INDUSTRY INSIGHTS

Retail, E-commerce, and PropTech

with a special emphasis on India

1. Retail & E-Commerce

OVERVIEW

Retail is one of the **most significant industries** in the world. As technology usage increased enormously, e-commerce became a primary channel of retail sales worldwide. E-commerce and retail hence go hand in hand and are considered together in this report.

Below are some significant numbers which will help understand this industry:

GLOBAL		INDIA	
4.25 $ trillion	Global retail e-commerce market size in 2019	795 $ billion	Indian retail e-commerce market size in 2017
9.4% compounded annual growth rate	Expected growth rate of industry from 2020 to 2027	9-11% compounded annual growth rate	Expected growth rate of India's retail market from 2018 to 2026
8.58 $ trillion	Revenue forecast in 2027	1.75 $ trillion	Revenue forecast in 2026

The global retail e-commerce market size was valued at USD 4.25 trillion in 2019 and is expected to grow at a compound annual growth rate (CAGR) of 9.4% from 2020 to 2027. Some factors responsible for this growth, particularly in India, are:
1. India has the 2nd largest population in the world
2. Indian Middle class has around 600 mn people
3. Increasing urbanization in India
4. Increasing consumer spending worldwide
5. Growing income
6. Increased online spending
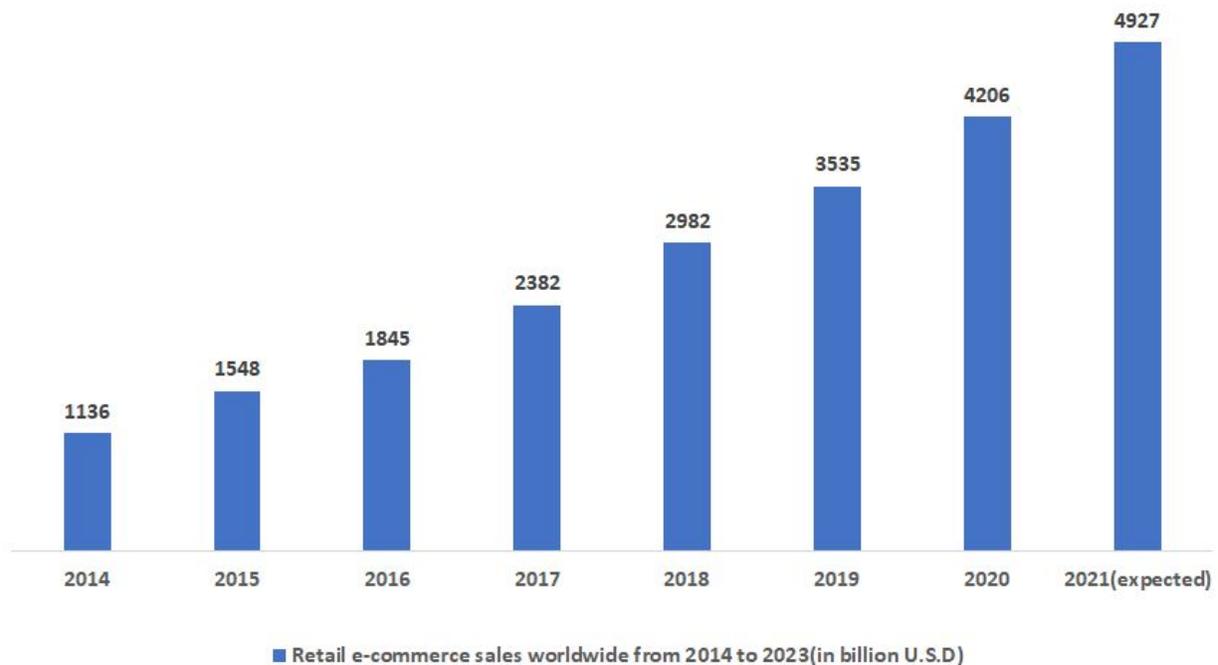7. Growth of rural consumption

8. Young millennial households

These factors provide for a plethora of opportunities for e-commerce and retail market in India. And this has not gone untapped- big e-commerce firms(read Flipkart, now acquired by Walmart) are coming up in India. Reliance Jio Infocomm Limited (Jio), the Indian telecommunications company in India is looking to be a world leader in e-commerce. In May 2020, JioMart, the e-commerce venture from Jio, launched in 200 cities and towns. (More in Jio Case Study below).

On the other hand, e-commerce has put pressure on worldwide manufacturers and retailers. They are now looking to differentiate themselves from the competition and most are shifting to online stores as an addition to the physical presence.

MARKET SIZE and PRESENT SCENARIO

Retail e-commerce sales worldwide from 2014 to 2023(in billion U.S.D)

Year	Sales (billion USD)
2014	1136
2015	1548
2016	1845
2017	2382
2018	2982
2019	3535
2020	4206
2021(expected)	4927

■ Retail e-commerce sales worldwide from 2014 to 2023(in billion U.S.D)

As is evident from the graph above, e-commerce sales are increasing at a fast pace every year.

CORONAVIRUS AND THE E-COMMERCE MARKET

Due to the Corona Virus pandemic in 2020, there was a temporary decrease(during nationwide lockdowns), followed by a tremendous increase in the e-commerce sales after the lockdowns reopened. A study by Adobe showed that online merchants gained as much as an extra $107 billion in 2020 thanks to pandemic. And the high number of smartphones sold contributed the most to this list. As per the study:

1. U.S. online sales increased 42% year over year in August, a slowdown from July.
2. BOPIS(buy online pickup in store) sales surged 259% year over year in August, and smartphone sales generated 40% of online sales so far in 2020(thanks to work-from-home and online classes etc). Adobe also found that consumers spent $190 billion on smartphones in 2020 as of August.

A whopping fact based on 2020 numbers:
"As of August, 130 days in 2020 exceeded $2 billion in online sales, compared with 2019, when only two days exceeded $2 billion in online sales outside of the holiday season."

But this is slowing down as more and more people feel comfortable visiting physical stores. Hence, Adobe attributes part of the August slowdown to more stores re-opening after the restrictions are being decreased.
**In Adobe's Aug. 31-Sept. 2 survey of 1,018 U.S. consumers, 27% of consumers said they felt more comfortable shopping in physical stores compared with July.
Nevertheless, online shopping continues to dominate the market.**

Remazing GmbH, an agency that helps brands sell on Amazon found that 71% of the top 100 search terms on the U.S. Amazon marketplace were related to COVID-19 from mid-February to mid-March. Remazing defined COVID-19 keywords as searches related to products that surged because of the virus, examples being: face mask, disinfectant, hand sanitizer, N95 mask, thermometer for adults, rice, bread, rubbing alcohol and toilet paper.

All of this, while being intuitive, provides a structured insight of the market during and after the peak of the pandemic curve.

MARKET SEGMENTATION

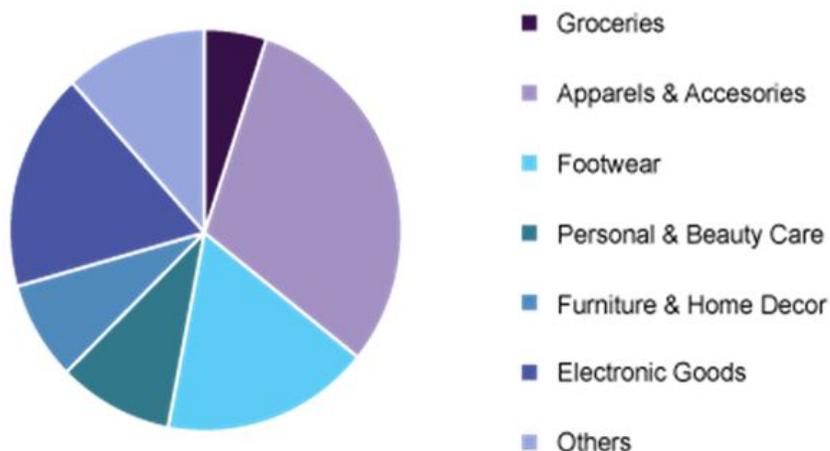The retail and e-commerce market is broadly categorized into the following product segments:
1. Groceries
2. Apparels, Footwear and Accessories
3. Toys and Baby products
4. Personal and Beauty Care
5. Furniture and Household Decor
6. Electronic Goods

MARKET SHARE

The highest selling e-commerce segment is Apparel and accessories followed by Consumer Electronics. Apparel and accessories segment led the market and accounted for more than 30.3% revenue share in 2019.

As far as consumer electronics is concerned, the world has increasingly seen a number of online exclusive consumer electronics models. One of the reasons for the dominance of this segment is that this industry is continuously evolving with new and innovative developments with an increasing ease of using products.

Global retail e-commerce market share, by product, 2019 (%)

- Groceries
- Apparels & Accesories
- Footwear
- Personal & Beauty Care
- Furniture & Home Decor
- Electronic Goods
- Others

Source: www.grandviewresearch.com

E-commerce Funding in India

Major companies and their recent funding in India:

MAJOR PLAYERS	INVESTMENT In 2020	MAJOR INVESTOR
AMAZON INDIA	$1bn	AMAZON
FLIPKART	$1.2bn	WALMART LABS
MYNTRA	$300mn	FLIPKART
PAYTM	$1bn (2019)	T Rowe Price Group
BIGBASKET	$60mn	ALIBABA

SNAPDEAL	$1.13bn(2017)	Nexus Venture Partners

"Indian startups raise $38.3 billion funding in 2018; e-commerce, fintech attract highest investments: Report"

Flipkart's $16 billion deal with American retailer Walmart accounted for the biggest piece of the pie.

There has been a meteoric rise of startup funding for Indian startups. With India and China being the leading players, Asia has emerged as a key contender for startups globally, beating the Americas and Europe.

In the last part of this section, we cover some Indian e-commerce companies not much spoken about. They have definitely created a dent in this space because of the enormous amount of funding they received and the unique segments they are targeting. Some of these are:

Startup	Total Funding Amount	Headquartered in
ARTWALEY	$1B	Bangalore
INSTANT PAY	$340B	New Delhi
WIKKA	₹200M	New Delhi
DaMENSCH	₹137.5M	Bangalore
Dial for Books	₹50.3M	Chennai

REASONS FOR INCREASED INVESTMENTS IN INDIA

India ranks among the best countries to invest in Retail space. **India ranked No. 2 in Global Retail Development Index (GRDI) in 2019.** Retail is India's largest industry, currently accounting for over 10% of the country's GDP and 8% of total employment.

Expected growth rate of E-commerce market for GVM(Gross Merchandise Value) till 2026 in India is 30% compounded annual growth rate.

Some reasons for these significant numbers are:
1. Policy support
2. India has the 2nd largest population in the world: plethora of opportunities
3. Middle class of 600 mn people, Young millennial households
4. Increasing urbanisation
5. Increasing consumer spending, Growth of rural consumption
6. Increased online spending
7. Growing income

8. Increasing investments

CHALLENGES IN E-COMMERCE BUSINESS

1. **Absence of online identity verification:** both at the end of customers as well as the suppliers/manufacturers. Fake registrations can lead to revenue losses.
2. **Competitors:** With the world shifting towards online, there is a lot of competition, especially in the e-commerce market. Competitors can be retailers and manufacturers selling products directly instead of selling it through the e-commerce platform, or they can be other e-commerce companies.
3. **Shopping cart abandonment:** Even e-commerce giants face this issue, the major reason of which being the complicated and bug-filled checkout processes.
4. **Maintaining customer loyalty:** This is one of the most important factors for a business and can be built only after multiple transactions.
5. **Product Return and Refund:** this is an important part of customer service and can lead to losses for the company: both in shipment and reputation
6. **Data Security:** Customer's data is very confidential, and protecting it is a huge challenge. Storing this enormous amount of information can be very costly too.

KEY GLOBAL COMPANIES

Companies ranked on the basis of global net sales in 2018:

Company		JD.COM	Alibaba.com Global trade starts here.™	Apple		Walmart
Country	USA	China	China	USA	China	USA
Founded	1994	1998	1999	1976	1990	1962
Global net sales in bn USD in 2018	77	61	36	26	20	16

Key Takeaways:
1. The top 5 online stores' global net sales amounted to more than $200 billion in 2018.
2. Out of the top five world e-retailers ranked by online sales in 2018, 3 are from the US and 2 are from China.
3. "Electronics and media" is the main and best-seller category of all five top-ranked e-retailers globally.

New Trends in E-commerce

1. **AR(Augmented Reality)** enhances the reality of online shopping:
   a. It helps customers visualise the products that they're interested in, whether it's a clothing item or furniture. They can see the furniture placed in their rooms virtually.
   b. In 2019, Gartner predicted that 100 million consumers will shop using AR by 2020, so it will be interesting to see how that shakes out in the coming year.
2. Increasing **voice search**
   a. Loop Ventures forecasts that 75% of U.S. households will own a smart speaker by 2025.
   b. People are increasingly relying on voice assistants like Google Assistant or Amazon Alexa to do everything from check the weather to buy products online.
   c. Voice search provides more optimised results
3. **AI** helps shops learn about customers. On-site personalization uses those insights to create more individual experiences.
   a. AI has improved customer service, enhanced personalization and helped companies utilise customer data with real-time insights to improve the shopping experience.
4. **Big data** plays a big part in creating personalized experiences
   a. Also, according to Forbes, 53% Of companies were adopting Big Data Analytics, as of 2017, up from 17% in 2015.

     b.   Walmart is an example: it is **Leveraging Data to Make Business Better**.
5. **Chatbots** improve the shopping experience
     a.   Experts predict that [80% of businesses](#) will be using chatbots in 2020.
     b.   Chatbots have automated tasks such as customer support through chatbots to help customers 24/7.
6. **Mobile shopping** is still on the move.
     a.   In 2019, [Statista estimated that by the end of 2021, 73%](#) of ecommerce sales will take place on a mobile device.
7. Customers respond to **Video**
     a.   In 2019, video was shown to increase conversion rates with [62% of consumers](#) saying they watch [product reviews](#) before making a purchase.
8. More ways to **pay**.
     a.   Customers are constantly asking for more and better payment options
     b.   Apple Pay, Paypal, Google Pay are some notable mentions.
9. **Headless and API-driven e-commerce** allow continued innovation.
     a.   [Headless commerce](#) is a solution that allows a store's [ecommerce platform](#) to be completely decoupled from the frontend presentation layer.
10. **Subscriptions** build customer retention
     a.   Amazon Prime, Flipkart Gold in India are some relevant examples.
11. **Growth of B2B**
     a.   More and more B2B unicorn startups are coming up worldwide
     b.   Global retail ecommerce sales for B2B are expected to reach $1.1 trillion in 2021, according to data from [Statista](#).
     c.   [Forrester](#) predicts that by 2020 almost half of all adults will be Millennials, which also means an increase in [Millennial](#) B2B buyers.
12. Digitally native brands go **offline**
     a.   In order to increase the customer base and to give a different experience to users, brands open up offline legs as well. Amazon GO is an example
13. **New channels** and devices for marketing
     a.   Audio and video are already influencing users
     b.   While Facebook and Instagram will continue to be the bread and butter on which many brands rely, significant growth can be expected in ad dollars targeting consumers who are streaming their favorite streaming television or music services. (Source: Shopify plus)
14. **Sustainable** e-commerce goes mainstream
     a.   People are become aware of the limitedness of the resources on Earth.
     b.   [One survey](#) found that 50% of respondents wanted more sustainability in the fashion industry, and 75% wanted to see less [packaging](#).
     c.   Biodegradable packaging, going paperless and using recyclable supplies are ways to do this
15. **Dropshipping** is becoming increasingly popular
     a.   Drop shipping is a supply chain management method in which the retailer does not keep goods in stock but instead transfers its customers' orders and shipment

details to either the manufacturer, another retailer, or a wholesaler, who then ships the goods directly to the customer.

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2. Property Technology

OVERVIEW AND MARKET SIZE

What is PropTech?

Property technology(PropTech), also called real estate technology, is the application of information technology (and economics) to real estate markets.
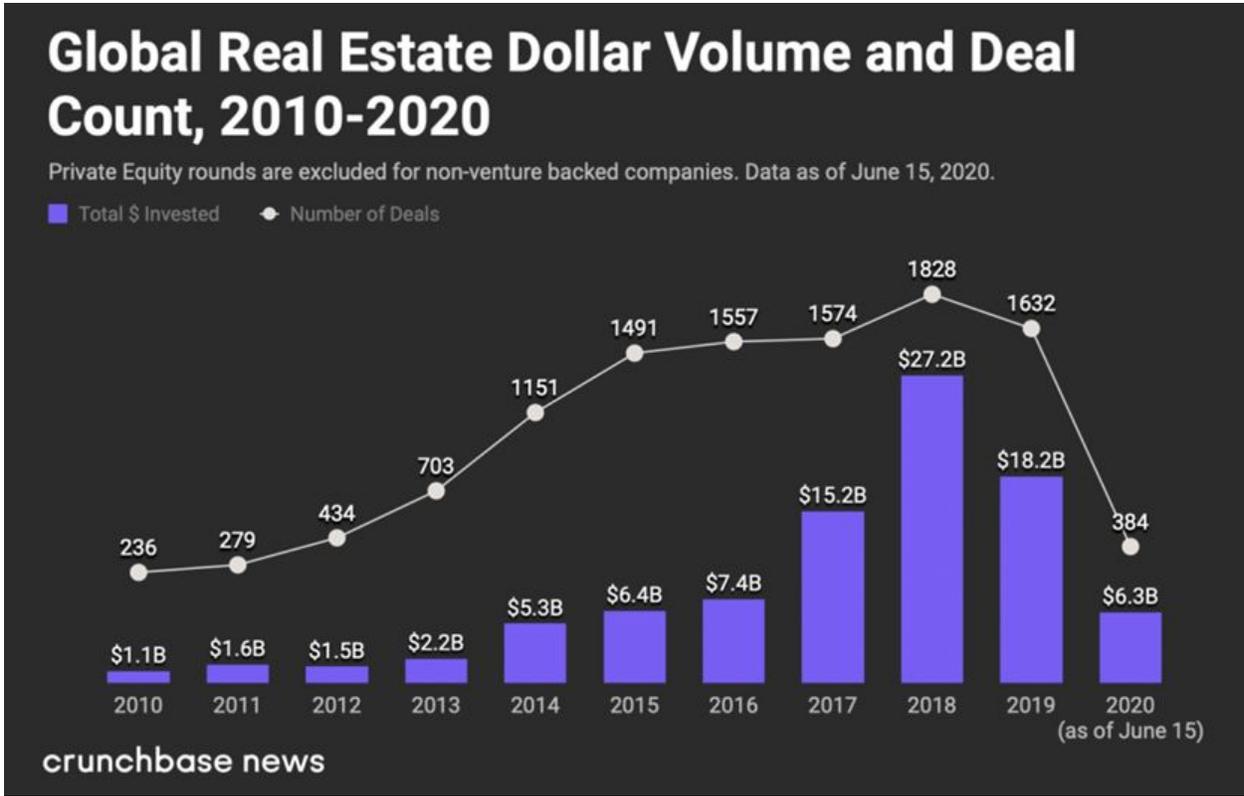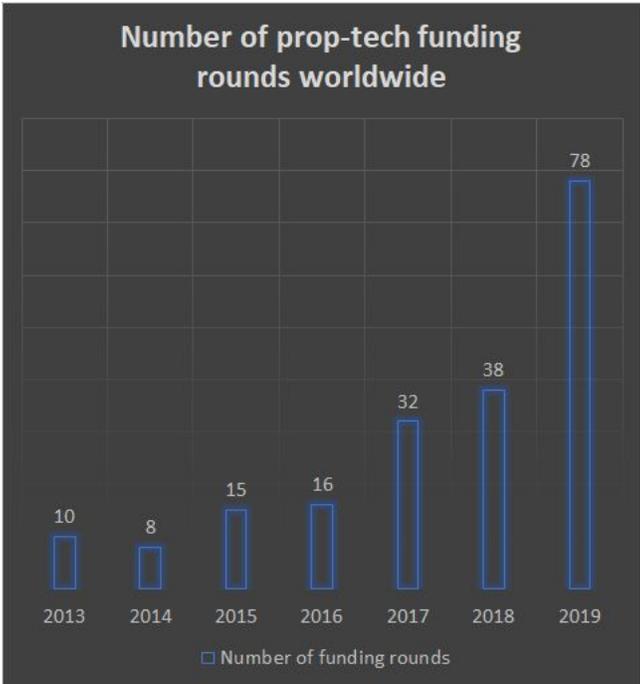
- PropTech is the technology which is used to offer services in real estate to buy, sell, rent, develop, market and manage property in a more efficient and effective way.
- It involves using IT(information technology) to help companies research, buy, sell, and manage real estate. PropTech uses digital innovation to address the needs of the property industry.

Why PropTech?

- 12% Growth Y-o-Y in Deal Activity
- 50% Growth Y-o-Y in Funding
- 2014 saw highest number of prop-tech company launches in the last decade: 255
- Proptech contributes $3.5 trillion to the US GDP, of which $836 billion is construction spend.

Proptech Funding

Funding in proptech is increasing every year which highlights its growing potential and it is expected to capture a significant chunk of the funding share in future.

Number of prop-tech funding rounds worldwide

Year	Number of funding rounds
2013	10
2014	8
2015	15
2016	16
2017	32
2018	38
2019	78

☐ Number of funding rounds

Global Real Estate Dollar Volume and Deal Count, 2010-2020

Private Equity rounds are excluded for non-venture backed companies. Data as of June 15, 2020.

■ Total $ Invested   ● Number of Deals

Year	Total $ Invested	Number of Deals
2010	$1.1B	236
2011	$1.6B	279
2012	$1.5B	434
2013	$2.2B	703
2014	$5.3B	1151
2015	$6.4B	1491
2016	$7.4B	1557
2017	$15.2B	1574
2018	$27.2B	1828
2019	$18.2B	1632
2020 (as of June 15)	$6.3B	384

crunchbase news

Key Takeaways:

1. In the last 10 years, $92.4 billion has been pumped into 11,200 global real estate companies, with a surge beginning in 2017, according to Crunchbase data.

2. According to a research firm CREtech (Obando, 2019):
   a. Investment in Prop-Tech companies globally hit $14 billion in the first half of 2019.
   b. 2017 saw a record $12.7 billion in PropTech investment, a 309 percent increase from the first half of 2018.

DRIVERS OF CHANGE:

1. **Automation and Innovation**
   The real estate industry has to move at high speeds to pick trends and tastes of digitally savvy customers.
2. **Online search platforms**
   Aggregation services and search providers are being increasingly used by people.
3. **Transparency and Accountability**
   The transactions and management on the platform need to be transparent and only technology can enable this.
4. **User experience – the game changer**
   User experience is becoming increasingly important as it is one of the main factors that drives user retention.
5. **Strategy – a working Business model**
   Service providers should be ready to adopt, both resources and skill-wise and must be thoughtful about the success of their business model.
6. **Making the most of Housing policies**
   The sector is experiencing significant regulatory changes thanks to government policies and a strong focus on affordable housing and initiatives like Smart Cities. Hence, to scale up efficiency and returns, it becomes necessary to adopt technology.
7. **Enhances workplace experience**
   a. Many organisations have adopted cafeteria apps, and F&B tech for their large campuses with thousands of employees. This ensures a seamless food management experience for employees.
   b. Several organisations and developers have started to adopt a cloud and mobile-based visitor management system to optimise lobby operations, offer a smooth experience to visitors and keep the premises secure.
   c. Effective solutions for connected workplaces have surfaced. These include solutions for desk and meeting room management, utilisation of valuable space, increasing productivity etc.
8. **Sensors track office usage and plan occupancy**
   a. AR and virtual reality for occupancy planning and visualisation is being used to plan occupancy in advance.
   b. IoT sensors capture a lot of actionable data which can help optimise space and save expenditure on necessary commodities like electricity and water.
9. **Track energy consumption and control wastage**

a. Data captured by sensors and other devices help reduce wastage and save energy. Also, green buildings is the new trend in the real estate industry.

AREAS OF ADOPTION

- Construction Technology
  - Developers are able to speed up construction.
- Project & Facility Management
  - Technology is being used in all services starting from parking to pantry to desk management
- Real Estate Transactions
  - Technologies like Blockchain are ensuring seamless, secure and transparent transactions
- Asset Valuations
  - Property valuation is becoming increasingly data-driven and AI, ML are being used to generate insights
- Assets and Space Management
  - IoT sensors, ML algorithms enabling more effective use of assets and space

IDENTIFYING THE NICHE IN PROPTECH

There are different types of companies/startups operating in this space. Some of their areas of focus include:
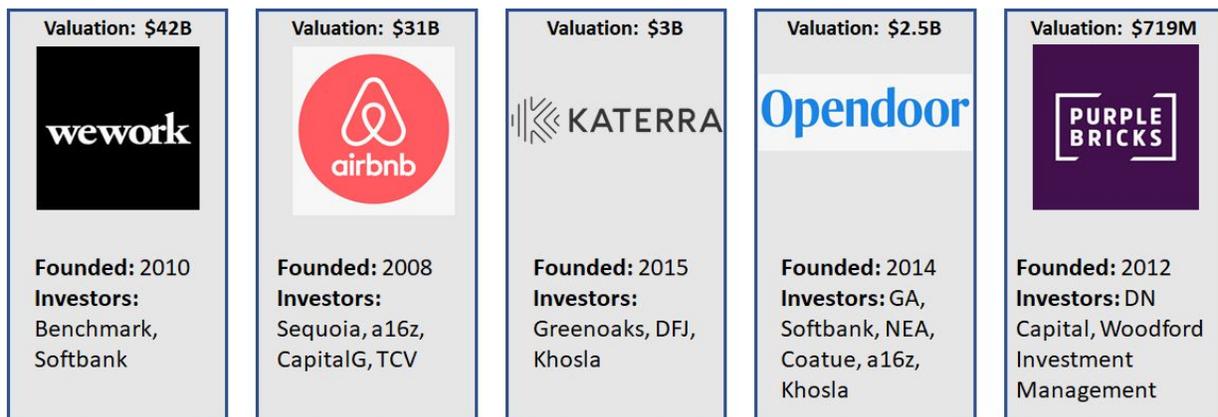
	Deliverables	Companies/Startups
Information aggregators	-Listing portals -Improve access to and aggregate accurate sales information -The ability to quickly and easily access qualified prospects has greatly benefited independent and corporate agencies	Rightmove
Efficiency drivers	-Improve efficiency and reduce costs -Related mostly to property management space of residential properties and commercial buildings	Fixflo

Shared economy	- Converting properties into lucrative short-term holiday lets instead of catering for long-term residential renters.	Airbnb
Smart buildings	-Related to the boom in the Internet of Things (IoT) -Digital lockers, smart thermostats, keyless doors, voice-controlled lighting etc.	Honeywell, View

TRENDS IN PROPTECH

1. **Data** will drive the transformation in real estate
2. Proptech will help to adjust to the **regulatory environment** which is otherwise a huge burden
3. **Virtual reality** is the new normal in the real estate sector
4. **COVID-19** makes **residential real estate** important. **Work from home** has opened up new opportunities- to reside far from the office, but this is possible only through technology.

MAJOR PLAYERS

Valuation: $42B	Valuation: $31B	Valuation: $3B	Valuation: $2.5B	Valuation: $719M
wework	**airbnb**	**KATERRA**	**Opendoor**	**PURPLE BRICKS**
Founded: 2010 **Investors:** Benchmark, Softbank	**Founded:** 2008 **Investors:** Sequoia, a16z, CapitalG, TCV	**Founded:** 2015 **Investors:** Greenoaks, DFJ, Khosla	**Founded:** 2014 **Investors:** GA, Softbank, NEA, Coatue, a16z, Khosla	**Founded:** 2012 **Investors:** DN Capital, Woodford Investment Management

Major investors	**Sequoia**
	Softbank

$79.219 Bn	**Combined Valuation of these 5 major players**

Special Mention: Genea is a SaaS cloud-Based, automated property technology company. It has raised $7.6M of funding and was founded in 2006.

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