good enough.

# Real Estate as a Service: All Change, All Change.

## Part 5: Ten Takeaways

Both these areas, micro mobility and autonomous vehicles, are complicated, nuanced subjects, but anticipating how they will impact real estate is important. The development of railways created more real estate than railway billionaires; autonomy will likely be the same.

### 10. Where to invest

In the light of everything we have discussed, what technology should one invest in? And what real estate types will emerge as the best investments?

#### The tech to invest in:

1. Focussing on the end users of real estate is the really huge market. Yes, selling technology products and services to the real estate industry itself is a decent market, but everyone on the planet uses real estate. There is no bigger market than that.
2. Anything that enables offices to be used effectively, efficiently and productively is a massive opportunity. As JLL have said, think of 3, 30, 300. Utilities cost \$3, rent \$30 but people \$300. Improving the productivity of people should be the core value proposition.
3. Within retail, anything that makes physical shopping a great user experience will have great value. From site selection, to design, to localisation, optimisation and personalised recommendation. The future retail winners will invest heavily in all of these functions.
4. We need to build more efficient, more sustainable housing. AI driven generative design will play a large part in this, as will modular construction. A true Smart Home will be a Service, not a Product. It might well also be delivered by a non real estate Brand. Apple Homes anyone? Cross laminated timber, solar panels (or roof tiles) plus battery storage will all become big industries. Tesla has been having trouble with solar and batteries for the home, but someone will crack it. And it is of course a vast market.



# Real Estate as a Service: All Change, All Change.

## Part 5: Ten Takeaways

5. Build to Rent, as an institutionalised asset class, has great potential to be the front runners in creating Smart Homes, with strong Brands and tech enabled services providing unparalleled living experiences.

6. And across the industrial sector, the key will be anything that makes same day delivery easier. Figuring that out and providing 'Logistics as a Service' will be a powerful proposition.

It all boils down to space utilisation, data & analytics and tech enabled operations. And ultimately how these three areas interact.

### The Real Estate to invest in:

1. Location still matters. An on-demand world needs density. For the unit economics of dark kitchens, or Uber, or Scooters, or delivery services to work a certain density is required. Scale matters with physical items. Spotify, Netflix, Facebook need no density as everything they sell is entirely weightless, but for all these services that we humans enjoy in the real world, enough customers in close proximity is vital. The lifestyle one can enjoy in a dense major City is not replicable out of town, so invest in density.

2. That said, great connectivity can simulate density. When autonomous vehicles do become commonplace, the unit economics of delivery will change, so perhaps we will be able to have everything a great city enjoys whilst living somewhere beautiful and quiet? Where might these places be? Follow broadband; wherever has excellent broadband today is likely to develop these other services tomorrow.

3. Just as 'The modern world does not work without good data' the modern world will not flourish without a lot of human brainpower. Invest where there are excellent universities. Always has been a good bet, it will only get better.

# Real Estate as a Service: All Change, All Change.

## Part 5: Ten Takeaways

4. The age of single use space is coming to an end. Technology is making it unnecessary. The future belongs to mixed use.

5. The key KPI's of the future will be different, and there are four that really matter. Flexibility, Productivity, Wellness and Sustainability. Only invest in assets that score highly against all four.

I hope this series of articles has proven useful. PropTech has come of age, and we are beginning to understand that 'All Change, All Change' really is what is occurring. The joy of being in the real estate and the tech industry is that the former impacts on every single individual on earth and the latter enables us to make it better.

Go and make it better!