

Commercial Real Estate in post COVID-19 World

By:

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# Highlights

- Innovation in technology, inclination towards a greener environment, move towards online shopping and a consistent rise in the customer expectations – are greatly influencing the path of Commercial Real Estate
- Scenario planning helps in understanding today better by imagining tomorrow
- With a better understanding, businesses are able to take the right bets, manage key risks and understand the new world order

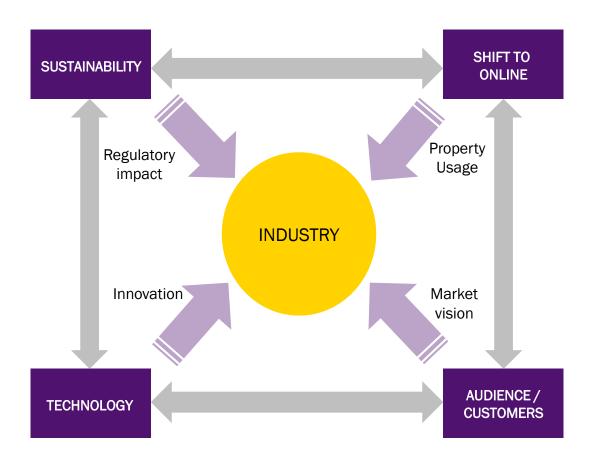
In 2019, Commercial Real Estate remained one of the most attractive and stable long-term investments. Investors placed capital into the Canadian commercial property market with confidence during 2018-19 which drove investment activity levels to record high. Debt and equity capital continued to flow into the sector at a healthy rate. Consequently, transaction closing volume held at the historic high.

Starting 2020, the pandemic has accelerated some trends which were already in evidence, whereas reversed few others. The implications of COVID 19 have been profound, and the path to business recovery is fluid and evolving. For example, demand for online shopping has increased and will likely continue, while the ongoing trend for the densification of work and living space is now under scrutiny.

Once the risk to human life has reduced and steps are taken back towards a fully productive economy, it is worth spending some time envisaging what this 'new normal' might look like. Commercial Real Estate sector will have to transform in order to meet the challenges of the disruptions ahead. This document focusses on scenarios to stimulate thinking about what the future may look like. To start with, we have used four key megatrends: technology breakthrough, focus on greener environment, rising customer expectations and shift from offline to online

- Green buildings are 14% less costlier than traditional buildings. Additionally, green buildings are worth 7% more than traditional buildings
- There is a 10 folds increase since 2010 in Zero Energy buildings
- Multiple organizations and regulations are in place to combat climate change and develop sustainable practices

- Proptech is disrupting just about every aspect of CRE and interest is at a fever pitch. Global investment in proptech companies has grown from USD 1 bn in 2012 to 18 bn in 2018
- Fueled by millennials, the old style shopping mall is undergoing a rapid reimagining driven by technology and immersive experiences

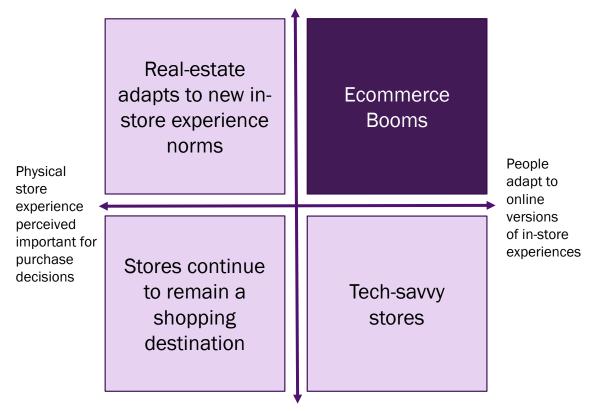


- The demand for space has been doing well across the country due to an explosion of ecommerce logistical demands and other tech industries. This will further go up
- The rise of ecommerce does not necessarily mean an end of offline retail as retailers move on integrating their stores with fulfilment centres

- The ways in which real estate tenants and end users engage with their physical surroundings is evolving rapidly.
- Redeveloping properties to include community services & residential uses. Expect to see a diverse mix of entertainment areas, shops, restaurants & above all a safe shared space indoors and out

#### Example of Scenario Set

Society adopts social distancing norms permanently; High demand for Online options



Post-Covid, consumer's offline preferences remain as was earlier

- To develop each set of scenario, we started out with two axes, each with significantly different outcomes at opposing poles. These outcomes were chosen keeping in mind 'Megatrends' which will have an effect on the real estate industry in the future.
- The scenarios in the four boxes are deduced from a combination of outcomes on X and Y-axes. So, for example, if one thinks about a scenario that includes right-hand side of X-axis and top of the Y-axis, that might look like the top-right box in darker colour – a scenario where E-commerce booms owing to high adaptability of consumers to online in-store experience and high focus on social distancing norms.
- We considered 3 scenario sets each equally important for real estate industry. One of them has been shown here as example.
- The value and limitations of this method of scenario planning are that the possibilities of potential axes are infinite, as are the resulting scenarios.

# **SCENARIO 1:**

# **Ecommerce Booms**

With a change in shopping habits and space constraints, ecommerce grows and customers refrain from going offline

# **SCENARIO 2:**

# **Technology Singularity**

Increase in customer expectation will be addressed by delivering superior customer experience using technology: from software to immersive visualization to three-dimensional modelling to drones

# **SCENARIO 3:**

# **Sustainable Development**

Sustainability and a decreased impact on the environment are bound to be the focus areas

#### Society adopts social distancing norms permanently; High demand for Online options Real-estate adapts to new in-Ecommerce store experience Booms norms People Physical adapt to store online experience versions perceived of in-store important for experiences purchase Stores continue decisions to remain a Tech-savvv shopping stores destination

Post-Covid, consumer's offline preferences remain as was earlier

With a change in shopping habits and space constraints, ecommerce grows and customers refrain from going offline

This scenario assumes that Covid pandemic will bring a permanent shift towards social distancing and people would want online in-store experiences. This consumer shift would boom e-commerce. In response, retail companies will test waters with complete online ordering and delivery system or a mix of online and supporting offline presence.

### **Implications**

- Industry will experiment with various ideas like store designs with inbuilt distancing norms; human-less checkout and payment; virtual trials
- Purpose of stores will shift from a shopping destination to a complement to online experience. Stores might shrink in size as well
- Commercial real estate will focus on mixed-use properties with large open areas where customers will come for an experience

Use of technology continues at current pace Experience-driven Technological advances only for stores: Real few TGs ex: estate as a millenials service Emergence Traditional experiences consumer consumption as priority Benefit to value consumers through Cost Technology Singularity savings by Smart operations & Smart buildings

Technology adoption greatly accelerates and permeates all areas of operations

Increase in customer expectation will be addressed by delivering superior customer experience using technology: from software to immersive visualization to three-dimensional modelling to drones

This scenario assumes consumer companies invest heavily in technology in response to consumers' preference to experience and high technology adoption. There will be emergence of attention grabbing retail outlets, man-less warehousing, drone-deliveries, IoT controlled buildings etc

### **Implications**

- Consumer-focussed companies invest heavily in interactive video displays, retail tables with touch-screen technology, digital memory mirrors in fitting room, etc
- In order to please high-income consumers especially keen on experience and personalization – stores become a destination for complete immersive experience
- Manufacturers get their own point-of-sale customer data, relying far less on retail partners

Post-Covid, awareness and focus towards climate and green buildings increases Limited shift to Shift towards sustainable sustainable building - where buildings TG is ready to pay Government No focus of eases govt towards regulations to pro-climate benefit proregulations climate development Shrinking share Lesser demand of green buildings for sustainable in real estate projects market

People view Covid pandemic as a one-of-case; Lesser consideration for nature

Sustainability and a decreased impact on the environment are bound to be the focus areas

More and more companies are already focussing on green and sustainable development. The Covid pandemic simply increases support for projects that consider its effects on nature. This popular support will soon force governments to ease regulations to promote pro-climate projects. This will have impact on real estate industry as well and there will be significant rise in number of sustainable buildings.

#### **Implications**

Significant investments in the science of green buildings. Stronger alliances between real estate sector and pro-climate organizations. Companies will start measuring popularity of various sustainable technologies and operationalize those projects which are perceived more environment-friendly by its consumers

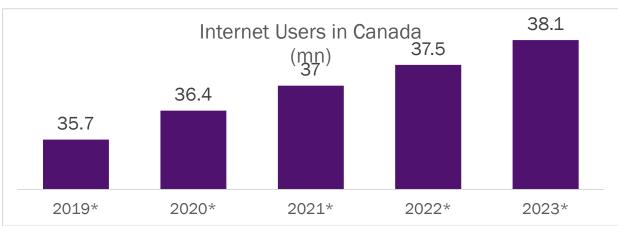
# **Ecommerce Booms: Assertions**



- 1. With an increase in internet users (internet penetration and population growth), the demand for ecommerce will further increase
- 2. With an increase in the number of immigrants, the percentage of ecommerce shoppers (30-50 years of age) will increase
- 3. Retailers will need a winning omni channel strategy to survive and thrive
- 4. With the growing demand, there will be an opportunity for made in Canada brands and home grown retailers
- 5. Offline will become more of a socializing hub with mixed-use properties

# With an increase in internet users, the demand for ecommerce will further increase

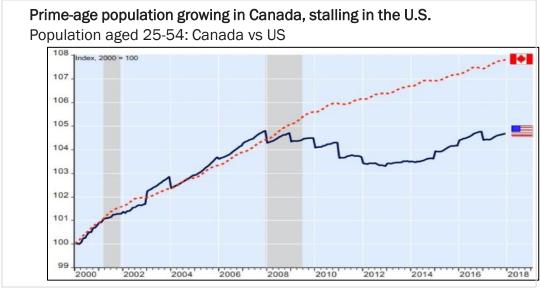


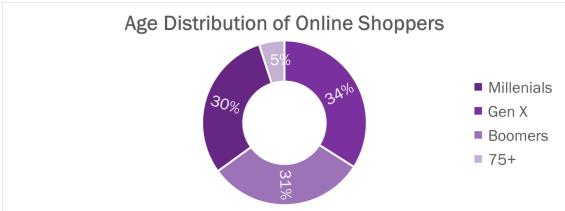


- The share of ecommerce in retail keeps increasing. Although in 2017 the world average share barely exceeded 10%, in 2018 the figure rose to almost 12%. The share of e-commerce in 2019 is estimated to grow to 13.7%
- In Canada, retail ecommerce was expected to reach CAD\$64.56 billion (\$49.80 billion) in 2019. That's up 21.1% from 2018 and represents 10.0% of all retail sales.
- Sales are set to achieve a current value of CAGR of 15% (2019 constant value CAGR of 13%)
- From 35mn users in 2018, the no. of internet users will increase to 38mn in 2023. Internet penetration in 2018 was at 90% of which 87% of users have made an online purchase. 3 in 4 Canadians spend 3-4 hours online everyday
- Canada ranks 6th in terms of growth in ecommerce sales
- With a growth in home grown ecommerce companies, increase in convenient shopping options, improved customer service and faster delivery will make more Canadians move to online shopping

With high growth in ecommerce sales, Canada will most likely turn out to be among the top 5 ecommerce countries in the world by 2030

# With an increase in the number of immigrants, the number of ecommerce shoppers will increase

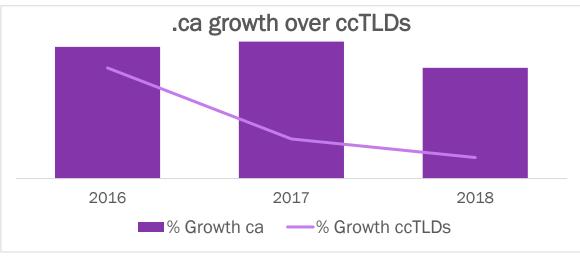




- 95% of consumers who shop online are under the age of 75
- In Canada, there are more than seven million millennials (born between 1981 and 1996). Compared to the U.S., Canada will have the added benefit from a faster growing population. Over the past two years, Canada's population has grown by more than one million people with immigration being the main source of growth. Many of the immigrants to Canada are in their prime working years
- Given that immigrant newcomers are, on average, younger than the Canadian-born population, it will result in decline of Canada's worker-to-retiree ratio. In 2012, the worker-to-retiree ratio was 4.2 to 1; projections put that ratio at 2 to 1 by 2036

By 2030, the percentage of online shoppers will increase because of the demographic shift



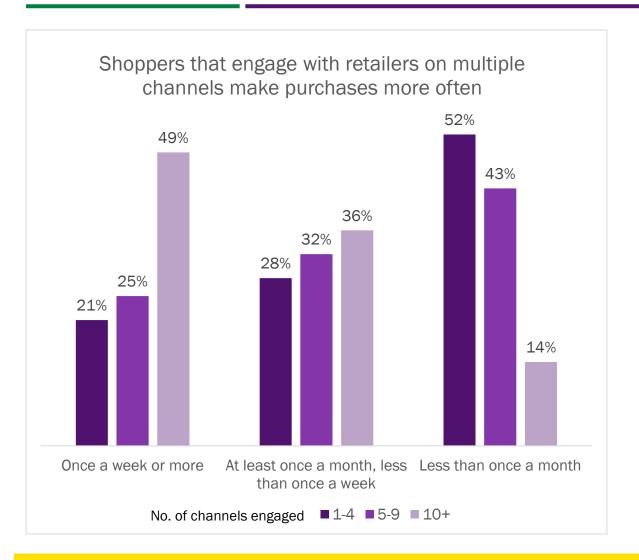


- Almost 2/3<sup>rd</sup> (64%) customers prefer making online purchases from Canadian retailers when they have a choice
- .ca domain growth has significantly outpaced industry growth trends. There is a rising inclination to purchase on domestic websites in recent years, as the Canadian dollar has stayed low, whilst international shipping and duty charges have remained very costly
- Apparel and footwear retailers, such as Aritzia and Canada Goose, have been experiencing a rapid acceleration of online sales, which now account for a significant share of their retail sales
- With a rapid increase of online sales of home grown retailers, Canadian retailers will invest more in ecommerce

With growing inclination for home retailers, ecommerce revenue share of home grown retailers will further go up by 2030

# **Ecommerce Booms: Assertion 4**

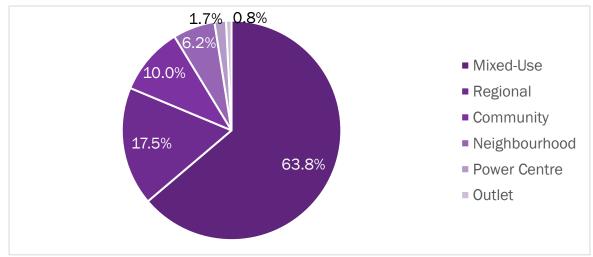
# Retailers will need a winning omni-channel strategy to survive and thrive

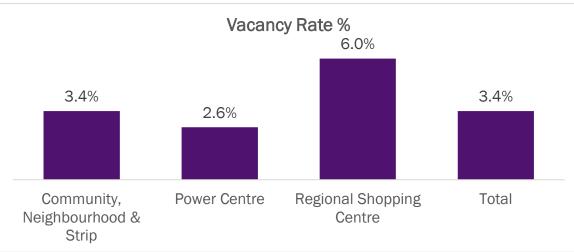


- According to Harvard Business Review findings, omni-channel customers love using retail touchpoints, in all sorts of combinations and places
- Beyond having multiple channels and points of contact, shoppers like when an integrated omni-channel experience is available
- Customers interacting with an omni-channel experience spent 4% more in-store and 10% more online, too
- Transactions are shifting online and retailers are using brick and mortar store networks for a combination of sales, customer acquisition, brand experience, online order fulfilment, returns and data gathering. The global clicks to bricks trend – whereby online-only players are opening physical stores-demonstrates continued and changing value of a physical retail presence
- One strategy emerging across the globe involves partnering directly with online-only or digitally native brands for temporary or permanent space within centres. In North America, major mall owners like Simon Property Group and Oxferd properties are creating dedicated areas for pop-up and online only players to drive foot traffic
- The in-store shopping experience will play an important role in demonstrating brand concepts and connecting with customers.
   Retailers will put an effort to bridge the gap between online and offline

By 2030, majority of the retailers will have both online and offline presence

# **Ecommerce Booms: Assertion 5** Offline will become more of a socializing hub with mixed-use properties





Sources: CBRE, Deloitte

- Mixed-use projects continue to reign supreme and account for 63.8% of projects under construction nationally, highest so far. These desirable urban locations are being anchored by non-traditional retail offerings such as coworking operators, like WeWork at Mirvish Village in Toronto. Viewed as a desirable co-tenant to retail, these types of occupiers help boost daytime foot traffic high as well as improving the mix of clientele
- A marked improvement has been noted in the regional shopping centre segment which dropped 50 bps from year end 2018 to 6%. Total vacancy rate also reduced by 20 bps to 3.4%
- Lifestyle and entertainment centres have been drawing investor attention, as owners and occupiers continue to reinvent and reimagine traditional spaces with "experiences" in mind
- Boom in fitness and food hall concepts prove to be major draw for many centres, boosting overall productivity and increasing foot traffic
- Consumers will be drawn to stores that offer experiences they can't find online. Consumer focus will shift from "Things" to "Experience"

To increase overall productivity and foot traffic, offline will shift 100% towards mixed-use concept by 2030

- 1. The scope of AI and ML application in CRE industry will further broaden
- 2. IoT and sensors will be used to improve efficiency and reduce costs
- 3. Every real estate developer will use drones extensively during planning, development and sale of properties
- 4. Immersive digital technologies will transform the real estate industry
- 5. Blockchain will transform core operations for CRE



#### Current

- Al is in it's early stages of adoption in CRE industry. Software platforms have started using Al and ML to help investors ensure the profitability and sustainability of their portfolios thereby reducing risk factor
  - Example: LocateAl uses machine learning to help in retail site selection by predicting market potential, identifying success factors and evaluating the impact of nearby competition

# Opportunities

- Within CRE industry, Al will have a deep impact on location decisions, including more precise property valuations forecasts. For instance, data about people's movement within a building can potentially be sold to advertisers or urban planners to help them in decision-making
- In another instance, CRE organizations can collect in-store shopping behavior data, use AI technology to identify patterns and generate insights. These insights can be given to institutional investors as well as retail tenants

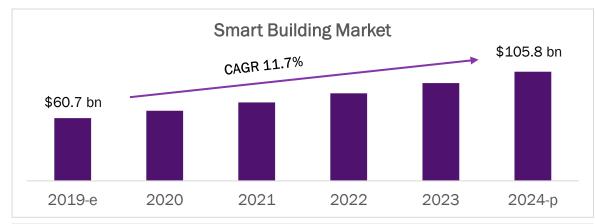
## Challenges

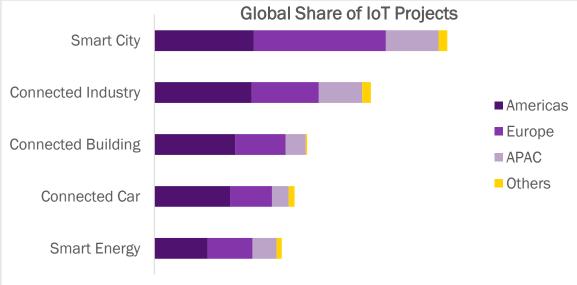
- Dearth of high quality data sources
- o Preference to deal with an agent instead of a system

Al and ML will work in harmony with humans by providing the why with every what

# **Technology Singularity: Assertion 2**

# IoT and sensors will be used to improve efficiency and reduce costs



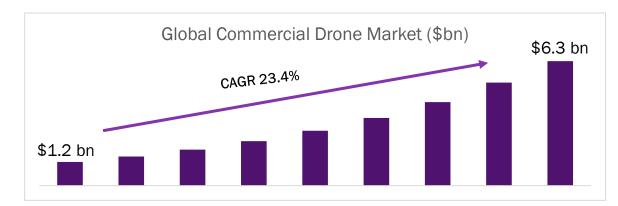


- The global smart building market is expected to grow from USD 60.7 bn in 2019 to USD 105.8 bn in 2024, at a CAGR of 11.7%
- The growing adoption of IoT technologies for building monitoring system (BMS), raising awareness of space utilization and increased industry standards and regulations will drive the growth of the smart building market
- Based on building type, the commercial segment is expected to lead the market from 2019 to 2024. The growth of this segment can be attributed to need for appropriate and tailor made solutions for optimized energy performance to reduce building energy consumption without compromising on comfort or security and enhancing energy
- Of all segments, connected building has experienced the largest increase in IoT projects compared to the 2016 study (7 percentage point increase). 61% of Connected Building projects identified involved facility-automation to reduce energy costs (e.g., the Marriott hotel chain in China is implementing building automation solutions resulting in savings of 10-15% on energy costs). 39% of projects are related to building security and 31% to HVAC/Heating/Cooling.
- IoT and sensors will be used to track movement of people and collect data.
   'Smart building' features such as lighting sensors and smart plugs will be used widely to lower energy usage
- Smart Buildings have gotten more and more intelligent over the past 20 years, and are getting even better through advanced sensor technology. IoT is starting to really change the way that CRE operates. More specifically, it has allowed managers, tenants, and even owners to have more control over their various operations of a unit or building

IoT capabilities and features will continue to grow and adapt to new building needs as the years go by

# Technology Singularity: Assertion 3

Every real estate developer will use drones extensively during planning, development and sale of properties

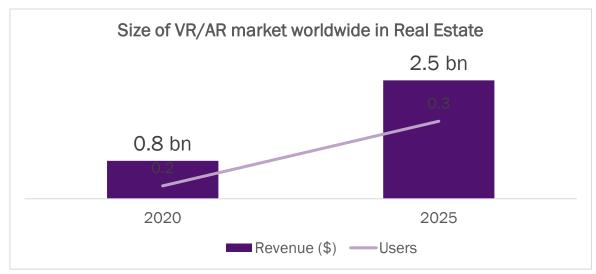


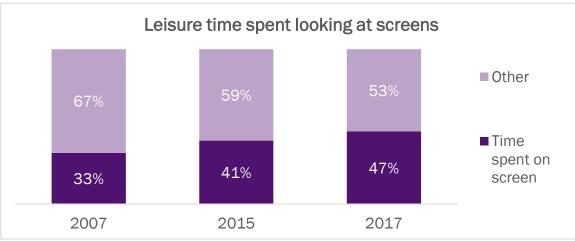
# Ability to perform hazardous tasks Higher accuracy Cost effective Provide image of views before construction Execute 3D mapping

- The global commercial drone market size, valued at \$1.2 bn in 2018 is projected to reach \$6.3 bn by 2026, at a CAGR of 23.37% during the forecast period. North Amercia leading the commercial drone market and continue its domination during the forecast period
- Drones are used to plan and photograph high rises and other residential multi-unit projects, either to help them sell or for inspection and surveying
- Many types of robots are poised to revolutionize the largely unautomated construction industry.
   For example, 3D-printing and industrial robots recently built a 3D printed bridge in Netherlands.
   Demolition robots, machines that can lay bricks, remote-controlled and autonomous vehicles are other examples of construction robots
- Drone technology offers tremendous opportunity for the business of real estate and the broader economy. That's why NAR (National Association of Realtors) continues to support the integration of drones into the National Airspace and a regulatory landscape that allows for the responsible commercial use of drones
- Real estate has become the number one industry in North America that uses drones for marketing purposes. And the numbers projecting the growth of the drone industry are staggering, 10 million drones were sold worldwide last year, that number is expected to nearly triple by 2021. Drone industry value was estimated at \$3.3 billion in 2015; by 2025, it's expected to be \$90 billion
- In 2016, to increase accessibility, FAA guidelines for drones in the U.S. were made favorable to real estate, and now 770,000 drones are registered with the FAA. In Canada, rules are currently stricter than the U.S., but the popularity of power of aerial footage has not slowed down the desire to use them in listing videos
- It's not hard to imagine the value that drones also offer for construction, where drones can generate accurate contour maps, monitor change over time, and share insights via the cloud. Data gathering is more accurate, occurs at a fraction of the normal time and the budget, and drives an unprecedented level of analytics
- We are just now touching the tip of the iceberg in terms of harnessing the true power of drones for business operations, and new ways of conducting business

By 2030, multiple drones will be used in every real estate project. Algorithm-Driven Autonomous Drones Will Be Game Changers

# Technology Singularity: Assertion 4 Immersive digital technologies will transform the real estate industry





#### Current

- Real estate sector has started incorporating ideas from entertainment industry in order to build cutting edge immersive experience for clients
  - 3D photography and 3D video used to create interactive walk throughs of buildings
  - With Virtual Reality(VR) and Augmented Reality (AR), buyers can tour a construction that is still getting developed
  - VR allows users to explore far beyond the general vicinity, giving them the opportunity to see the outside of a building, its campus and the city around it
  - Architects & developers are also using VR as a key component in their design process
  - AR can offer buyers a streamlined experience wherein community data, comparable prices, and building features are consolidated into one easy-to-use platform

#### Opportunities

- The market for VR in real estate alone could generate as much as \$2.6 billion with 0.3 mn estimated users by 2025
- North America has been assessed as the largest market share in the AR/VR market due to the presence of substantial market players and the growing investors in the AR/VR technology
- Commercial buildings and shopping centers are in high-trafficked areas, full of potential shoppers, and we need to be ready to take advantage of the massive revenue stream opportunity that AR is likely to provide
- Higher internet speed represents an opportunity to celebrate the adoption of VR & AR
- With increase in time spent on device, the content provided in immersive technologies will be increasingly personalized

#### Challenges

- Protection against unwanted AR uses in commercial properties
- · Lack of talent to meet the demand for growth
- · Widespread adoption is high on cost

By 2030, immersive digital technology will become as ubiquitous as touch-screens today. Customers will increasingly expect digital reality experiences to be more widely available

# Benefits of Blockchain in Real Estate



Improving trust and transparency



Reduced siloed databases



Make transaction processes more efficient



Limit the use of intermediaries



Better decision making

#### Current

- Block chain concept is at a proof of concept stage
- Block chain start-ups continue to garner heavy interest from venture capital investors and initial coin offerings
- Few companies have started initial testing of block chain technology for property listings. Examples: Imbrex, Aqua, Shelter Zoom, Telia, Rex MLS, Ubitquity, Ripple, ChromaWay

## **Opportunities**

- Authentic and efficient property search
- · Expedite pre-lease due diligence and financial evaluation
- Ease leasing and subsequent property and cash flow management using smart contracts
- Pivotal in connecting various technology systems which will refine quality of data, analysis and facilitate decision making
- Reduce fraud and simplify the process of title records and checks
- Direct exchange of all transaction related information in a transparent manner resulting in faster cross border transactions

## Challenges

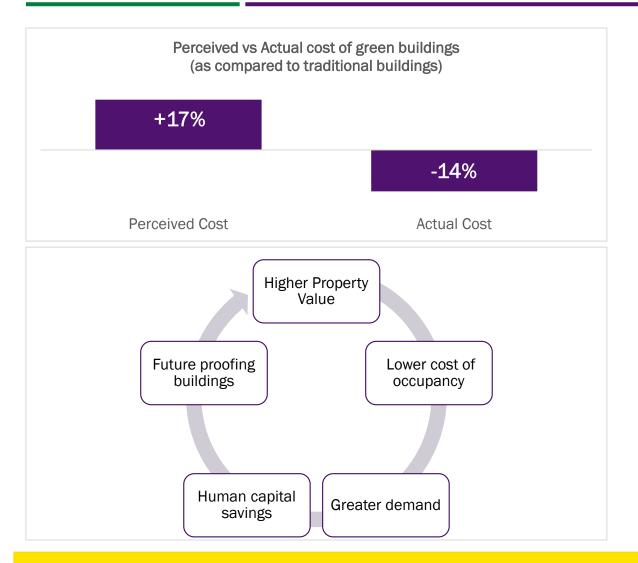
- Blockchain can increase costs if not implemented correctly
- Lack of standardization across blockchains

By 2030, blockchain will open up gates for potential investors from across the world to try their hands in real estate investment

- 1. The imperative to act is shifting from a moral to a business case
- 2. IoT convergence will make buildings more efficient and reliable
- 3. New government regulations and incentives will be created aimed at making commercial real estate more efficient and sustainable
- 4. Investment in zero energy buildings is increasing

# Sustainable Development: Assertion 1

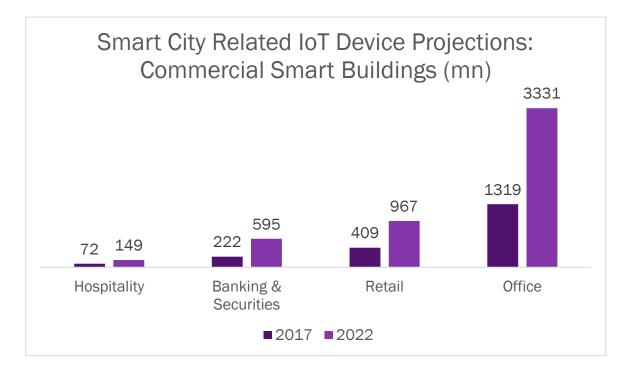
# The imperative to act is shifting from a moral to a business case



- According to the World Green Building Trends 2016 Smart Market Report, green buildings are 14% less costly to operate than traditional buildings – with newer buildings saving significantly more in terms of energy costs. Additionally, green buildings are worth 7% more than traditional buildings, on average – with market demand for green buildings doubling every three years
- Bank of America, Morgan Stanley and Goldman Sachs are among the investors finding that sustainable companies produce stronger fiscal results
- Companies that are able to offer sustainability reports benefit not only from improved access to capital, but also benefits like a better reputation, higher employee satisfaction and energy savings from increased building efficiency
- By greening the built environment in the neighborhood and city scale, large-scale economic priorities such as climate change mitigation, energy security, resource conservation and job creation, long-term resilience and quality of life can be delivered
- As green building certification schemes, rating systems and green buildings in general become more mainstream around the world. The challenge is no longer about not having the expertise to deliver green buildings, but rather having the data and knowledge to be able to deliver them cost effectively
- Integrated design process will increasingly play a key role in keeping costs down without compromising the quality of green buildings being constructed

Going green is cost effective and is beneficial for both the owner and the developer. By 2030, going green will become a status quo

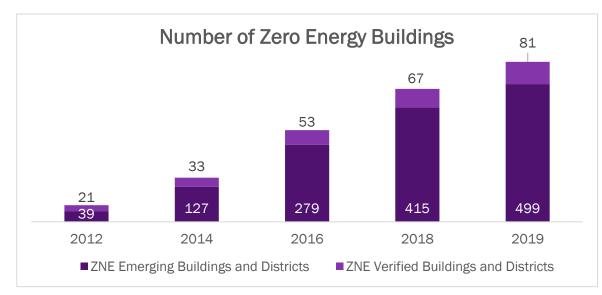
# Sustainable Development: Assertion 2 IoT convergence will make buildings more efficient and reliable



- In terms of what kind of energy, buildings consume 53% of the world's electricity, estimated to increase to 80% by 2040
- The global market for smart meters is forecasted to cross USD 11 billion by 2024, with commercial meter shipments reaching as high as 30 million units. This growth is being driven by consumer demand for more accurate billing as well as to support energy conservation efforts
- Beyond the service entrance, commercial and industrial energy consumers are also increasingly installing more sensors, meters, and other connected devices in new and existing facilities. Memoori estimates that the total number of connected devices across all categories of smart buildings will reach over 10 billion by 2021
- Smart building features such as lighting sensors, smart plugs, and other technologies, will lower energy usage by 26 percent.
- The IFMA estimates that with active controls, a 50% increase in efficiency can be expected. With proactive, predictive maintenance and analytics one can save up to 20% per year on maintenance and energy costs. What's needed is the right combination of tools. The Internet-of-Things (IoT) offers an answer
- IoT-related innovations that are converging to create intelligent buildings that minimize energy use, optimize performance and lifespan of physical assets, and ensure the safety, security, and efficiency of people and processes
- These smart devices enable facility teams to deeply access their power network by measuring, collecting data, and providing control functions. Digital power meters, power quality meters, and smart circuit breakers measure all aspects of electricity and other utilities. They also monitor equipment performance and alarm on threats to reliability or efficiency. It's now possible to meter energy and other parameters at every key point throughout a facility's power network, from the main utility incomes down to individual plug loads. This will reveal every instance of energy waste while helping the maintenance team address risks before they can cause downtime or damage
- Data can be aggregated to cloud-hosted repositories that share data with everyone that needs it, using a choice of analytic platforms including power and energy management, building management, and asset management. If one needs outside support, an IoT network makes it easy to access remote monitoring, maintenance, and engineering consultation services

By 2030, smart buildings will be the global model for optimized efficiency and productivity

# Sustainable Development: Assertion 3 Investment in zero energy buildings is increasing



Market Ready technologies applied in the Zero Energy building set	
Heat Pumps	Daylighting Access and Controls
Ventilation	Energy Management Systems
Highly Efficient Thermal Envelope	Building Dashboards
Building Orientation & Glazing Ratio	Energy Recovery Systems
Solar Control – Shading	Plug Load Reductions

- While still a nascent market, the growth trend for Zero Energy is steep. The
  count of Zero Energy buildings across the United States and Canada has
  increased tenfold since 2010, and encompasses 80 million square feet of
  commercial building space. (Basis information collected from thousands
  of low-energy projects across USA and Canada by New Buildings Institute)
- In addition to growing private-sector investment, more and more states and cities are calling for zero energy and zero carbon building goals in their policymaking and for their own buildings
- From Washington State to Virginia, governors are issuing executive orders and pursuing upgrades to energy codes
- Legislatures are passing bills to require zero energy, and increasingly zero carbon, performance outcomes for both residential and commercial buildings
- Cities likewise are using building energy policy as a lever to reduce carbon locally as buildings are responsible for up to 75% of carbon emitted in cities. Programs are being implemented that provide technical support and financial incentives that are spurring market adoption
- The growing number of projects and technology application trends also show an increasing capability of the market to deliver on zero energy performance
- Zero-net-energy buildings are becoming increasingly commonplace. It seems that everyone wants the "net zero" opportunity. If a project wants to be newsworthy, it needs to incorporate something NEW and "net zero" seems to be the ticket

By 2030, zero energy buildings will be the norm

# Sustainable Development: Assertion 4

New Government regulations and incentives will be created aimed at making CRE more efficient and sustainable

# Benefits of Blockchain in Real Estate



The United Nations Environment Program is dedicated to combating climate change and developing sustainable practices



The USGBC is a non-profit organization which promotes sustainability in building design, construction and operations



Arc is a state of the art platform designed to help collect, manage and benchmark your data to improve sustainability performance



WELL Building Standard is a flexible framework for improving health & human experience through design, advancing health and well-being in buildings globally



Living Buildings Challenge seeks to develop regenerative buildings that connect occupants to light, air, food, nature and community

- Buildings currently account for about 33% of global energy use more than industry or transportation and 20% of energy-related Green House Gas emissions. By 2050, 66% of the world's people will be living in cities, consuming over 80% of the world's electricity
- Facility management teams from around the globe are facing corporate mandates and government regulations aimed at making their office buildings, campuses, or other facilities more efficient and sustainable
- Multiple organizations and regulations are in place to combat climate change and develop sustainable practices
- Smart building incentives: To curb energy use, congress offers incentives such as the Energy Efficient Commercial Building Deduction(179D), which in 2006 through 2017 allowed qualifying building owners and businesses to receive a tax deduction of up to \$1.80 per square foot for energy efficient buildings including retail, office, industrial and warehouse buildings
- Energy-efficient improvements include HVAC and lighting systems, which ultimately cut energy costs and improve a building's value. Low interest financing packages further facilitate such efficiency enhancements
- With the increase in government regulations and incentives, inclination of CRE towards sustainable development will increase

By 2030, more CREs will comply with the regulations