

Deep Dive PropTech in China

April 2021



metaprop.



Introduction

The scale and impact of China's emergence as a global technology trendsetter has made the country an attractive destination for tech firms. While many tech firms have had tremendous success in the West, many are hesitant to enter the Chinese market. In the area of property technology ("PropTech"), Chinese development is still slightly behind that of the US and Canada. However, China's cutting-edge approach to retail, e-commerce, and mobile payment has unlocked its potential for PropTech growth.

Understanding China's PropTech landscape can provide global real estate players and the PropTech community with a new perspective on the adoption of technology in the real estate industry.

The report examines the opportunities and challenges in cross-border PropTech transfers. It also serves as a follow-up to the "[An Introduction to PropTech in China](#)" published by MetaProp in December 2017.



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Executive Summary



Factors Driving Real Estate Innovation

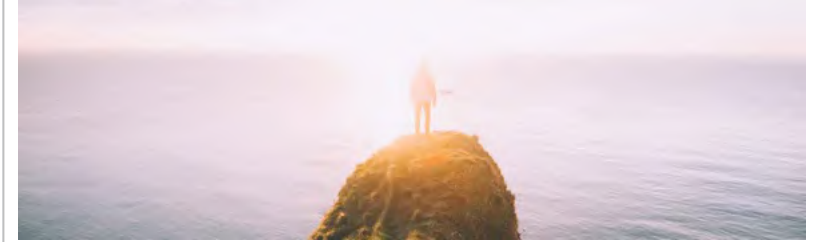
1. The **government's** push for innovation & new infrastructure.
2. Chinese **consumers'** preferences are evolving.
3. **Real estate** firms are innovating to compete.
4. Chinese **PropTech** unicorns are catching up with the West.
5. **Internet giants** all have a real estate playbook.



Cross-Border Opportunities

Foreign startups have the potential to build cross-border businesses based on their **tech competency** relative to local rivals and their **propensity for adoption** in the Chinese market. They need **China-specific strategies** in order to:

1. Develop deep knowledge about culture, market, and customers.
2. Navigate the regulatory environment.
3. Adapt to the China landscape and build a unique positioning.



Trends on the Horizon

1. The rise of **super app** in PropTech.
2. Chinese developers are becoming **service-providers**.
3. Physical assets will be digitally-powered to provide omnichannel and **value-driven experiences**.
4. **New technologies** will unlock more applications in real estate.
5. Real estate giants will collaborate with the tech sector to build **industry best practices**.

01



Understanding PropTech in China

- PropTech Development in China
- Major Players in PropTech-China vs US
- PropTech Landscape in China
- Tech Applications in Real Estate in China
- Residential and Commercial PropTech Market Maps in China

PropTech Development in China

The development of PropTech in China followed major technological advancement, industry change, and the US PropTech industry.

	2000-2007 PropTech 1.0	2008-2016 PropTech 2.0	2017-present PropTech 3.0
PROPERTY FOCUS	Residential	Residential & Office	Residential, Office, Retail & Mixed-Use
TECH DRIVERS	<ul style="list-style-type: none"> • Basic Information Technology • Popularity of PCs • Data analytics 	<ul style="list-style-type: none"> • Internet • Mobile Devices • Big data infrastructure & software 	<ul style="list-style-type: none"> • AI & Machine Learning • Blockchain • 5G • IoT & Automation
TECH TRENDS	<ul style="list-style-type: none"> • Real estate online listing & brokerage • Home decoration e-commerce • Digital design & construction integration • Data-driven market research 	<ul style="list-style-type: none"> • Sharing economy • Rental services • SaaS • Smart building & smart home • Big data analytics • Home decoration & furnishing 	<ul style="list-style-type: none"> • Full-service home brokerage • AR/VR • 3D Printing • Robotics • Building automation • Commercial real estate marketplace
PROPTech FIRMS	        	        	

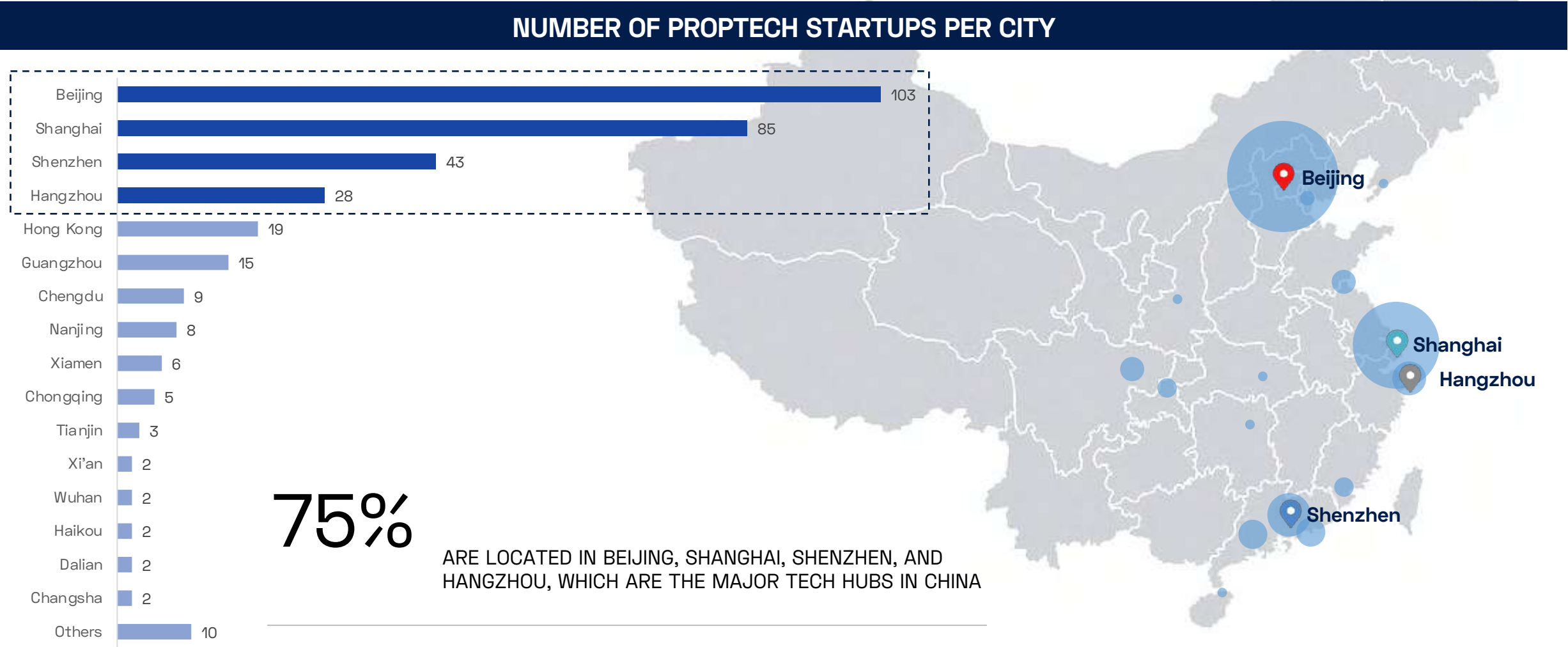
Major Players in PropTech – China vs. US

Chinese PropTech startups mimic their US counterparts with a more local business model.



PropTech Landscape in China

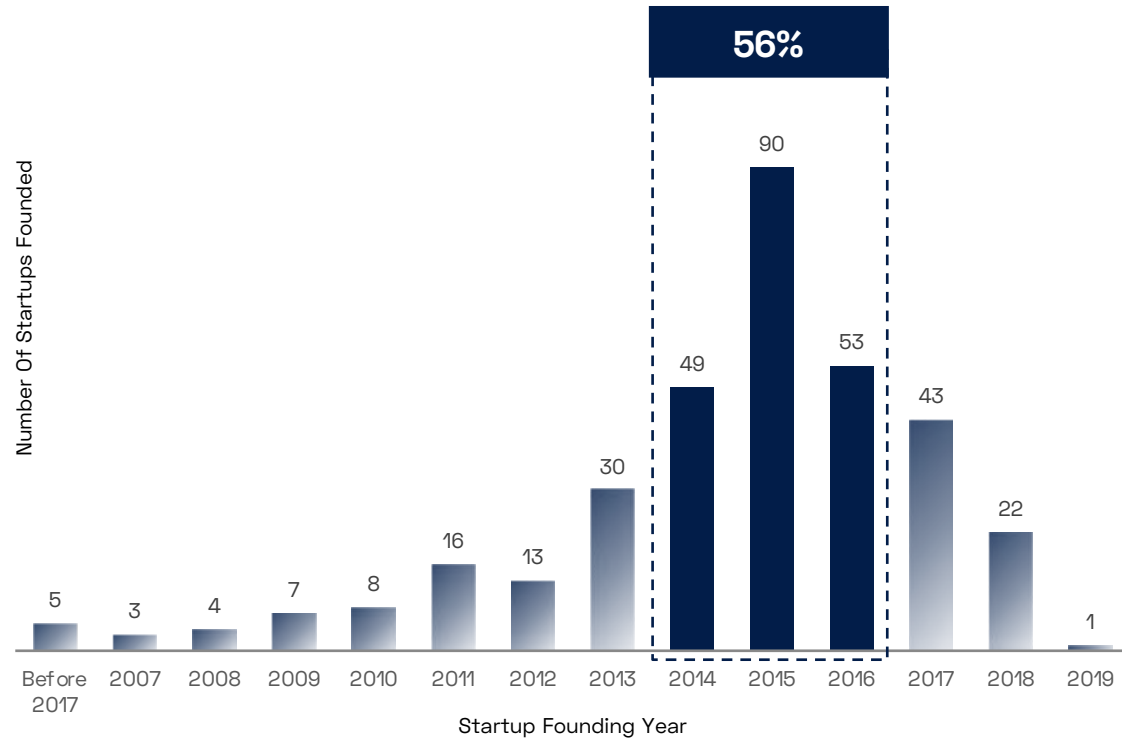
Beijing and Shanghai are the main hubs for PropTech in China.



PropTech Landscape in China

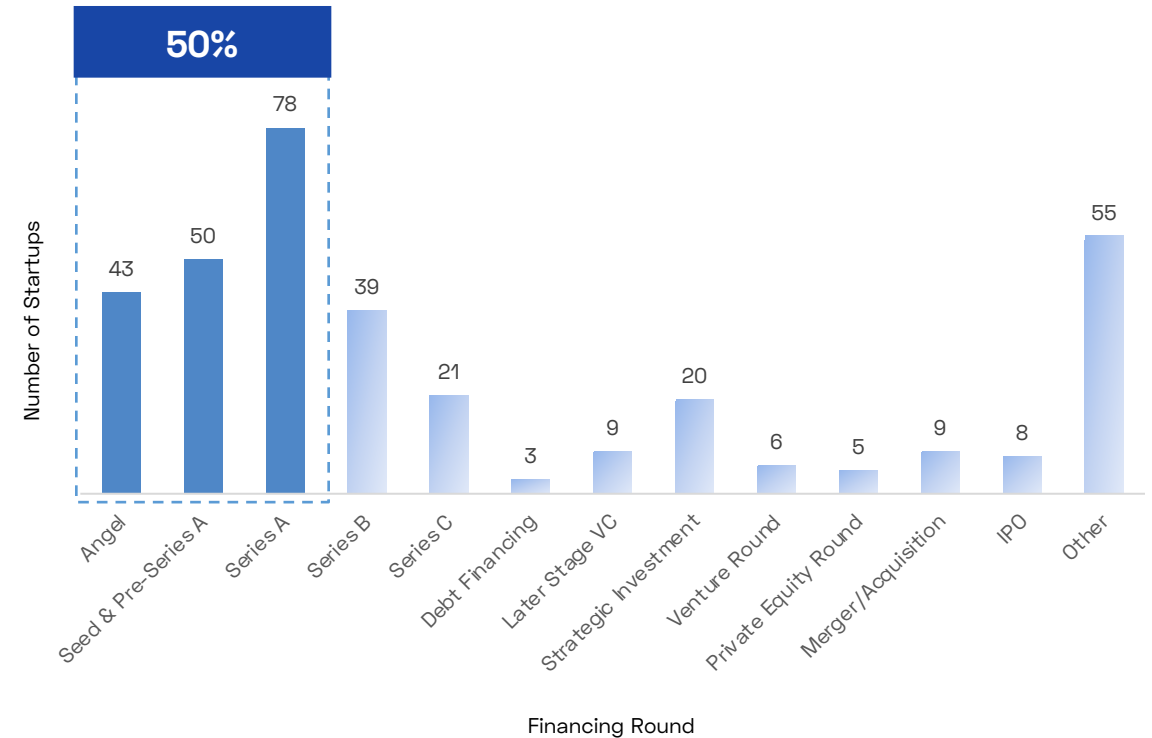
Majority of the Chinese PropTech startups are in early-stages.

FOUNDING YEARS



The **slowdown in the real estate market** since 2012 and the **prevalence of mobile internet** have accelerated the adoption of technology in the real estate sector to create a new value proposition and increase operational efficiency.

INVESTMENT STAGE



Winner-takes-all. While many PropTech startups were founded to help the real estate developers transition into service-providers, most of the funding went to a few startups to build a national footprint.

PropTech Landscape in China

Residential sector is going through a consolidation phase, whereas commercial sector is quickly expanding.

TOP EXITS IN PROPTech IN CHINA

Company	Date	Status	Market Cap / Price (USD \$M)
 贝壳	Aug-2020	IPO on NYSE	85,400
 明源云	Sept-2020	IPO on HKSE	8,200
 Q房网	Jan-2017	Acquired by Hubei Guochuang Hi-Tech Material	570
 房多多	Nov-2019	IPO on NASDAQ	559
 贝壳找房	Apr-2018	Acquired by The We Company	400
 好屋	Sep-2016	Acquired by Zhejiang Ming Jewelry Company	350
 安居客	Mar-2015	Acquired by 58.com	267
 爱上租	Jan-2019	Acquired by Danke Apartment	200

Most of the IPO and M&As are in **residential listing & brokerage** as the sector goes through the consolidation phase.

MOST WELL-FUNDED PROPTech COMPANIES

Company	Last Financing Date	Total Raised (USD \$M)	Selected Investors
 贝壳	Mar-2020	3,600	Sequoia Capital, Tencent, SoftBank, Hillhouse Capital, Gaw Capital, CPPIB etc.
 自如	Mar-2020	2,100	Sequoia Capital, Tencent, Warburg Pincus, General Atlantic, SoftBank etc.
 链家	Apr-2017	1,421	Huasheng Capital, Vanke, Sunac China Holdings etc.
 途家	Oct-2017	755	Lightspeed China Partners, GGV Capital, All-Stars Investment etc.
 优客工场	Apr-2019	704	Gopher Asset Management, Yintai Group, Zhongrong International Trust, All-Stars Investment etc.
 魔方公寓	Mar-2019	650	Warburg Pincus, AVIC Trust, Caisse de Depot et Placement du Quebec etc.
 小猪	Oct-2018	572	Morning side Venture Capital, Legend Capital, YF Capital etc.
 氪空间	Mar-2019	482	IDG Capital, Gopher Asset Management etc.

Most well-funded PropTech startups in China are in **listing & brokerage, short-term rental, apartment rental services, and co-working**.

PropTech Landscape in China

Major VC funds in China have been actively investing in PropTech, especially in the residential listing & brokerage sector.

TOP VCS WHO INVEST IN PROPTech

	Sequoia Capital												
	Tencent												
	ZhenFund												
	Matrix Partners China												
	InnoAngel Fund												
	Alibaba												
	K2VC												
	Hillhouse Capital												
	Shunwei Capital												
	58.Com												



Major Tech Applications



Residential

Home Decoration



Home decoration and design platform

Founded in 2011

Raised **\$234.8M** from Hillhouse Capital, Shunwei Capital, GGV Capital, IDG

Rental Services Platform



O2O rental services platform

Founded in 2011

Raised **\$2.1B** from Softbank Vision Fund, Sequoia, Tencent, Warburg Pincus, General Atlantic

Access Control



AI company focuses on facial recognition

Founded in 2014

Raised **\$2.6B** from Softbank, Alibaba, CDH, IDG, Qualcomm, Fidelity

Smart Home



Home security hardware and systems

Founded in 2014

Raised **\$130M** from Baidu Ventures, Shunwei Capital, SIG China, K2VC

Package Storage



Self-service package stations

Founded in 2015

Raised **\$706.3M** from CDH Investments, China Development Bank Capital, STO Express

Brokerage & Marketplace



Real estate services platform

Founded in 2017

Raised **\$3.6B** from SoftBank, Tencent Holdings, ZhenFund, Hillhouse, CPPIB, Sequoia

Major Tech Applications



Retail

Indoor Navigation



Indoor map data and location-based service provider

Founded in 2012

Raised **\$4.4M** from TSVC and TusPark Ventures

AR Shopping



Location-Based AR Shopping App

Founded in 2015

Raised **\$874K** from PRD Angels, SOSV and Chinaccelerator

Omnichannel



Interactive Advertisement Platform Operator

Founded in 2014

Raised **\$114.7M** from Orchid Asia Group, TPG

Contactless Store



Contactless Convenience Store

Founded in 2016

Raised **\$94.7M** from CGV Capital, Qiming Venture, Fosun Capital, Source Code Capital

Vending Robots

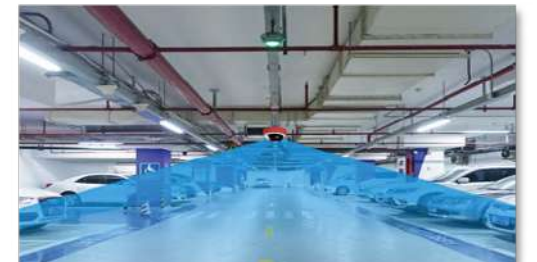


AI Powered Smart Retail System

Founded in 2014

Raised **\$94.8M** from Greenland Group, CICC, Meridian Capital and Desun Investments

Smart Parking



AI Powered Parking Solutions

Founded in 2017

Raised **\$99.4M** from Sequoia China, Singularity Power Investments, ClearVue Partners, ZhenFund

Major Tech Applications



Office

Energy Efficiency



Building Energy Management

Founded in 2009

Raised **\$3M** from Yizhuang Hulian Fund

Leasing Marketplace



Commercial Real Estate Leasing Platform

Founded in 2015

Raised **\$39M** from SDIC Unity Capital, Joy Capital

Building Management



Building Asset Management SaaS

Founded in 2015

Raised **\$3M** from Sequoia China, Silicon Valley Bank, Morningside Capital

Digital Twin



Digital Twin for Buildings

Founded in 2015

Raised **\$45M** from Sense Time, Star VC, Green Pine Capital Partners

Co-Working



Co-Working Space Provider

Founded in 2014

Raised **\$704.4M** from All-Stars Investment, Yintai Group, Gopher Asset, Tianhong Asset Management, CEC Capital

Smart Building



TERMINUS 特斯联

City-Level AIoT Platform

Founded in 2015

Raised **\$553M** from Everbright, IDG Capital, Sense Time, iflytek, Wanda Group

Major Tech Applications



Logistics

Supply Chain Management



ALOG
心怡科技物流

3rd Party E-Commerce Warehouse & Logistics Service Provider

Founded in 2004

Acquired by Alibaba Group in 2019 for undisclosed amount

Shared Warehouse



WH+ 鲸仓

Shared Smart Warehouse

Founded in 2014

Raised **\$90M** from YF Capital, Baidu Ventures, GSR Ventures

IoT



易流科技

Logistics-Focused IoT for Asset Tracking

Founded in 2008

Alibaba's Cainiao Network invested in YiLiu Technology to digitize entire logistics chain

Robotics



Geek+

Logistics & Warehousing Robotics

Founded in 2015

Raised **\$439.4M** from CGV Capital, D1 Capital Partners, V fund Management, Warburg Pincus

AR/VR



LLVISION

AR Wearable Devices

Founded in 2014

Raised **\$15.6M** from CCB International, Cheetah Mobile, Matrix Partners China

Procurement



Sunyur 商越

Digital Procurement Solutions Provider

Founded in 2018

Raised **\$19.8M** from SIE Information Industry, Investment Fund, Vision Plus Capital

Commercial Real Estate Technology Landscape in China

Find Property

Listings & Marketplace



Broker CRM & Marketing



Viewing & Imagery



Property Financing

Debt Financing Platforms



Equity Financing Platforms



Comps & Valuation



Transaction Management



Property Management

Building Automation & IoT



Leasing & Asset Management



Sales & Marketing



Property Management



BIM / Digital twin



Energy Management



Property Management

Indoor Mapping



Robotics



Property Construction

Planning & Construction



Construction & Equipment Finance



Asset Utilization

Co-living & Home Sharing



Co-working & Office Space



Event Space



Retail & Industrial Utilization



Short-term Rental



Contactless Store



Residential Real Estate Technology Landscape in China

Find Your Home

Listings & Marketplace



Rental Listings



Agent Tool



Tech-enabled Brokers



- Property Management

Home Improvement



Rental Management



Smart Home & IoT



Finance Your Home

Alternative Financing / Digital Lender



- Mortgage Lender Software

Loan Applications and Docs



02



Drivers for Real Estate Innovation in China

- Factors driving China's innovation in real estate
- Case Studies of Innovation in China

Five factors have been driving China's innovation in real estate

A The **Government's** push for innovation & new infrastructure.

B **Chinese consumers'** preferences are evolving.

C **Real estate firms** are innovating to compete.

D **Chinese PropTech unicorns** are catching up with the West.

E **Internet giants** all have a real estate playbook.



The development of technology in China is largely top-down, driven by government support and investment. One of the most significant policies is the country's plan to build out high-tech infrastructure.

Smart City & New Infrastructure

In the 19th CPC National Congress report, President Xi made the remark to build “**Smart Society, Digital China, and Internet Power Strategy.**”

- China has become a global leader in smart city developments with plans for approximately **500 smart city pilot projects**, the highest in the world.
- **Xiong'an New Area** is a purpose-built smart city from ground up with integrated leading-edge technologies, aiming to become the next Shenzhen.

In 2020, China committed **US\$1.4 trillion in a new infrastructure (新基建) plan**, which refers to infrastructure that is ‘digital, smart, and innovative.’

- The new infrastructure includes **seven key areas**: 5G networks, industrial internet, inter-city transportation and rail system, data centers, AI, ultra-high voltage power transmission, and new-energy vehicle charging stations.

Innovation Powerhouse

Promoting innovation and entrepreneurship is one of the Chinese government's top priorities for promoting China's economic transformation and achieving global competitiveness. The State Council has a few major policies:

“Internet Plus” Policy

Integrating the Internet with traditional industries to fuel economic growth

“Made in China 2025”

Transforming China into world's leading manufacturing power in a few key sectors by 2025

“China Standards 2035”

Setting industry standards for the next generation of technologies

New Generation of Technologies

Supported by the government, China has become a key player in a few **emerging technologies**:

5G

China is leading the world in 5G technology in terms of infrastructure, applications, and commercial use.

IoT

China is set to become the world's largest market for IoTs and the most active region for IoT development.

Cloud Computing

In 2017, the scale of China's cloud computing reached RMB 69 B (US\$10 B) and will grow at 28% annually in the next 3 years.

Big data

In 2017, the output from China's big data market reached RMB 470 B (US\$70 B), and will reach 1 trillion (US\$149 B) in 2020.

AI

China's AI ranks among the top in the world and enjoys advantages in data collection, investment in infrastructure and government support.

A Case Study: Xiong'an New Area (雄安新区), China's True Smart City



Background

What's Xiong'an New Area?

- On April 1, 2017, President Xi announced a plan to transform Xiong'an in China's Hebei province into a **green, innovative, and livable city by 2035**. The Xiong'an New Area will be China's 19th national-level new district and new economic zone.
- The development of Xiong'an is known as a "**Millennium Strategy**" (千年大计). It could become the next Shenzhen and Shanghai Pudong, China's main business centers.
- It is estimated that **RMB 4 trillion** (US\$580 B) could be spent on building Xiong'an over the next two decades.

The Purpose of Xiong'an New Area:

- Facilitate the integration of **Beijing-Tianjin-Hebei**.
- Relocate Beijing's **non-capital functions**, such as colleges, hospitals, business HQs, public services, and financial services.
- Create a hub for **cutting-edge technology industries**, such as information technology, biotech, and new materials.
- Develop a new model of **digital urbanism**, in which technologies are integrated with infrastructure.

Smart City Initiatives

Transportation Infrastructure:

- **4 high-speed train lines** will run through Xiong'an while **2 canals** will connect Xiong'an to Beijing and Tianjin. By high-speed railway, it will take only 20 minutes, at a speed of 350 km/h, to travel from Xiong'an to Beijing's new airport in Daxing.
- **RMB 600 B** (US\$91 B) will be spent on building its transportation infrastructure by the end of 2020.

Urban-Tech:

- **Xiong'an** will develop a **city information modeling** platform by combining GIS, BIM, IoT, and CityGrid, a grid-level big data collection system, to create a digital twin of the city to support real-time decision-making.

The backbone of Xiong'an's **smart city infrastructure** will be 5G. Major Chinese telecom operators will use the city as a base for testing their 5G wireless network.

A **smart transit system** will be built using AI to regulate traffic. The system will also integrate autonomous vehicles, mobility on demand, and bike-sharing.

Green Energy:



- Xiong'an aims to achieve **100% clean power**, all powered by renewable and low-carbon energy sources. A 1,000-kilovolt power transmission line was put into operation in 2020 to use wind and solar energy from Zhangbei, Hebei Province.
- **Xiong'an** will build a **smart energy usage system** and a tech-enabled underground pipeline system based on IoT network.

B Chinese Consumers' Preferences Are Evolving

China, the biggest mobile market in the world, has a robust mobile ecosystem, which poses a profound impact on consumers, businesses, and wider society.





High Mobile Penetration

With close to 1.2 billion subscribers and 82% penetration level, **China has the largest mobile market**. The rate of growth in mobile internet penetration reached 82%, which is on-par with the US.

	# of mobile users (2019)	Penetration Level
	1.17B	82%
	321M	83%

Internet Environment is Mobile First

China has the **largest e-commerce market** in the world. Most of the transactions are done on mobile phones, which has accelerated the growth of **mobile payments**.

E-commerce	Industry Size (2019)	% of Total Retail
	\$1.94 TRN	37%
	\$62 B	10%
Mobile Payments	# of Users (2019)	CAGR
	577M	10%
	64M	9.1%

Rise of Sharing Economy

The digital ecosystem in China is highly integrated, blurring lines between various sectors and making China **a leader in the sharing economy and home to some of the biggest startups** in the world.



Largest video-sharing / content sharing company
Valuation: \$140 B



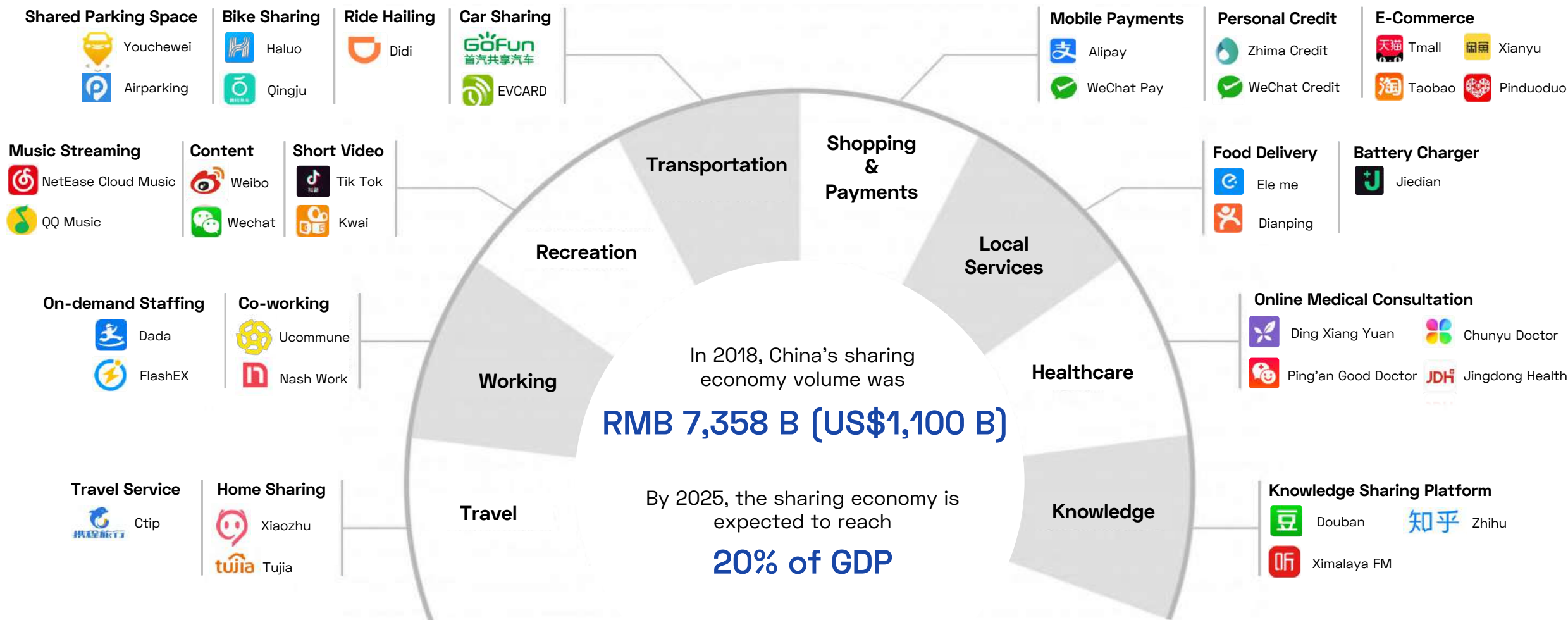
2nd largest ride-sharing company
Valuation: \$62 B



Largest food delivery company
Market Cap: \$13.7 B

B Case Study: China's Sharing Economy

China is the world's largest sharing economy with startups penetrating every aspect of people's lives.



C Real Estate Firms Are Innovating to Compete

With an increasing need for technology adoption, Chinese real estate players have adopted various innovation models to build their tech capabilities while remaining competitive.

Self-Built Teams

Given the scale of their businesses, top Chinese real estate developers are **building tech-related capabilities and businesses internally** by hiring dedicated engineering and data teams.

The main purpose of building dedicated tech business units is to create efficiency in the workflow while building new tech-enabled business lines, such as a BIM platform and construction robotics.



Tech Partnership

Some large Chinese real estate developers choose to **partner with internet and tech giants** such as Alibaba, Tencent, JD, and Huawei to build out their tech capabilities.

These developers can leverage the R&D capabilities of the tech companies, while sharing business insights and providing physical spaces and financial resources in the partnership.



Accelerators & Venture Investment

By **working with accelerator programs or investing directly in startups**, some real estate developers are looking for ways to identify more innovative technology solutions.

These developers establish a joint venture with VC funds or accelerators to build an open innovation platform that tests tech solutions, usually on a smaller, but more frequent basis.



Top-tier real estate players are building major initiatives to develop a more tech-enabled business and to undergo digital transformation.

Self-Built Teams



- Vanke set up a technology subsidiary, **Wanyi Technologies** (万翼科技), in 2016 to build an in-house tech capability for Vanke.
- Wanyi's tech solutions include BIM 5D platform, AI-design platform, smart industrial park solutions, and online sales & marketing tools.
- In 2018, Wanyi partnered with Huawei to build innovation labs for smart campus scenarios and models to build an ecosystem for future industrial parks.

Tech Partnership



- Greenland Group has been **pushing the "real estate + technology"** business model by establishing strategic partnerships with tech companies.
- In 2019, it set up a partnership with Alibaba to build smart homes and develop industrial parks. The partnership will leverage Greenland's real estate assets and Alibaba's cloud computing, IoT, big data, and AI technologies to build the next generation of digitally enabled homes and workplaces.
- Greenland also has partnerships with Huawei and ZTE in 5G wireless networks.

Accelerators & Venture Investment



- UrbanLab (城越) is Mainland China's first **PropTech corporate accelerator** co-founded by Ping An Urban-Tech, JLL and Swire Properties in 2019.
- The three companies aimed to build a dedicated tech-sourcing pipeline for the Mainland China's PropTech ecosystem that could quickly identify and test new technology.
- 12 startups were selected for the accelerator. The three real estate companies worked with these startups on proof-of-concept pilots.

D

Chinese PropTech Unicorns Are Catching Up with the West

China has become a force to be reckoned with in many digital technologies, especially in consumer-facing industries and Fintech. The Chinese PropTech market is also catching up with the U.S in terms of number of unicorns and valuations.



Company	HQ	Time Founded	Valuation (\$B)	Sector
Lianjia*	Beijing	2001	\$13	Listing & Brokerage
Ziroom	Beijing	2011	\$5	Apartment Rental Services
Ucommune	Beijing	2015	\$3	Co-working
Tubatu	Shenzhen	2008	\$2	Interior Design Platform
Tujia	Beijing	2011	\$2	Short-term Rental
Kr Space	Beijing	2016	\$1.48	Co-working
Kujiale	Hangzhou	2014	\$1	Home Decoration Platform
ihomefnt	Nanjing	2015	\$1	Furniture E-commerce
Mofang	Shanghai	2009	\$1	Apartment Rental Services
Xiaozhu	Beijing	2012	\$1	Short-term Rental

No. of PropTech Unicorns	10
Major PropTech Hub	Beijing
Major Sectors	Listing & Brokerage Apartment Rental Services
Avg. Valuation	\$ 3 B



Company	HQ	Time Founded	Valuation (\$B)	Sector
Airbnb	San Francisco, CA	2008	\$18	Short-term Rental
WeCompany	New York, NY	2010	\$7.8	Co-working
Compass	New York, NY	2012	\$6.4	Tech-enabled Broker
Procore	Carpinteria, CA	2003	\$5	Construction Tech
Houzz	Palo Alto, CA	2009	\$3.8	Interior Design Platform
OpenDoor	San Francisco, CA	2014	\$3.8	i-buying
Katerra	Menlo Park, CA	2015	\$3	Construction Tech
Sonder	San Francisco, CA	2012	\$1.3	Short-term Rental
VTS	New York, NY	2012	\$1	Leasing & Asset Mngt
ParkJockey	Miami, FL	2013	\$1	Smart Parking







No. of PropTech Unicorns	10
Major PropTech Hub	San Francisco, NYC
Major Sectors	Short-term Rental Construction Tech
Avg. Valuation	\$ 5 B

D Case Study: Lianjia is Building an Integrated Housing Platform

Known as the Zillow of China, Lianjia has grown from a real estate brokerage to a comprehensive housing services platform. In August 2020, Beike (KE Holdings), Lianjia's online platform, went IPO on the NYSE.

Introduction

- **Founded in** 2001
- **HQ** in Beijing, China
- Raised **\$3.6 B** from Tencent, SoftBank, Hillhouse Capital, Sequoia, CPPIB, China Renaissance, Gaw Capital etc.
- **Description:** Lianjia is the leading real estate brokerage brand with integrated online and offline operations. Based on its gross transaction value, it is the largest home sales platform in China.

 Gross Transaction Value (2019)	RMB 2.1 Trillion (US\$301B)
 # of Transactions (2019)	2.2 M
 # of Agents	456 K
 # of Cities / Stores	103 / 42K
 Housing Dictionary	226 M Homes
 Mobile MAU	39 M

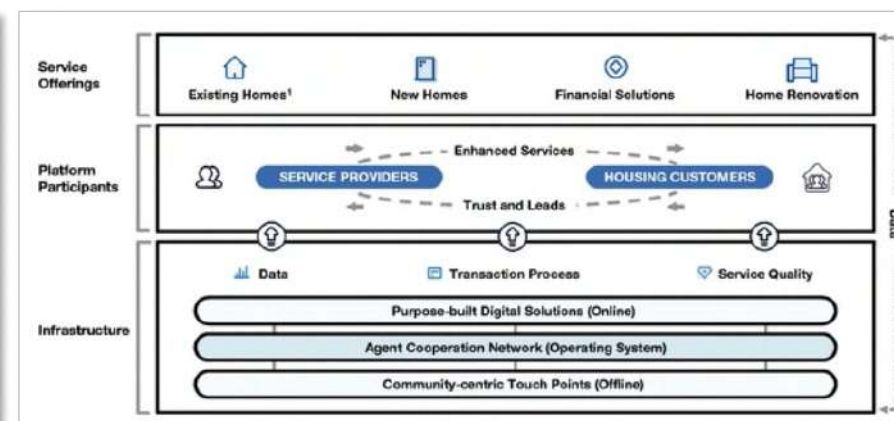
Business Model

Lianjia has created a platform which integrates online and offline housing transactions and services while offering value-added services.

- **Offline:** Lianjia has 42K community-centric stores in 103 different Chinese cities. The offline stores serve as an entry point for customers to generate leads.
- **Online:** Beike, the online platform, was established in 2018 to open the transaction and services solutions to other brokerage brands, agents, and real estate developers.
- **Value-added Services:** Beike's Pick (an AI-powered housing recommendation system); financial solutions (e.g. credit scoring, mortgage facilitation); VR property showing; home renovation services (e.g. interior design referrals).



Lianjia Offline Store



Beike Platform

E Internet Giants All Have a Real Estate Playbook

Chinese internet giants have started to fight the offline battle in the physical space as a way to invest in new businesses and maintain high-speed growth.

Motivation

- The internet giants' interest in real estate is seen as springing from **the industry's outsized role in China**. They continue to find new businesses to maintain high-speed growth, especially in traditional industries with limited digitalization.
- Internet giants have strong incentives to create more **use cases** from their core technologies (e.g. cloud computing, big data) for which they invested heavily in the R&D process. These technologies can be applied to the physical spaces, such as **smart city, smart building, and smart home**.
- Tech adoption in real estate has been low in China. Besides Lianjia, there has not been any significant PropTech players for years. With Tencent being Lianjia's second-largest shareholder, all the other **internet giants are racing to form their own real estate strategies**.
- Internet giants increasingly view the offline space as a great place to attract customers, test new products, and accelerate the **online + offline integration**.

Major Strategies & Players

Real Estate + Tech Products

Leverage their existing tech capabilities (AI, IoT, cloud) and core businesses (e-commerce or social network) to build a new digital solution for the physical space or to expand existing product's application scenarios, such as:

- **Baidu** developed DuerOS, a AI+IoT smart home platform
- **Alibaba, JD.com** sell residential homes on its e-commerce platform
- **Tencent** Haina is cloud-based property management platform and uses Wechat to connect residents



Investment & M&As

Acquire or strategically invest in a real estate tech startup to build product offerings and generate synergy with its existing digital ecosystem, such as:

- **Tencent** is the second-largest shareholder of Beike, China's biggest online housing transaction platform
- **ByteDance** acquired Xingfuli, an app that help users find properties
- **Xiaomi** backed more than 300 companies to form an ecosystem of IoTs



Strategic Partnerships

Collaborate with local real estate developers to build tech-enabled physical spaces or invest in infrastructure, such as:

- **Huawei** has built partnerships with developers like Vanke, Greenland, Poly, Sino-Ocean, China resources to build industrial and office parks
- **Alibaba** is working with Yintai Retails to create "Intime Department Store"
- **JD.com** has raised a RMB1.5B (US\$218M) fund with GIC to invest in warehousing facilities



E Case Study: Alibaba's Real Estate Playbook

Alibaba is one of the most aggressive players in building a physical presence through multiple channels and asset types.

New Retail



FreshHippo

- Alibaba, the e-commerce giant, wants to use data and technology to transform retail. It created a concept called **"New Retail,"** a strategy to redefine retail by enabling seamless engagement between the online and offline world.
- In 2016, Alibaba launched **FreshHippo (盒马鲜生)**. The supermarket division is a central component of its new retail strategy. As of June 2020, FreshHippo opened **214 stores¹**, mainly in first and second tier cities in China.



In-store experience

Online purchases

On-demand services & delivery

Smart Home



Tmall Genie

- In 2017, Alibaba launched **Tmall Genie (天猫精灵)**, an Amazon Echo-like smart speaker, as part of its **smart home system products**.
- Much like Amazon's Alexa, Tmall Genie has functions such as smart home control, weather, news, and music. It features the **AliGenie voice assistant** and can order items from Tmall, Alibaba's e-commerce platform, through voice commands.
- Tmall Genie is China's best-selling smart speaker. According to IDC, **15.6 million²** units were sold in 2019.



2017.7
T.G X1

2018.3
T.G M1

2018.5
T.G Fang Tang

2018.5
Kid Edition

2018.5
TV Box

O2O Brokerage



Tmall Haofang

- In Sep 2020, Alibaba launched **an online housing brokerage platform "Tmall Haofang" (天猫好房)** with E-House, a real estate service provider. Tmall Haofang will allow developers, agents, and financial institutions to seek partnerships and offer services.
- The two parties will cooperate in areas such as **online-offline real estate transaction, digital marketing and after-sale services**. The platform will host online showrooms from real estate developers, allowing buyers to view the buildings on Tmall with features like live-streaming.



Platform launch event



Tmall Haofang app

03

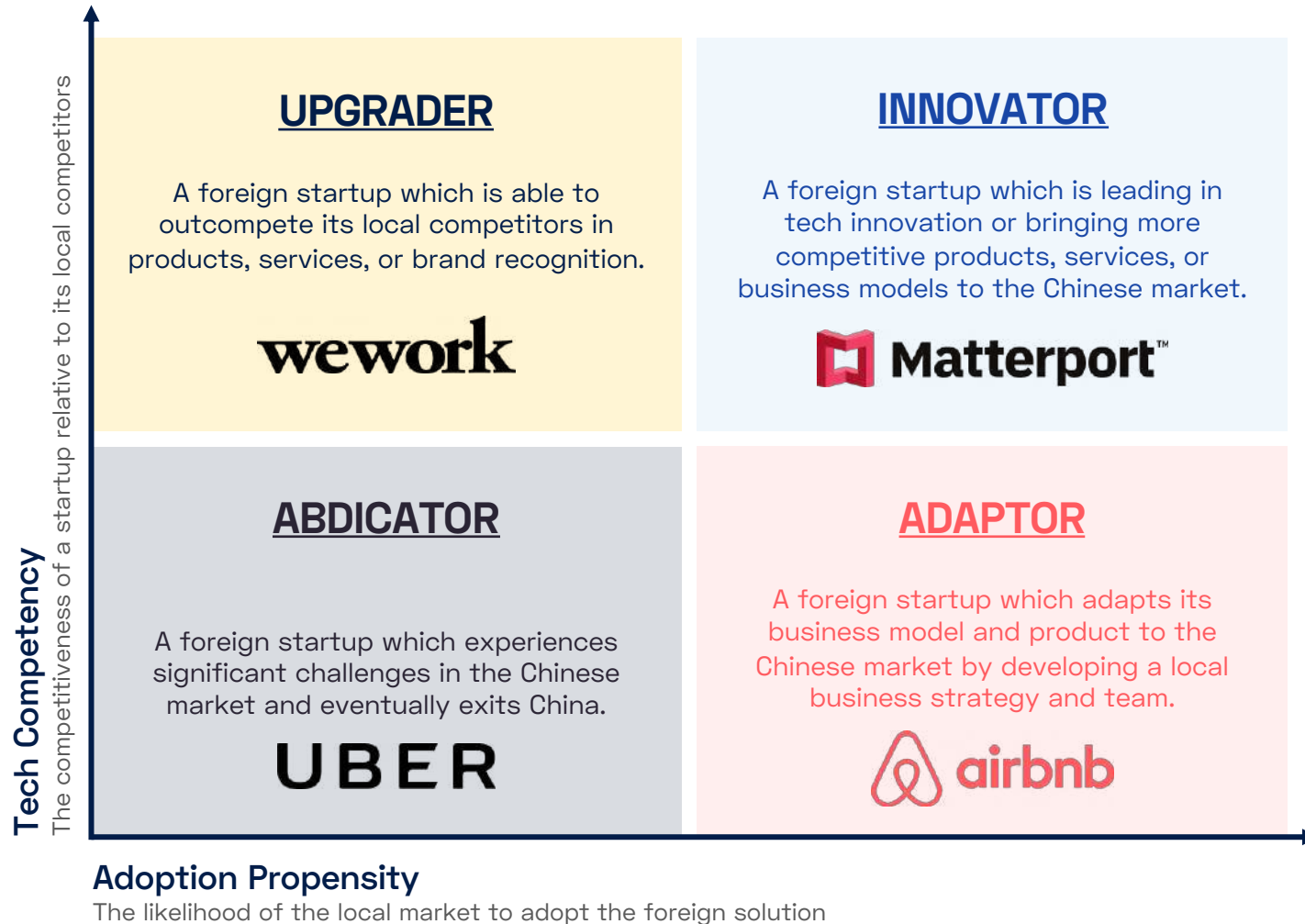


Cross-Border PropTech Opportunities

- Cross-Border PropTech Matrix
- Case Studies of Foreign Startups in China: Matterport, WeWork, Airbnb, Uber
- Cross-Border PropTech Opportunities
- China Strategies for Foreign PropTech Firms

Cross-Border PropTech Matrix

We classified foreign startups into Innovator, Adaptor, Upgrader, and Abdicator based on their tech competency relative to local rivals and their adoption propensity in the Chinese market.



Adoption Propensity

To evaluate the likelihood of the local market to adopt a foreign solution by assessing market size, regulations, competition, and customer preference based on:

- Market potential
- Local competition
- Economic significance
- Customer preference
- Regulatory compliance

Tech Competency

To evaluate the competitiveness of a startup's core technology, product, talents, industry applications, and value creation relative to its local competitors based on:

- Technology advantage
- Market competitiveness
- Industry usage
- Talent
- Return on investment

Matterport is the market leader in 3D immersive data and virtual reality model for the built world. The firm entered China in 2017 and has been able to establish a footprint in the country by attracting local top-notch customers and building strong local channel partners.

Introduction

- Founded in 2011; HQ in San Francisco, CA, US
- Raised **\$168M** from Qualcomm, CBRE, Navitas Capital, DCM Ventures etc.

China Footprint

- In early 2017, Matterport launched its official China content distribution network in partnership with **ChinaNetCenter**. It allowed faster rendering times. Its flagship 3D Showcase media player is available in Chinese.
- In Nov 2017, Matterport partnered with **Centaline Property**, one of the largest real estate agencies in China. The partnership enabled Centaline's website to feature the largest number of property listings that include a VR experience.
- In March 2020, Matterport expanded its Value-Added Resellers Program. It sells Matterport's cameras and platform. **Vistandard**, a China-based VR provider, became its resell partner in China.
- In June 2020, Matterport announced a global agreement with **Cushman & Wakefield**.



Matterport 3D
Virtual Tours

Lessons in China

Best-in-class product & service

- Matterport Pro2 is the gold standard for professional 3D capture with no apparent local competitor in China.

Quick scale-up

- Matterport acquired a top real estate agent in China as a customer. This allowed Matterport to grow rapidly in the Chinese market.
- Its global agreement with Cushman & Wakefield helps Matterport expand across the firm's global footprint.

Strategic partnerships

- The channel partnership with Vistandard, which also uses the Matterport SDK to develop VR tools, brings Matterport Pro2 to Hong Kong and China.

Product localization

- When it entered China, Matterport built a local distribution network and a product that supports Chinese language, allowing a better user experience.

New use case and revenue streams

- Matterport has diversified its application beyond real estate to other verticals, such as architecture, design, insurance, travel, and hospitality.

Upgrader – wework

WeWork arrived in China in 2016 at the height of the country's co-working boom. Its brand, service, chic design, local acquisitions, and partnerships have helped it lead the co-working industry in China.

Introduction

- Founded in 2010; HQ in New York, NY, US
- Raised **\$20.6B** from SoftBank, Benchmark, JP Morgan, Hony Capital, Goldman Sachs etc.
- WeWork China raised **\$1.2B** from SoftBank, Trustbridge Partners, Temasek, Legend Holdings, etc.

China Footprint

- In mid-2016, WeWork entered China and opened its first location in Shanghai. Later, WeWork formed a partnership with Sino-Ocean, a local real estate developer, using a **revenue-sharing model**.
- In 2017, WeWork **received \$500M funding** from SoftBank and Hony Capital for a standalone WeWork China business. Earlier in 2018, WeWork **acquired Naked Hub**, its local rival for \$400M. The purpose was to increase market share.
- In July 2018, WeWork China **raised another \$500M** from SoftBank, TrustBridge Partners, Temasek, and Hony Capital for the purpose of expanding into 6 more cities, include Shenzhen and Hangzhou.
- Throughout 2019, WeWork China accelerated its expansion, while launching **WeWork Go** (on-demand services) and **WeWork Lab** (incubator program).
- In Sep 2020, WeWork China secured a **\$200M investment** primarily from Shanghai based PE firm TrustBridge. It will transition into a Chinese-owned company. The goal is to increase localization by seeking partnerships with local communities, real estate firms, and Chinese enterprises. By Sept 2020, WeWork China had 125 spaces in 12 cities.



WeWork China Flagship Location in Weihai Lu, Shanghai

Lessons in China

Product & business model localization

- Early during its expansion, WeWork China integrated the design and functioning of its product so as to be suitable to the Chinese market. E.g. they provided WeChat mini program entry, integrated mobile payment, and focused on social network engagement.

Entrepreneurial corporate culture

- A few of WeWork's global product offerings started in China. E.g. WeWork Go, which was launched to cater to Chinese market's preferences for on-demand services.

Premium brand image & effective marketing

- WeWork China ensured the consistency of its brand in pricing, target customers, location choice, and service level.

Strategic partnerships

- WeWork China's local investors assembled a few rounds of investment and also facilitated partnership with local real estate developers for WeWork.
- WeWork has partnered with Alibaba Cloud to launch a one-stop platform called "China Gateway" for overseas firms looking to enter China.

Local competition assessment

- The acquisition of Naked Hub enabled WeWork to become a dominant player in the high-end co-working market in China, while acquiring an experienced local team.

Quick scale-up

- Through partnership and acquisition, WeWork China quickly built a strong presence in a few major cities.

Adaptor - airbnb

Airbnb entered China in 2014, but faced challenges during its initial years. Since 2018, Airbnb has started adopting a localized strategy and has become one of most popular short-term rental platforms in China.

Introduction

- Founded in 2008; HQ in San Francisco, CA, US
- Raised **\$6.4B** from Silver Lake, Sixth Street Partner, GGV, Hillhouse, Sequoia, Temasek etc.

China Footprint

- In 2014, Airbnb founded the China division. The China expansion attracted investment from **top-tier Chinese VCs**, such as **GGV, Hillhouse, Sequoia**, and **Broadband**.
- From 2015 to 2017, in order to expand in China, Airbnb **attempted to acquire its Chinese equivalent**, Xiaozhu, and merge with Tujia. But it eventually pulled out of both deals and decided to go it alone in China. During that time, Airbnb faced regulatory difficulties, dissatisfied local customers, and fierce competition from local rivals.
- 2018 was a turning point for Airbnb China as it has started to **adopt a China-specific strategy**. It welcomed a Chinese name [爱彼迎], hired a local team [including a CEO who is an ex-entrepreneur in tourism], integrated mobile payment platforms such as Alipay, built WeChat mini programs for customer support, and customized the website and app designs.
- By the end of 2019, Airbnb had become the **2nd largest** short-rental platform after Tujia, with a **25.5%** market share in China.



Airbnb China Website

Lessons in China

Product & business model localization

- Airbnb formed a local team to localize its product offering, business operations, and customer services to better cater to Chinese customers' aesthetic and functional preferences.

Entrepreneurial corporate culture

- Airbnb China's CEO is an ex-entrepreneur.
- "You can think of Airbnb China as a Chinese startup invested by Airbnb."

Premium brand image & effective marketing

- Airbnb China has focused on differentiating itself from local rivals by building a high-end quality platform.
- Airbnb also has built effective marketing strategies that focus on attracting young professionals and families.

Strategic partnerships

- Airbnb China's investors, e.g. Sequoia, Hillhouse, Broadband, and GGV, supported Airbnb's expansion in team recruiting, government relations, and strategy planning.

Government relations & regulatory compliance

- Airbnb partnered with city governments, e.g. Beijing, Shenzhen, Chongqing, and Shanghai, to help promote their local tourism by attracting more foreign visitors.
- Airbnb China has strictly complied with local laws in data privacy, taxation, rental management, and safety control.

Abdicator - UBER

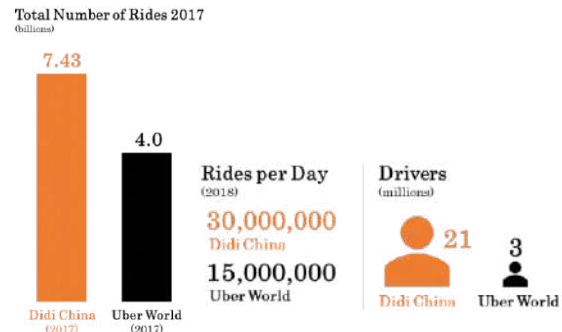
Uber entered China in early 2014 and quickly built a presence in 1st and 2nd-tier cities. Because of regulatory challenges and financial loss, Uber sold the China division to Didi, its local rival, in 2016 and exited the market.

Introduction

- Founded in 2009, HQ in San Francisco, CA, US
- Raised **\$28.54B** from Softbank, American Express, Putman, Blackrock, Baidu, Sequoia etc.

China Footprint

- Uber piloted Uber Black in Shanghai in 2013 and **formally entered China** in early 2014. It founded Uber China as a separate entity, with its own funding structure.
- During 2014, Uber secured \$1.2B for its China expansion. It entered a **strategic partnership with Baidu** for the purpose of accelerating its expansion and improving its tech infrastructure.
- In 2014 and 2015, Uber and local competitors, especially Didi, entered into a price war. High subsidies were given to attract riders and drivers.
- In 2016, Uber added more services while integrating mobile payments and a Baidu map. By mid-2016, **Uber China had entered 60+ cities**. Five out of the 10 cities with the most Uber orders worldwide were in China. But Uber suffered great financial loss, a slowing growth rate, and major compliance problems. Uber was also lagging Didi in all metrics.
- In July 2016, China announced new regulations for ride-hailing which made Uber's operations in China no longer sustainable. In Aug 2016, **Didi acquired Uber China** for \$7B and invested \$1B in Uber. Uber formally exited China.



Didi vs. Uber

Lessons in China

Strategic partnerships

- Uber partnered with Baidu, which provided the necessary tech infrastructure and support during its initial expansion.
- Uber China's investors include state-owned insurance and financial services firms, which could add strategic value.

Quick scale-up

- Within 2 years, Uber China built a footprint in 60+ Chinese cities, and established itself as the 2nd biggest ride-hailing startup in China. The large user base unlocked potential to broaden Uber China's services.

Product & business model localization

- Uber never appointed a CEO for Chinese operations because the founder did not find a suitable person. Instead, he directly led China team.
- Uber did not build a core R&D team in China. All important product development was done by the US team, which made it fail to fully localize its products.

Government relations & regulatory compliance

- When Uber entered and operated in China, there were no formal regulations on ride-hailing. Uber faced unforeseeable regulatory risks, especially related to data privacy.
- The taxi industry is strategically important to the local economy. Uber experienced regulatory challenges in every market it entered.

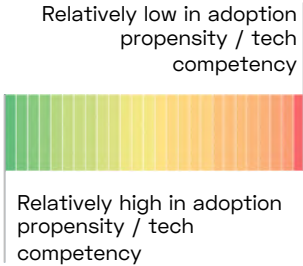
Local competition assessment

- Didi outcompeted Uber China in financing, product localization, service offering, and government relations.

Cross-Border PropTech Index



To evaluate opportunities in cross-border tech transfers, we ranked the following PropTech sectors based on their tech competency and adoption propensity.



Adoption Propensity

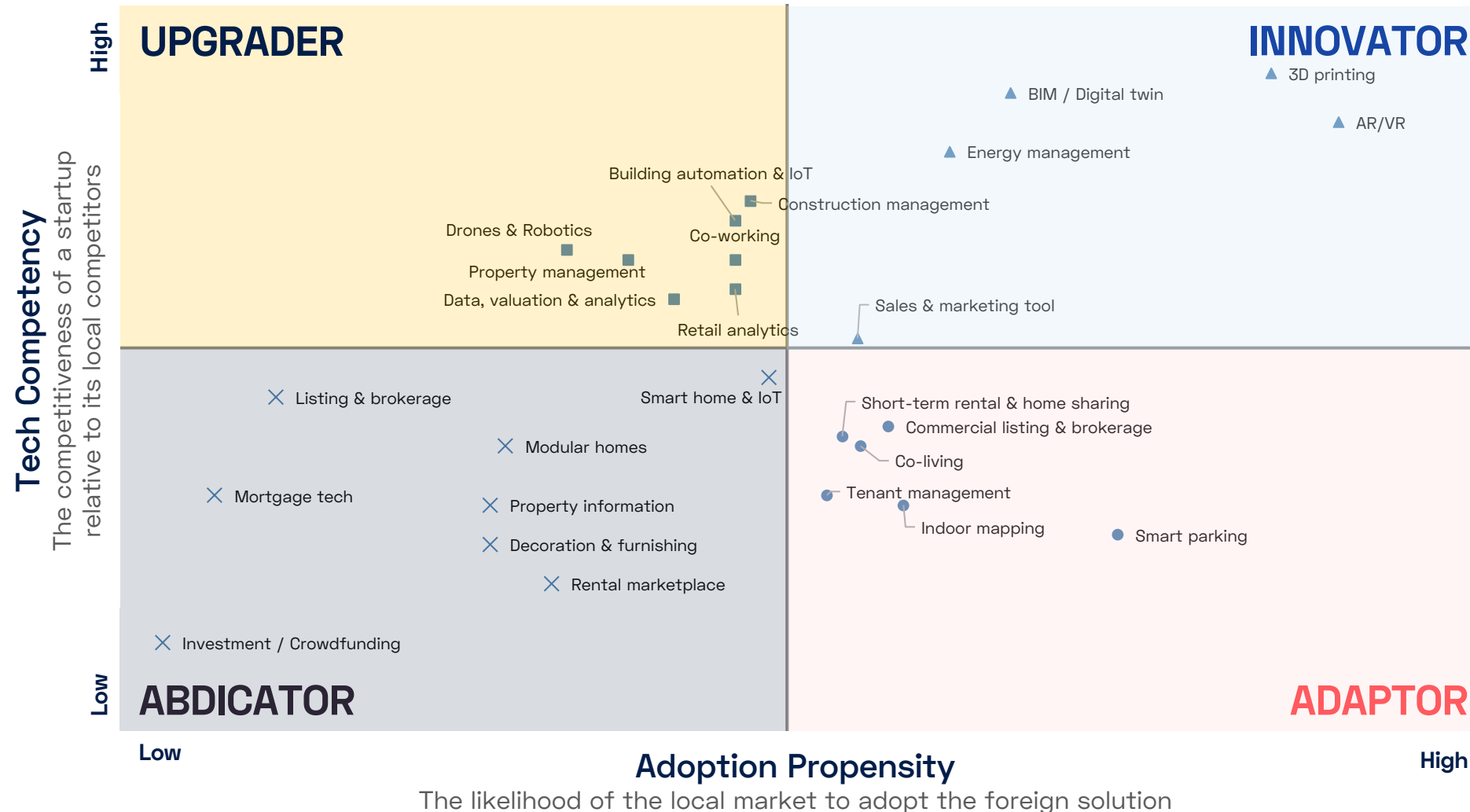
PropTech Sector	Overall Adoption Propensity	Market Potential	Local Competition	Economic Significance	Customer Preference	Regulatory Compliance
AR/VR						
3D printing						
Smart parking						
BIM / Digital twin						
Energy management	H					
Indoor mapping						
Commercial listing & brokerage						
Sales & marketing tool						
Tenant management						
Co-living						
Construction management						
Smart home & IoT	M					
Short-term rental & home sharing						
Co-working						
Building automation & IoT						
Retail analytics						
Data, valuation & analytics						
Property management						
Drones & Robotics						
Rental marketplace						
Modular homes	L					
Property information						
Decoration & furnishing						
Listing & brokerage						
Mortgage tech						
Investment / Crowdfunding						

Tech Competency

PropTech Sector	Overall Tech Competency	Technology Advantage	Market Competency	Industry Usage	Talent	Return on Investment
3D printing						
BIM / Digital twin						
AR/VR						
Energy management						
Building automation & IoT	H					
Drones & Robotics						
Co-working						
Property management						
Retail analytics						
Data, valuation & analytics						
Sales & marketing tool						
Smart home & IoT						
Construction management	M					
Listing & brokerage						
Commercial listing & brokerage						
Short-term rental & home sharing						
Co-living						
Modular homes						
Tenant management						
Indoor mapping						
Property information	L					
Smart parking						
Decoration & furnishing						
Rental marketplace						
Mortgage tech						
Investment / Crowdfunding						

Cross-Border PropTech Matrix

Based on the following PropTech sectors' ranking on Adoption Propensity and Tech Competency, many sectors have the potential to build cross-border businesses with the right approach.



▲ INNOVATOR:

- 3D printing
- BIM / Digital twin
- AR/VR
- Energy management
- Sales & marketing tool

■ UPGRADER:

- Building automation & IoT
- Construction management
- Drones & Robotics
- Co-working
- Property management
- Retail analytics
- Data, valuation & analytics

● ADAPTOR:

- Short-term rental & home sharing
- Commercial listing & brokerage
- Co-living
- Tenant management
- Indoor mapping
- Smart parking

✕ ABDICATOR:

- Smart Home & IoT
- Listing & brokerage
- Modular homes
- Property information
- Decoration & furnishing
- Rental marketplace
- Mortgage tech
- Investment / Crowdfunding

Cross-Border PropTech Opportunities

We identified a few PropTech startups who have the potential to become the innovator, upgrader, and adaptor in the Chinese market.

INNOVATOR



Large-Scale 3-D Printing

- Founded in 2013; HQ in Chattanooga, TN, US
- Raised \$10.05M from Bonaventure Capital, MetaProp, Brick & Mortar Ventures etc.



AI-powered Risk Management Platform for City Infrastructure

- Founded in 2015; HQ in New York, NY, US
- Raised \$20M from Piva, Energy Impact Partners, MetaProp, Fifth Wall, National Grid Partners etc.

UPGRADER



AI-Powered Workplace Sensor Provider

- Founded in 2017; HQ in San Francisco, CA, US
- Raised \$10.6M from JLL Spark, Y-Combinator, Allegion Ventures, MetaProp, Bolt etc.



Automated Construction Verification and Progress Monitoring

- Founded in 2017; HQ in New York, NY, US
- Raised \$3.05M from Khosla Ventures, LocalGlobe, MetaProp, Stacked Capital etc.

ADAPTOR



Professional Tenant Experience Platform

- Founded in 2015; HQ in Boston, MA, US
- Raised \$46.8M from Insight Partners, JLL Spark, Allegion Ventures, MetaProp, and Accomplish VC etc.



Tech Enabled Corporate Housing Provider

- Founded in 2011; HQ in San Francisco, CA, US
- Raised \$106M from Initialized Capital Management, Bowery Capital, MetaProp, CEAS Investments etc.

China Strategies for Foreign PropTech Startups

Potential challenges when entering China

Lack of deep knowledge about culture, market, and customers

The Chinese tech landscape is **diverse, competitive, and unique**. It is detached from markets elsewhere in the world, and many foreign companies have been unsuccessful in China because they failed to take into account cultural barriers and consumer preferences early during their expansion.

Difficulty in navigating the regulatory environment

There is a substantial difference in the role of government in Chinese businesses compared to the West. **Foreign companies in China face government, legal, and regulatory challenges**, especially in a few areas where foreign firms are placed in more disadvantageous positions.

Increasingly competitive local market

Chinese local startups move fast and agilely. The foreign startups' ability to learn and adapt quickly to the China context will be essential to compete. They can be quickly cloned if they fail to build quick wins or do not have truly unique products or services.

China Strategies

- Enter China when **the market has already adopted the latest technologies** in your sector to avoid spending time and resources to educate the market.
 - **Find investors in China** who can help plan China-entry strategies, build networks, and recruit local teams early.
 - **Build strategic partnerships** with major local real estate developers and tech players, or with a global real estate company and enter China through its businesses.
 - **Recruit a local leadership team** with a strong entrepreneurial spirit and a deep understanding of the market.
 - **Localize and customize product development and business operations** (especially customer support) in a way that caters to local preferences (e.g. integrate mobile payment, social media).
-
- **Conduct regulatory due diligence** and develop an in-depth understanding of laws and regulations, especially those related to collecting personal data from consumers.
 - **Evaluate the risks** in compliance and potential regulatory changes.
 - Always **play it safe** and cooperate with the local authorities.
-
- **Keep differentiating** yourself from the local players in brand awareness, user experience, and corporate culture.
 - **Amplify product offerings and application scenarios** in ways that attract customers beyond the real estate industry.
 - **Build a joint venture or acquire a local competitor** so you can enter the market with existing customers during the early phase of expansion. If you go it alone, **begin in first-tier cities** where brand recognition and product and service quality is essential to win customers.

04



The Future of PropTech in China

- Trends on the Horizon of PropTech in China
- What has been learned?

Five Trends on the Horizon of PropTech in China

01 The rise of **super apps** in PropTech.

02 Chinese real estate developers are becoming **service-providers**.

03 Physical assets will be **digitally powered** to provide omnichannel and value-driven experiences.

04 **New technologies** will unlock more applications in real estate.

05 Real estate giants will collaborate with tech sector to build **industry best practices**.



01 The Rise of Super Apps in PropTech

Super apps, often known as all-in-one platforms, have become synonymous with the rise of Chinese super products such as WeChat and Alipay. Each has built a multi-faceted and multi-sector digital ecosystem.



The messaging app has morphed into one of the most comprehensive digital ecosystems, hosting 1 million mini-programs that penetrate all aspects of Chinese life.



Besides mobile payment functions, Alipay offers a multitude of services such as retail, bookings, and utility bill payments via mini-apps.

What is included in a Super App?

Core Function

The super app usually acquires users through a core function, usually through messaging, mobile payment, ride-hailing or food delivery.

Marketplace

As users grow, the super app integrates more services on its platform, delivered via in-house product development and through third-party service integration.

Mini Program

External companies build their apps within the super app to leverage its existing functions, such as mobile payments and subscription accounts, without requiring users to download an additional app or change user interface.

Value of the Super App

- **“Seamless, integrated, contextualized and efficient experience”:** The super app has integrated many third-party services. This creates value for customers and gains their loyalty. **WeChat has 1 billion monthly active users and receives 29% of all time spent on mobile devices.**
- **Data and analytics capability:** The super app has access to volumes of customer data, which can then generate insights for expanding product offerings. E.g. Alipay, as the payment method on Taobao, collects behavioral and transactional data. It used the data to build a credit-rating system through Ant Financials for personal and business loans.
- **Form a digital ecosystem:** By becoming a marketplace, super apps broaden the scope of their businesses without spending millions on product development. These platforms cover all aspects of daily life, providing a one-stop service while retaining the role of e-commerce (Alibaba) and social media (Tencent) as their major revenue pools.

01 The Rise of Super Apps in PropTech

WeChat and Alipay are no longer the only super app ecosystems. Super apps are also being utilized by the PropTech sector, especially for in-home transactions and rentals services, creating a one-stop shop for home buying and renting.

Home Transactions



China's largest integrated online and offline ("O2O") platform for housing transactions and services.

Product & Services Offerings:

- Home sales
- Home rentals
- Home renovation
- Beike's Pick (home recommendation)
- Property information & dictionary
- Tools to engage with agents
- Agent recommendation / agent rating
- Beike Index (market price trend)
- Home valuation
- VR property showing
- Industry news
- Real estate financial solutions:
 - Bridge loans
 - Home renovation loans
 - Rental installments

Apartment Rentals



China's largest apartment rental platform provides rental and property management services.

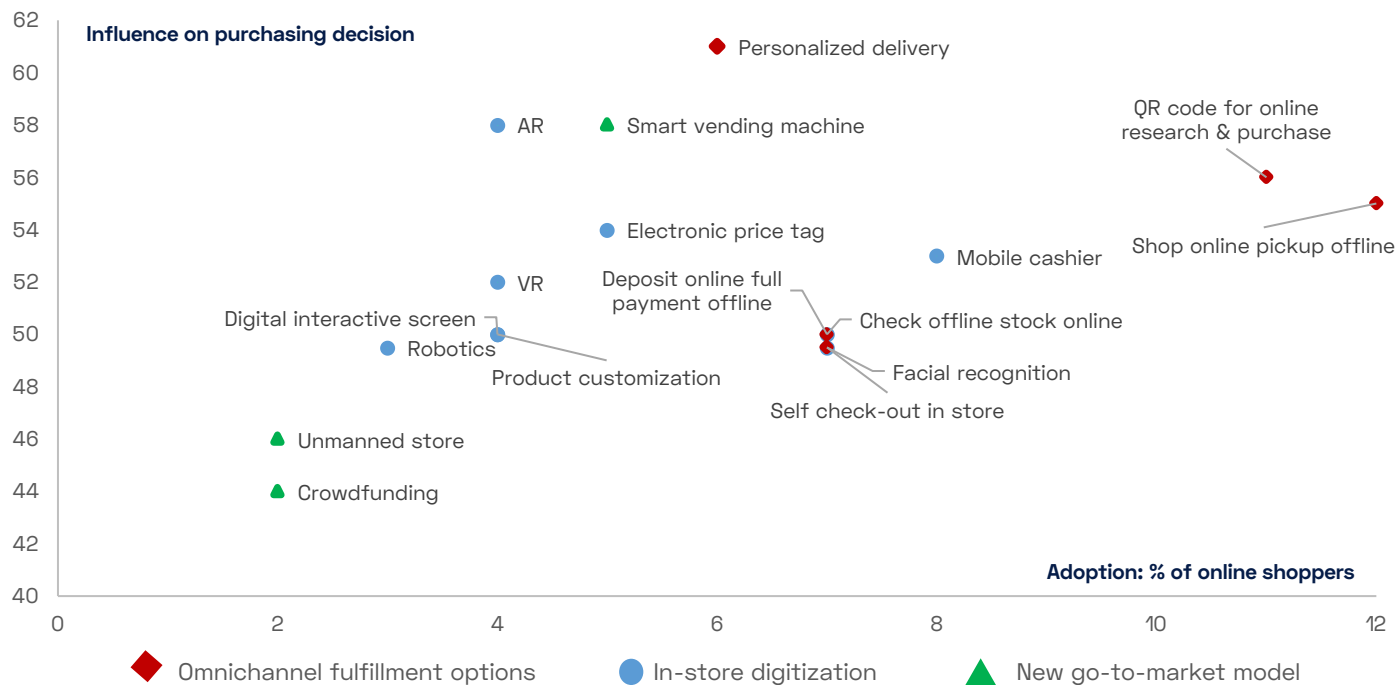
Product & Services Offerings:

- Apartment rentals
- Short-term rental & service apartment
- Roommate searching
- Moving services
- Cleaning & maintenance services
- E-contract & mobile payment
- Utility management
- Smart home device integration
- Decoration & furnishing
- Event space rentals
- Social & community:
 - Meeta: friend-making and dating services
 - Z-Space: social events
 - Z-Lovi: dance and gym classes

02 Physical Assets Will Be Digitally Powered to Provide Omnichannel and Value-Driven Experiences

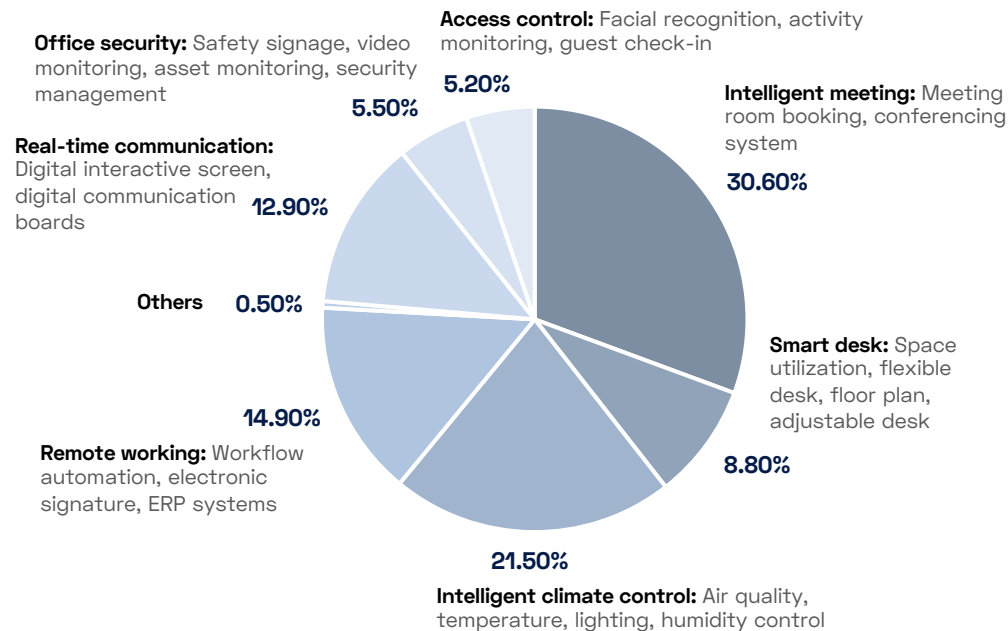
Traditional real estate is being disrupted so the “physical location” no longer provides sufficient value. Real Estate developers in China are looking for ways to provide new value through data, services, and experience.

Digitally Powered Physical Retail



According to a McKinsey survey on Chinese online consumers, retail innovation through **omnichannel fulfillment options**, **in-store digitization**, and **new go-to-market model** could have big influence on their purchasing decisions.

Digitally-Powered Workplace



Based on a survey done by IFMA, office workers in China want more integrated **smart office solutions**, especially intelligent meeting and climate control, to make the workplace happier and more productive.

Physical Assets Will Be Digitally Powered to Provide Omnichannel and Value-Driven Experiences

With the help and push from technology, the physical spaces are becoming personalized, multi-functional, and green in China.



Personalized

SK-II Future X Store

📍 Shanghai

SK-II has opened its Future X Smart Store in Shanghai, calling it the “store of the future.” It uses AI and facial recognition to help customers on their beauty buying journey. A digital wall can read your facial expression and a smart booth can scan and analyze your skin to provide personalized recommendations.



Multi-Functional

Yan Jing Lane

📍 Beijing

“**Yan Jing Lane**,” located in Chaoyang, Beijing, is a mixed-use community which includes an apartment building (co-living), an office building (co-working), cafés, galleries, and restaurants. The space aims to create “a model of future community” for people to work, live, and socialize.



Green

Sino-Ocean Taikoo Li

📍 Chengdu

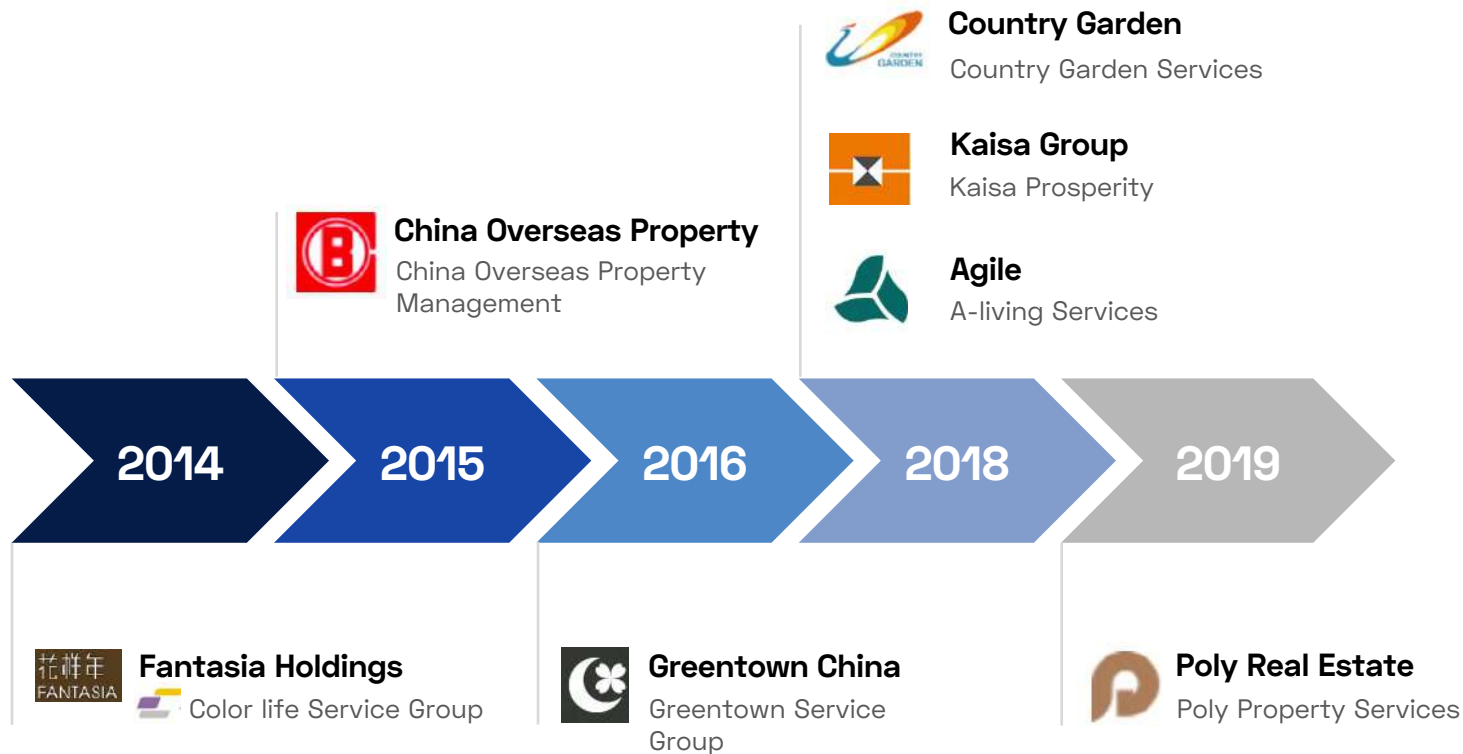
Taikoo Li Chengdu is now powered by 100% renewable electricity, making **Swire Properties** one of the first companies in Sichuan to achieve “net zero carbon” in its annual electricity consumption for landlords’ and tenants’ operations. This also echoes the pledge of China’s target to achieve carbon neutrality before 2060.

03 Chinese Real Estate Developers Are Becoming Service Providers

As China's property development market experienced slow-downs, the real estate developers turned their focus on the next driver to profit growth – property management.

Publicly-Listed Property Management Companies

Starting in 2014, many major Chinese real estate developers spun-off their property services arms for separate IPOs:



Non-Listed Companies

A few other are yet to be publicly listed:



Vanke Services is the largest property management firm in China with services covering 3800+ projects in 101 Chinese cities.



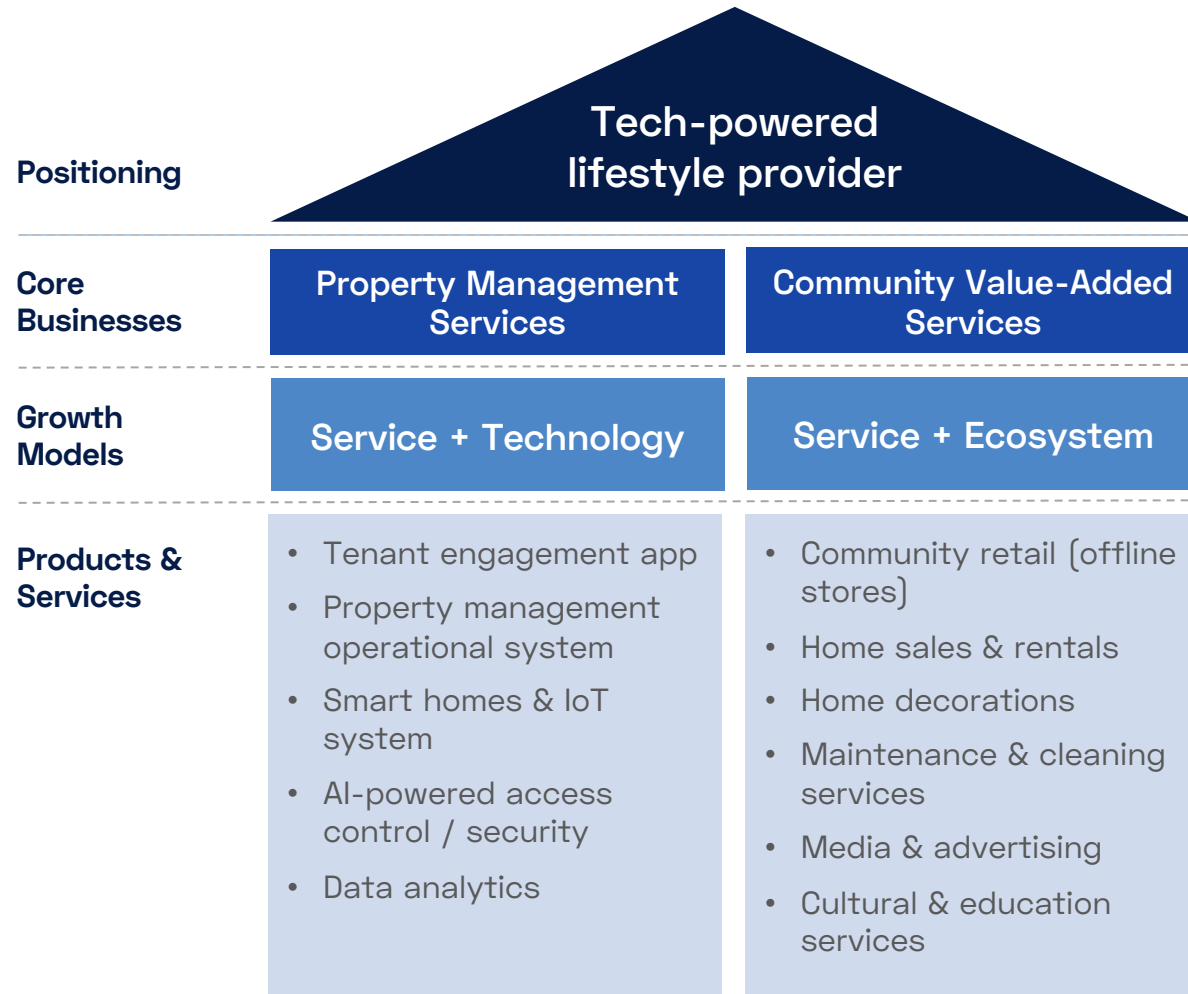
Longfor Services is a leading property management firm and manages 132 M m² of properties.



China Resources Land Services is planning an IPO on HK's stock exchange to raise about USD 5B.

03 Chinese Real Estate Developers Are Becoming Service Providers

The developer-turned property managers have integrated technologies into their services aiming to create lifestyle products for their customers while increasing operational efficiency.



These major developers aim to create an integrated one-stop platform to offer “full-cycle” online and offline property management services.



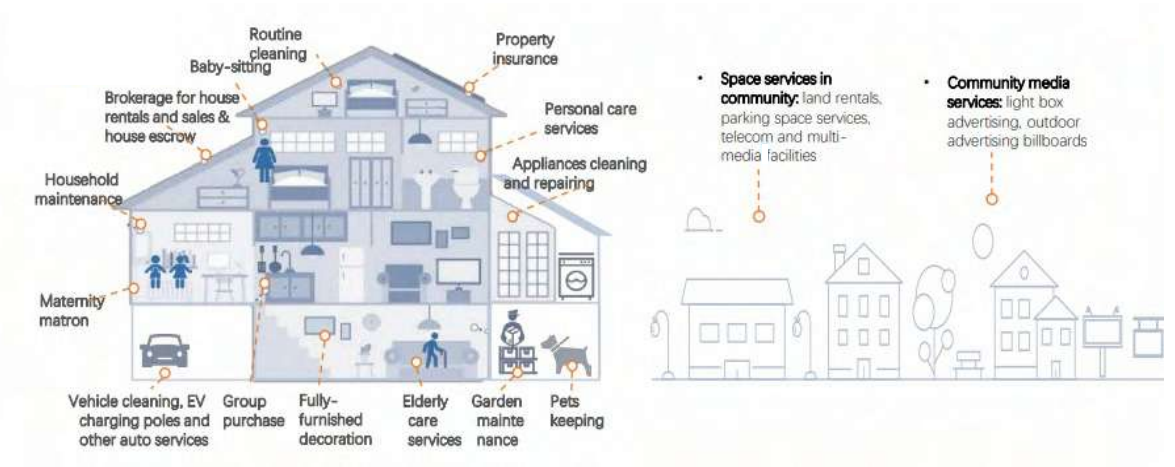
Community convenience store



Tenant engagement app



Cleaning & maintenance services



Overview of community value-added services

04 New Technologies Will Unlock More Applications in Real Estate

China's urbanization rate will increase from 60% to 70% over the next decade. The population growth will increase the demand for a few emerging technologies to make cities and their physical assets more efficient and sustainable.



5G

- Autonomous vehicles
- Drones for last mile logistics
- Remote platforms
- Remote working
- Live streaming
- AR/VR
- Smart cities



Big Data & Cloud Computing

- Real estate-specific SaaS solutions
- Foot traffic analysis
- Site selection
- Property data platform
- Asset utilization & optimization
- Sales & marketing
- Valuation & appraisal
- Investment & underwriting analytics
- Risk management



AR/VR

- BIM /Digital twin
- VR property tour
- AR/VR Shopping
- Temperature Detection
- Remote training

USE CASES



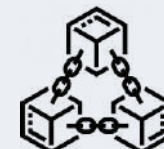
AI & Machine Learning

- Facial recognition
- Voice assistant, chatbots
- Security robotics
- Service robotics
- Construction robotics
- Surveying drones
- Design
- Access control & security



IoT

- Indoor air quality monitoring
- Energy management system
- Building automation
- Smart & connected home
- Asset tracking
- Smart parking
- Smart meters
- Smart grid



Blockchain

- Home registry / smart contract
- Asset tokenization
- Supply chain traceability

USE CASES

04 New Technologies Will Unlock More Applications in Real Estate

China is no stranger to experimenting with new kinds of technology and applying them to the real world.



5G

Live-Stream Home Selling

During COVID-19, live-stream home selling has become a trend. Many developers collaborated with **Taobao** and **Douyin** influencers to sell homes during their live stream events. Weiya, the #1 KoL on Taobao, had attracted 19 million viewers and sold 15 properties during one live-stream event.



AI

Car Vending Machines

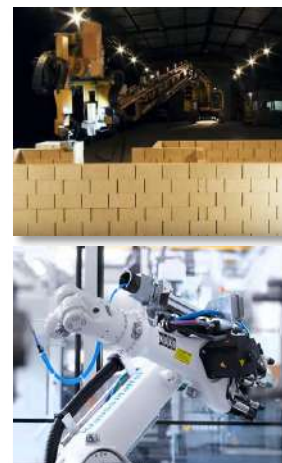
Alibaba started to sell cars through the unmanned vending machine facilities. The customers can use Taobao to scan a car they want to test, arrange a test-drive, and buy the vehicle outright via Taobao.



VR/AR

VR Property Tour

KE Holdings or Beike has a VR property showing function called Realsee (如视) which allows customers to visit properties remotely and provides on-demand real-time agent interaction. In 2019, it had 420 million views for VR property showing.



Robotics

Construction Robotics

Country Garden started investing in robotics R&D in 2018, and it aims to have at least one robot at each of its sites across the nation. In 2018, it targeted to invest 16 billion yuan (US\$2.33 B) in robotics each year for five years to develop robots used for agriculture, restaurants and construction.

Real Estate Giants Will Collaborate with Tech Sector to Build Industry Best Practices.

Chinese real estate developers are undergoing digital transformation in response to emerging technologies, changing consumer behaviors, and new operating models. They will work with the tech sector proactively to set the standards for the industry.

PropTech Ecosystem in China



Real Estate Giants Will Collaborate with Tech Sector to Build Industry Best Practices

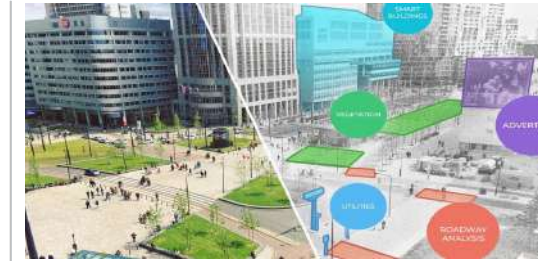
A few pioneers are already building leadership roles and setting the standard in the tech-enabled real estate sectors.



Smart Industrial Park



BIM



Digital Twin



Construction Robots



Property Management



Smart Home & IoT



In Summary



Real Estate Developers

- Chinese real estate companies' **digital strategies are top-down**, and largely depend on government policy, the company's strategic focus, and senior management's commitment and vision.
- Given the New Infrastructure policy and the coming of 5G, more Chinese real estate players will **collaborate with tech firms** to develop new tech-enabled businesses, increase efficiency, and seek new profit and value drivers.
- Chinese developers will **shift more focus on property management** and use technology to reduce cost, create additional value-added services, and meet customers' growing digital needs.
- Chinese developers prefer **an integrated platform** which incorporates various product & service offerings to a single product & service.
- Top-tier developers have the tendency to build an internal tech ecosystem, whereas other developers will welcome more **open innovation partnerships**.



Customers

- **All-in-one platform.** Chinese customers are more likely to adopt technology solutions that have pre-built integrations and include mobile payment (Alipay, WeChat Pay), social media (Douyin, Xiaohongshu, Weibo), and social network (WeChat).
- Chinese customers have **high acceptance of new digital solutions, new channels, and new experiences**. But they also have low loyalty unless these solutions create real value and enhance the experience.
- **First-tier cities customers** are more likely to be the **early adopters** of PropTech solutions. These customers care about brand, product quality, service level, and personalized engagement.
- With the prevalence of Alibaba's Hema and other new retail innovations, customers will start to **demand omnichannel options and experiences**.



PropTech Startups

- **More industry consolidation** as the leading Chinese PropTech firms are building a more comprehensive tech platform that caters to the needs of multiple asset types and diversified applications.
- The Chinese PropTech industry will continue to **follow the path of the US**. Startups will replicate their US equivalents, but adopt a local business model.
- Chinese PropTech startups **face competition** from large developers and internet giants. Their ability to compete depends on their core tech competency, industry network, and product & service quality.
- **Data is king.** PropTech startups who have accumulated data about customers, properties, sales and business operations will be able to leverage them to build new product offerings and help businesses with decision-making.
- In the areas of consumer-facing PropTech, physical retail innovation, and 5G-related applications, **China startups may lead the world**.

05



China PropTech Leaders Spotlight

- Interviews with China PropTech Leaders on:
 - The Impact of COVID19
 - Cross-Border Opportunities and Challenges
 - Future Tech Trends

China PropTech Leaders Spotlight



Dominic Penaloza

CEO at Reinvent; Former Head of Innovation & Technology at WeWork China

REinvent is Asia's first PropTech startup studio.
WeWork is the biggest co-working startup in the world.

REinvent



Larry Y. Liu

Managing Partner at Celtic House Asia Partners [CHAP]

CHAP is an early stage VC firm focusing on cross-boarder deals.



Ji Ke

Partner and Program Director at HAX

HAX is a full-stack accelerator for hardware startups.



Qi Su

Vice President at Kujiale; Founder of Modelo [Exited]

Kujiale is a SaaS-enabled home decoration and design platform.
Modelo is a spatial data visualization platform acquired by Kujiale in 2020.



Dr. Ruizhe Liu

Partner and Head of Data Science & Smart Technologies at Vanke

Vanke is one of the largest residential developers in Mainland China.

vanke



Roger Tian

Vice President of Innovation & Technology at China Resources Land

China Resources Land Limited is the real estate flagship under China Resources Group. It is an integrated real estate developer in China.



Raefer Wallis

Founder and CEO of GIGA

GIGA is an international organization that evaluates the health performance of buildings.



Anthony Liu

Head of Innovation & Technology at Goodman Asia

Goodman is a global developer, owner and manager of industrial property.



Vincent See

Head of New Ventures at Swire Properties

Swire Properties is a property developer of commercial properties in Hong Kong, Mainland China, Singapore and the US.



The Impact of COVID-19



What's the impact of COVID-19? Have you seen any tech opportunities emerge?



DOMINIC PENALOZA

CEO at REinvent
Former Head of Innovation & Technology at WeWork China

"One thing that will deserve the spotlight for huge positive impact is '**Sui Shen Ma**,' China's amazing speed of deployment of ubiquitous contact tracing and easy-to-use safety status. Another thing I'd be fascinated to understand is the impact on controlling virus spread attributed to China's pre-existing widespread adoption of **cashless mobile payments**. The third thing that I'd like to share from Shanghai, given the timing of this report, is that '**reports of the death of the office are greatly exaggerated**.' "



ANTHONY LIU

Head of Innovation & Technology at Goodman Asia

"COVID-19 accelerated many trends that were already in progress. A few areas that we have been exploring/implementing include: **contactless/unmanned solutions** - robots, drones, computer vision, video analytics, thermal scanning; **Smart workplaces** - including occupancy analytics, contact tracing, facial recognition; **Delivery/on-demand everything** - partnerships with tech providers who enable this for our customers."



ROGER TIAN

Vice President of Innovation & Technology at China Resources Land

"COVID-19 has caused the slowdown of China's economy, which has a great impact on the real estate companies' cash flow. In the past few months, many real estate companies used our Joy+ platform (CR Land's property management app) to improve their sales capabilities. In property management, there was a big demand for **more automated operations**, especially in **security and access control**."



DR. RUIZHE LIU

Partner and Head of Data Science & Smart Technologies at Vanke

"The impact of COVID-19 on macroeconomics and real estate will be greater than [that of] SARS. Nevertheless, we could still see some opportunities during the epidemic: **AR, VR, and panoramic technologies** are becoming mature in China; COVID-19 forces **remote and low-contact working environment**, which will probably become a new norm in the post-epidemic era. The demand for **property management** value-added services also increased, such as **community group-buying**, which may lead to the development of the community economy."

Cross-Border Opportunities and Challenges

Have you seen any successful cross-border tech applications?



DOMINIC PENALOZA

CEO at REinvent
Former Head of Innovation &
Technology at WeWork China

“Aside from **Musical.ly/TikTok**, if I have to think so hard to find examples then the answer is largely ‘no.’ LinkedIn can be one, but it is only widely used among ‘elite professionals’ in China, without being able to penetrate into more groups or lower-tier cities. **WeWork China** also has some success given it is the biggest co-working brand in China and has built a good brand image.”



ANTHONY LIU

Head of Innovation &
Technology at Goodman Asia

“**Bytedance** is probably the most prominent success story. Their well-designed algorithms have made **TikTok** successful across many different user groups and markets.”



LARRY Y. LIU

Managing Partner at Celtic
House Asia Partners

“I helped my own portfolio **ApplyBoard’s** (ApplyBoard is an online platform for study abroad) expansion in China. We used two years to figure out the right approach and business model. Unlike our approach elsewhere in the world, we built relationships with local recruitment agencies who are the channel partners to help us generate leads. After rounds of trial and error, we found a model that works for China now. For any startup, China is hard, but a market with unlimited possibilities.”



JI KE

Partner and Program Director
at HAX

“**Open source community** has done a good job in cross-border tech transfer. Open source community goes beyond the country border, and it helps us innovate as a society. That’s interesting for startups, because their ability to acquire knowledge does not have a physical border. Android system, open-source algorithms, and robotics operating system can be contributed and acquired by any startups or large organizations. It’s the biggest knowledge transfer for the past decades.”

Cross-Border Opportunities and Challenges

Why do most foreign startups fail in China?



DOMINIC PENALOZA

CEO at REinvent
Former Head of Innovation &
Technology at WeWork China

“In order to even have any chance, **a deep commitment from all stakeholders to localize team, strategy, decision making, and product** is absolutely required. That’s one of the main reasons I agreed to join WeWork when it acquired Naked Hub in April 2018. We had full commitment to build a local technology organization, localize global products, and not only create local products, but also business model innovation. The recent announcement of local investors taking majority ownership of WeWork China shows that this commitment has not changed. If anything, **localization should accelerate**, which will be good for the local business and local customers.”



QI SU

Vice President, Kujiale
Founder of Model (Exited)

“In the US, companies are able to create a product that solves a single problem. You just need to be really good at what you do. Whereas **companies in China tend to need to provide more comprehensive solutions**, or at least have pre-built integrations, to solve multiple if not all problems.”



LARRY Y. LIU

Managing Partner at Celtic
House Asia Partners

“**Lack of strong execution**, especially for foreign startups who don’t have a local management team. **Chinese startups move very fast**, so for any startups who enter China they need to understand the competitive landscape and quickly adapt. Local investors will be important for the startups’ expansion because they have more market knowledge and local connection to help them build early-entry strategies.”



RAEFER WALLIS

Founder and CEO of GIGA

“To obtain success, the rule of thumb is ‘**In-China-for-China**.’ 60-70% of failed startups have failed because of the same reason the Chinese startups failed. Doing a startup itself is tough. On top of that, **language and culture** are critical factors. Another reason is their **lack of focus** in the Chinese market. This is a market that requires patience and time to build up your network and business.”



JI KE

Partner and Program Director,
HAX

“What I have seen is many come into China trying to compete on the technological level or based on their product performance or design. This does not work because you can quickly be replicated by competitors. You need to **find a unique advantage in your brand** and create values that resonate with the local market. It also requires startups to be able to **pivot quickly and develop an agile business** model to be successful. The startups’ ability to pivot fast is also one of the advantages they have over a big tech company.”

Cross-Border Opportunities and Challenges

What's one type of firm you know in the U.S. that you have not seen in China yet?



DOMINIC PENALOZA

CEO at REinvent
Former Head of Innovation &
Technology at WeWork China

"Within PropTech, so far there is no clear '**CoStar of China**.' So that's a \$30B USD company that has no analog in China."



ANTHONY LIU

Head of Innovation &
Technology at Goldman Asia

"**WiredScore** – I'd love to see something like that in China."



LARRY Y. LIU

Managing Partner at Celtic
House Asia Partners

"**Stochastic B2B SaaS**. In Large, China has not yet adopted the monthly subscription pricing model, but it is changing as the younger generation is used to paying for video-streaming and music platforms.

North America has way more mature B2B startups who service corporates on a subscription basis. China's SMEs will have more and more demand for stochastic B2B SaaS."



RAEFER WALLIS

Founder and CEO of GIGA

"Things about **Environment Social and Governance (ESG)** are strong globally but weak in China. In North America, investors are pushing for that: financing comes from public funds and REITs. However, those models don't exist in China. In China, ESG is considered a government problem.

Also, China lacks **data on building materials**. There is no driver for demand, but it may change as some chemicals in the building may pose health risk to employees."



DR. RUIZHE LIU

Partner and Head of Data
Science & Smart
Technologies, Vanke

"I am keen to see more firms in data analytics area. **Data-driven decision-making** will be key in the future and I'd love to see more firms creating actual value.

For example, a China-based startup called Data Intelligence Times has developed a **big data analytics platform** – "Seeingflow Data" – that combines natural language with business intelligence, which allows authorized users to get instant data, charts and insight by simply asking verbal questions. I'd hope to see more of these types of firms in China."

Future Tech Trends

Which tech sectors have leapfrogged in China?



DOMINIC PENALOZA

CEO at REinvent
Former Head of Innovation &
Technology at WeWork China

"I think the question should actually be 'in which tech sectors has China not leapfrogged?' But very interestingly for PropTech, **B2B SaaS is one such sector (that China has not leapfrogged)**. There's much talk about this finally changing, in line with the evolution of China's economy. Perhaps China will also be able to leapfrog in B2B SaaS as well."



JI KE

Partner and Program Director,
HAX

"There are a few. In terms of the construction tech industry, **construction robotics**. China exceeded in automation, supply chain, and data. There are simply enough sensory data collected by the Chinese startups to train robotics to be autonomous. In combination of the supply chain, anything from motor, to LiDAR system, to shipment of factories will enable the faster construction and deployment of the robotics. This will especially be the case when 5G rolls out in China."



RAEFER WALLIS

Founder and CEO of GIGA

"In my world, China wins in everything related to **air quality monitoring**. Due to pollution levels, China has worked on the issue since 2012 – 2013, their air purifier devices are in the fourth generation. I see Chinese producers shipping their devices and attract customers from California during the wildfire."



QI SU

Vice President, Kujiale
Founder of Model (Exited)

"**Super app and B2C fintech**. China leads in digital mobile payment. The prevalence of the credit card in the US has hindered the speed of fintech innovation. China jumped directly from cash to cashless with the help of digital payment systems."



LARRY Y. LIU

Managing Partner at Celtic
House Asia Partners

"China has leapfrogged the world in **the application of AI and business model innovation** (super app). China's facial recognition leads due to the amount of data available to train algorithms. China's super app has penetrated people's everyday life and is being replicated in the rest of world. The China-US relations will push China to innovate more internally. The focus will be Manufacturing 4.0 and AI."



VINCENT SEE

Head of New Ventures at
Swire Properties

"We see significant advancements in Chinese technologies in two areas: **consumer-facing digital products and AI**. Marketing, sales and analytics based on platforms such as WeChat and Bytedance are growing faster in China than in other parts of the world."

Future Tech Trends

Are there any tech trends that you are bullish about in PropTech?



QI SU

Vice President, Kujiale
Founder of Model (Exited)

“Companies with **massive amounts of data** are able to expand their businesses into new scenarios. In Kujiale’s case, we have data on millions of different renovation plans. The data help us understand customers’ preferences and purchasing behaviors in home decoration and furniture. There is a lot we can do to leverage that data.”



VINCENT SEE

Head of New Ventures at
Swire Properties

“The **increasing application of AI and IoT in property operations** is particularly exciting. We are also bullish about the technologies that are helping to improve sustainability in the property sector, such as **energy and waste management tech**.”



DR. RUIZHE LIU

Partner and Head of Data
Science & Smart
Technologies, Vanke

“The application of **edge computing** in smart home, smart community and smart city. I am also excited about technologies in **sustainability and green construction** to improve the efficiency of the physical space and create a more sustainable environment. It will become important in China.”



ROGER TIAN

Vice President of Innovation &
Technology at China
Resources Land

“I am optimistic about a few things: **internet of things** (IoT), which plays a critical role in property management, including water, electricity and building security control; **more diversified application of facial recognition**; and **smart parking**, which is a high-frequency event in residential and commercial properties.”



RAEFER WALLIS

Founder and CEO of GIGA

“I am bullish about **AI-driven building risk assessment**, which can be applied to building insurance. In-door air quality and building material valuation metrics can help insurance companies better underwrite their buildings.”



ANTHONY LIU

Head of Innovation &
Technology at Goodman Asia

“**Computer vision**, video analytics; **Automation in construction** - drones, robotics, etc.; Workflow platforms and smart document management; **Open platforms** [the Taobao/Shopify of everything].”

Future Tech Trends



What's one startup or tech sector that has excited you recently?



DOMINIC PENALOZA

CEO at REinvent
Former Head of Innovation & Technology at WeWork China

"It was exciting to see the IPO and big valuation of KE Holdings / Beike, along with Ming Yuan Cloud. **I believe IPOs of Asia PropTech firms would open the eyes of many people to think about the sector.** It has also been exciting to see Airbnb's response to COVID and adjustments to its IPO plans."



LARRY Y. LIU

Managing Partner at Celtic House Asia Partners

"Xiaomi. While China has an equivalent for all the US FANG tech, **the US does not have a company like Xiaomi.** Xiaomi will play a role during China's Manufacturing 4.0. It has a large ecosystem of consumer electronics and, more importantly, very competitive pricing. In terms of the sector, I am interested in **more value-driven use cases in robotics.**"



ROGER TIAN

Vice President of Innovation & Technology at China Resources Land

"I am excited about the future of **facial recognition.** It will unlock a lot of different use cases, especially in property management. I am waiting to see more creative and valuable applications. China is and will be a leader in it."



JI KE

Partner and Program Director, HAX

"I see a lot of opportunities for **factorization in PropTech / construction tech.** I like to draw parallel between PropTech and manufacturing. Factories have been automated for decades and are in the 4.0 phase, whereas construction still heavily relies on labor, maybe just entered the 2.0 phase. I see that changing. Examples like **LiDAR, 3D-scanning** system have been used in the factories for ages, they can be applied in construction.

Other things like robotics arms, 3D prints, security robots are being applied to the construction industry. **Pre-fab** is the ultimate factorization in construction. It is coming."



About MetaProp

MetaProp is a New York-based venture capital firm focused on the real estate technology (“PropTech”) industry. Founded in 2015, MetaProp’s investment team has invested in 130+ technology companies across the real estate value chain. The firm manages multiple funds for both financial and strategic real estate investors that represent a pilot- and test-ready sandbox of 15+ billion square feet across every real estate asset type and global market.

The firm’s investment activities are complemented by pioneering community leadership including the [PropTech Place](#) innovation hub, [MetaProp Accelerator at Columbia University](#) programs, global events [NYC Real Estate Tech Week](#) and [Propel by MIPIM NYC](#), and publications [Global PropTech Confidence Index](#) and [PropTech101](#).

About the Authors



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Alice works in PropTech. Most recently, she was responsible for product innovation at Ping An Urban-Tech, the smart city division of China's largest insurance company. At Ping An, she co-founded UrbanLab, China's first corporate accelerator program that focuses on property technology.

Prior to that, she worked at Fifth Wall and MetaProp in PropTech venture capital. She graduated from Columbia University with a Master degree in Real Estate Development, and received her Bachelor degree in Finance from the University of British Columbia.



Troy Fan

Troy is an investment analyst at a NYC-based real estate private equity firm. Previously, he worked for Hudson Capital, where he wrote a research report on PropTech in the APAC market. He also has internship experience at American Enterprise Institute, Boston Properties and MIT Media Lab.

Troy graduated from MIT with a Master degree in Real Estate Development. He also has a Master of Public Policy Degree from Georgetown University and a Bachelor degree in Mathematics from The University of Birmingham in the UK.



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Xuan graduated from Cornell University with a Master of Science degree in Regional Science and a Minor in Real Estate.

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Thank You



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06



Appendix

- Understanding Real Estate in China
- Cross Border Tech Assessment Guidelines
- Real Estate in China-China vs US
- Chinese PropTech Startups List

Real Estate in China – Industry Facts

01 Winners-take-all

- In China's real estate market, the **top developers capture a large share of the market**, namely Vanke, Country Garden and Evergrande have kept the top 3 spots for a while.
- In 2018, China's **Top 50** real estate firms captured **~52% of annual sales**; 51% of the land were acquired by the top 10 real estate firms ¹.

02 Multi-asset owners vs. single property developer

- Unlike property owners in the US, who are very specialized and usually operate as REITs, major Chinese real estate developers have a **multi-asset portfolio** even though their major revenue source is still residential development.
- E.g. **Vanke** owns and develops a portfolio of residential, rental apartments, shopping malls, logistics centers, office parks, ski resorts, senior homes, etc.

03 From developer to property manager

- The Chinese property market is entering the **consolidation phase** as sales are cooling down. Chinese real estate companies who used to operate on a business model involving fast asset turnover are now looking to **gain operational expertise and deliver better services**.
- Developers such as **Country Garden** and **Vanke** have spun off their management units, dedicated to delivering commercial and residential property management services to pursue quality growth.

04 Government is highly involved

- Real estate accounts for **~7% of China's GDP** ², making it a pillar in China's economy. China's housing market thus is closely monitored by the government. Local governments manage the land resources, and the central government guides housing credit policies.
- In 2017, President Xi addressed the 19th Party Congress: "**China should produce homes for living, not for speculation,**" aiming to curb overheated housing prices in China.
- In addition to policy involvement, many major real estate developers in China are also **state-owned enterprises** (SOEs), e.g. China Overseas, China Resources Land.

Real Estate in China – China vs US



~ 7% ¹



~ 12% ²

% of GDP (2019)	~ 7% ¹	~ 12% ²
Ownership Rights	Leasehold Residential: 70 years Commercial: 50 years (except tourism)	Freehold Permanent property rights
Home Ownership (%)	~ 96% ³	~ 65% ⁴
Sector Focus	Residential Development	Cell towers, office, retail
Property Taxes	In order to curb the vacancy rate, China began to test property tax in several big cities, the average property tax rate is only about 0.5%. ⁵	The US has a strict collection of property taxes, which is usually 1 – 4%. Each State has its own regulations. ⁶
REITs	No REITs (quasi-REIT for rental properties)	REIT in each asset type
Housing Data	In China, there is no single housing data system . Each real estate developer has its own sales data, and shares the information at discretion.	Multiple Listing Service (MLS) , a database established by real estate agents to provide data about residential properties for sale at a regional level.
Investors	Heavy reliance on financing from the bank and buyers' down payments.	More diversified, include large institutional investors (e.g. pension funds, family offices, endowment funds) and small investor who invest through REITs.
Major Players (Market Cap \$B)	Vanke (USD 46.3B), Longfor (USD 32.7B) , Country Garden (USD 27.3B), China Overseas Land (USD 27.7B), Evergrande (USD 26.7B) ⁷	American Tower (USD 107.67B), Prologis (USD 77.0B), Crown Castle (USD 70.0B), Simon Property Group(USD 19.8B) ⁷

Cross-Border Tech Assessment Guidelines



	Metric	Definition
Tech Competency To evaluate the likelihood of the local market to adopt a foreign solution by assessing market size, regulations, competition, and customer preference.	Technology	<ul style="list-style-type: none">• How advanced is your technology (i.e. # of patents and IPs)?• How irreplaceable is your technology?• Does the US have an advantage in this technology?• How much have you invested in R&D?• Is your data assets market-specific? To what extent, do you require Chinese market-specific data?
	Market Competitiveness	<ul style="list-style-type: none">• How competitive is your product & service offerings?• Do you have alternative or adjacent solutions?• How much market share do you have (in the US)?• Are there similar players in the market (US and globally)?
	Industry Usage	<ul style="list-style-type: none">• Do you have mature use cases in the real estate industry?• Do you have established strong clientele (i.e. Fortune 500, REITs)?• Can the hard won customers be retained easily?
	Talent	<ul style="list-style-type: none">• Does this technology require your team to have deep industry connection?• Does this technology require your team to have strong technical knowledge?
	Return on Investment	<ul style="list-style-type: none">• Can you generate economic return for your customer?• Can you measure the value generated by your product & services?• Is your product / service capital intensive?
Adoption Propensity To evaluate the competitiveness of a startup’s core technology, product, talents, industry applications, and value creation relative to its local competitors.	Market Potential	<ul style="list-style-type: none">• To what extent, has the Chinese market adopted this technology / trend?• To what extent, does your product / service require China-specific knowledge?• How big is the market?• How fast is the market growing in China?
	Local Competition	<ul style="list-style-type: none">• How many domestic competitors do you have?• How is the quality of the domestic competitors?• How is the China giants’ engagement in this sector?
	Economic Significance	<ul style="list-style-type: none">• How important is the sector to local economy, in terms of GDP and employment?• Does policy support play a big role in this technology sector?• Does the legal and regulatory framework encourage competitiveness?
	Customer Preference	<ul style="list-style-type: none">• How competitive is your pricing?• To what extent, does foreign firms / technology have higher perceived brand value in this sector?• To what extent, does your product & service localization for the Chinese market?
	Regulatory Compliance	<ul style="list-style-type: none">• Is the ease of doing business supported by regulations in this sector?• How much compliance is required?• Does your product / services require heavy data governance and IP protection?

Chinese PropTech Startups

Residential (1/3)

Company Name	Chinese Name	Year Founded	HQ Location	Real Estate Application	Sector	Website
VFang	V房	2018	Beijing, China	Find your home	Agent Tool	www.davfang.com
Zmzfang.com	芝麻找房	2016	Shenzhen, China	Find your home	Agent Tool	www.zmzfang.com
Zhufangbang	住房邦	2014	Xiamen, China	Find your home	Agent Tool	www.zhufangbang.com
Hftsoft.com	好房通	2009	Chengdu, China	Find your home	Agent Tool	www.hftsoft.com
Lianjia	链家	2001	Beijing, China	Find your home	Listings & Marketplace	www.lianjia.com
Beike	贝壳	2018	Beijing, China	Find your home	Listings & Marketplace	www.ke.com/city/
Zhuge	诸葛找房	2015	Beijing, China	Find your home	Listings & Marketplace	bj.zhuge.com
Fangpinghui	房品汇	2014	Shanghai, China	Find your home	Listings & Marketplace	www.fangpinhui.com
Gongxiang Xianju	共享闲居	2018	Haikou, China	Find your home	Listings & Marketplace	N/A
Haowu.com	好屋	2012	Shanghai, China	Find your home	Listings & Marketplace	shanghai.haowu.com
Kat House	吉屋	2011	Shenzhen, China	Find your home	Listings & Marketplace	www.jiwu.com
Spacious	千居	2012	Hong Kong	Find your home	Listings & Marketplace	www.spacious.hk
Meiaojia	美澳居	2014	Beijing, China	Find your home	Listings & Marketplace	www.meiaojia.com
MiaoMaiFang	秒卖房	2018	Dalian, China	Find your home	Listings & Marketplace	www.miaomaifang.com
MiFang	觅房	2014	Shenzhen, China	Find your home	Listings & Marketplace	www.milike.com
NeoX[China]	神居秒算	2017	Shanghai, China	Find your home	Listings & Marketplace	zh.shenjumiastosuan.com
Uoolu.com	有路网	2015	Beijing, China	Find your home	Listings & Marketplace	www.uoolu.com
ViiNet	维宝	2016	Shanghai, China	Find your home	Listings & Marketplace	www.viinet.com
zhen22.com	真二网	2014	Zhengzhou, China	Find your home	Listings & Marketplace	www.zhen22.com
daojiale.com	到家了网	2016	Chongqing, China	Find your home	Listings & Marketplace	cq.daojiale.com
Waijule.com	外居乐	2015	Shanghai, China	Find your home	Listings & Marketplace	www.waijule.com
Loupan.com	楼盘网	2005	Changsha, China	Find your home	Listings & Marketplace	www.loupan.com
Qfang	Q房网	2012	Shenzhen, China	Find your home	Listings & Marketplace	www.qfang.com
Mainaer.com	买哪儿	2014	Nanjing, China	Find your home	Listings & Marketplace	www.mainaer.com
FangDD	房多多	2011	Shenzhen, China	Find your home	Listings & Marketplace	www.fangdd.com
Laifenyong	来分佣	2015	Xiamen, China	Find your home	Listings & Marketplace	www.laifenyong.com
Meifang.com	美房网	2011	Haikou, China	Find your home	Listings & Marketplace	www.meifang.com
Anjuke	安居客	2007	Shanghai, China	Find your home	Listings & Marketplace	www.anjuke.com
Aifang.com	58爱房	2019	Shanghai, China	Find your home	Listings & Marketplace	www.aifang.com
Julive	居理新房	2015	Beijing, China	Find your home	Listings & Marketplace	www.julive.com
Zhaofang.com	找房网	2015	Beijing, China	Find your home	Listings & Marketplace	www.zhaofang.com



Chinese PropTech Startups

Residential (2/3)

Company Name	Chinese Name	Year Founded	HQ Location	Real Estate Application	Sector	Website
Baletu	巴乐兔	2014	Shanghai, China	Find your home	Rental Listings	www.baletoo.com
Ziroom	自如	2011	Beijing, China	Find your home	Rental Listings	www.ziroom.com
CaiHome	彩虹租房	2016	Shenzhen, China	Find your home	Rental Listings	www.jiaozula.cn
HiZhu	嗨住	2015	Shanghai, China	Find your home	Rental Listings	www.hizhu.com
iShangzu	爱上租	2015	Hangzhou, China	Find your home	Rental Listings	www.ishangzu.com
Lekaihua Interaction	乐开花互动	2016	Beijing, China	Find your home	Rental Listings	www.lekaihuahd.com
OYU Butler	欧鱼管家	2017	Beijing, China	Find your home	Rental Listings	www.1ouyu.com
Uhomes	异乡好居	2015	Tianjin, China	Find your home	Rental Listings	www.en.uhomes.com
Uoko.com	优客逸家	2012	Chengdu, China	Find your home	Rental Listings	www.uoko.com
zfx365.com	指房向	2016	Shanghai, China	Find your home	Rental Listings	www.zfx365.com
Zuber	一起租	2016	Shanghai, China	Find your home	Rental Listings	www.zuber.im
Buwenzufang	不问租房	2018	Shanghai, China	Find your home	Rental Listings	N/A
ihome	爱家	2015	Beijing, China	Find your home	Rental Listings	www.ihome-realty.com
Qiaofang	巧房科技	2013	Shanghai, China	Find your home	Tech-enabled Brokers	www.qiaofang.info
Kujiale	酷家乐	2014	Hangzhou, China	Manage property	Home Improvement	www.kujiale.com
Aijia Home Furnishing Products	艾佳生活	2015	Nanjing, China	Manage property	Home Improvement	www.ihomefnt.com
Dabanjia	打扮家	2015	Tianjin, China	Manage property	Home Improvement	www.dabanjia.com
Don Quixote	唐吉珂德	2016	Beijing, China	Manage property	Home Improvement	www.interhouse.cn
Gulch	果栖	2018	Shanghai, China	Manage property	Home Improvement	www.gulch.cn
Xiangshu	乡墅	2015	Beijing, China	Manage property	Home Improvement	www.woaixiangshu.com
YiGaiFang	易盖房	2017	Beijing, China	Manage property	Home Improvement	www.1gaifang.com
JXJhome	极享家APP	2017	Nanjing, China	Manage property	Home Improvement	www.jxjhome.com
Esheyi.com	舍艺	2016	Shanghai, China	Manage property	Home Improvement	www.esheyi.com
3vjia	三维家	2013	Guangzhou, China	Manage property	Home Improvement	www.3vjia.com
See Home	晓家	2018	Beijing, China	Manage property	Home Improvement	www.seehome.cn
Youzhuwang	有住网	2013	Qingdao, China	Manage property	Home Improvement	www.youzhu.com
Manku	满屋家居	2016	Hangzhou, China	Manage property	Home Improvement	www.mankuhome.com
Yuehouse	悦装网	2015	Beijing, China	Manage property	Home Improvement	www.263060.zhuangyi.com
Niujiaojian	牛角监	2016	Guangzhou, China	Manage property	Home Improvement	www.niujiaojianli.com
jizhuang jizhi	极装吉住	2015	Beijing, China	Manage property	Home Improvement	www.sc.cc



Chinese PropTech Startups

Residential (3/3)

Company Name	Chinese Name	Year Founded	HQ Location	Real Estate Application	Sector	Website
Fuwo.com(Myhome3D)	爱福窝	2013	Shanghai, China	Manage property	Home Improvement	www.fuwo.com
isheji.com	爱设计	2018	Beijing, China	Manage property	Home Improvement	www.isheji.com
YiDouTang	一兜糖	2015	Guangzhou, China	Manage property	Home Improvement	www.yidoutang.com
Bedom Group	拜登集团	2013	Shanghai, China	Manage property	Rental Management	www.bedom.cn
Dash Hong Kong	N/A	2014	Hong Kong	Manage property	Rental Management	www.dash.co/en
Lefang	房司令	2015	Nanjing, China	Manage property	Rental Management	www.58fangdai.com
H2ome	水滴管家	2016	Shanghai, China	Manage property	Rental Management	www.shuidiguanjia.com
Lucia Blockchain	Lucia	2018	Beijing, China	Manage property	Rental Management	www.lucia.vip
Kaiwan Security	铠湾安全	2014	Shenzhen, China	Manage property	Smart Home & IoT	www.szkaiwan.com
Argrace	雅观科技	2017	Hangzhou, China	Manage property	Smart Home & IoT	www.argrace.ai
LifeSmart	云起智能	2011	Hangzhou, China	Manage property	Smart Home & IoT	www.ilifesmart.com
Xpower	相舆科技	2013	Shanghai, China	Manage property	Smart Home & IoT	www.shanutec.com
MICHOI	麦驰物联	1997	Shenzhen, China	Manage property	Smart Home & IoT	www.michoi.com
Tuya	涂鸦智能	2014	Hangzhou, China	Manage property	Smart Home & IoT	www.tuya.com/cn/
BaiCells	佰才邦	2014	Beijing, China	Manage property	Smart Home & IoT	www.baicells.com
Zhujiayi	筑家易	2011	Hangzhou, China	Manage property	Smart Home & IoT	www.zje.com
Linglingkaimen	令令开门	2014	Shenzhen, China	Manage property	Smart Home & IoT	www.linglingkaimen.com
Yunding Technology	云丁	2014	Beijing, China	Manage property	Smart Home & IoT	www.yunding.cn
KaKaMaiFang	咔咔买房	2016	Beijing, China	Finance property	Alternative Financing	www.kakamf.com
Ulink Financial Service	优联金融	2015	Shenzhen, China	Finance property	Alternative Financing	N/A
haodai	好贷	2012	Beijing, China	Finance property	Digital Lender	www.haodai.com
Yooli.com	有利网	2013	Beijing, China	Finance property	Digital Lender	www.yooli.com
Rong360	融360 (简普科技)	2011	Beijing, China	Finance property	Digital Lender	www.rong360.com
Banma Jiedai	斑马借贷	2017	Linyi, China	Finance property	Digital Lender	N/A
Fang Fintech	房钛科技	2017	Beijing, China	Finance property	Digital Lender	www.fangfintech.com
Huifengqi	会分期	2014	Beijing, China	Finance property	Digital Lender	www.huifengqi.com
Dadao Financial Service	大道金服	2015	Shenzhen, China	Finance property	Digital Lender	www.ddjf.com
Zhongli Finance	众力金融	2015	Beijing, China	Finance property	Digital Lender	www.zhonglijinrong.cn
Anniu Technology	安牛孵化器	2016	Hangzhou, China	Finance property	Loan Application & Docs	www.kongapi.com
Ajiaji	爱家纪	2014	Shenzhen, China	Manage property	Home Improvement	www.ajiaji.com

Chinese PropTech Startups

Commercial [1/8]

Company Name	Chinese Name	Year Founded	HQ Location	Real Estate Application	Sector	Website
Lieju Technology	猎居科技	2017	Shanghai, China	Find property	Broker CRM & Marketing	www.lieju.tech
Yushan Housing	遇善房	2014	Guangzhou, China	Find property	Broker CRM & Marketing	www.ysf.mobi
E-house	易居	2000	Shanghai, China	Find property	Broker CRM & Marketing	www.ehousechina.com
HaiTouJiaKeJi	海投家	2017	Shanghai, China	Find property	Listings & Marketplace	www.haitoujia.com
Haozu.com	好租	2015	Beijing, China	Find property	Listings & Marketplace	www.haozu.com
Hinabian	海那边	2014	Shenzhen, China	Find property	Listings & Marketplace	www.hinabian.com
Juwai.com	居外	2010	Hong Kong	Find property	Listings & Marketplace	www.juwai.com
Kufang WuYou	库房无忧	2015	Shanghai, China	Find property	Listings & Marketplace	www.kufangwuyou.com
Laipaiya	来拍法服	2015	Hangzhou, China	Find property	Listings & Marketplace	www.laipaiya.com
Xiaoweifeng	小微蜂	2015	Shenzhen, China	Find property	Listings & Marketplace	www.xiaoweifeng.cn
Haijupai	海居派	2015	Beijing, China	Find property	Listings & Marketplace	www.haijupai.com
LEPU.CN	乐铺	2015	Beijing, China	Find property	Listings & Marketplace	www.LEPU.cn
Kongjianjia.com	空间家	2015	Beijing, China	Find property	Listings & Marketplace	www.kongjianjia.com
Fspwork.com	房算盘	2015	Hangzhou, China	Find property	Listings & Marketplace	www.fspwork.com
F-Mai.com	房脉	2016	Xi'an, China	Find property	Listings & Marketplace	www.f-mai.com
Tuliu.com	土流网	2009	Changsha, China	Find property	Listings & Marketplace	www.tuliu.com
OKAY.com	屋企	2010	Hong Kong	Find property	Listings & Marketplace	www.okay.com
Zunest.com	著巢网	2014	Shanghai, China	Find property	Listings & Marketplace	www.zunest.com
joy homeplus	千万间	2015	Shanghai, China	Find property	Listings & Marketplace	www.joy-homeplus.com
Diandianzu	点点租	2014	Shenzhen, China	Find property	Listings & Marketplace	www.diandianzu.com
qizuu.com	企租网	2017	Beijing, China	Find property	Listings & Marketplace	www.qizuu.com/bj
klongvip.com	小恐龙商办	N/A	Shenzhen, China	Find property	Listings & Marketplace	www.klongvip.com
Youpu	优铺	2016	Beijing, China	Find property	Listings & Marketplace	www.youpuchina.com
Kongjianjia	空间家	2015	Shenyang, China	Find property	Listings & Marketplace	www.kongjianjia.com
AOSSCI	傲势科技	2015	Chengdu, China	Find property	Viewing & Imagery	www.aossci.com
Heivr	黑晶	2016	Beijing, China	Find property	Viewing & Imagery	www.heivr.com
Idea Make	思为科技	2011	Shenzhen, China	Find property	Viewing & Imagery	www.ideamake.cn
imapic	得见	2017	Shanghai, China	Find property	Viewing & Imagery	www.imapic.ltd
VDesign	易晨VR	2016	Shenzhen, China	Find property	Viewing & Imagery	www.ycvr.com
Vistandard	中视典	2002	Shenzhen, China	Find property	Viewing & Imagery	www.vistandard.com
En - Trak	安塔克	2013	Hong Kong	Find property	Viewing & Imagery	www.en-trak.com
Jingteng Tech	境腾科技	2017	Shanghai, China	Find property	Viewing & Imagery	www.jingtengtech.com



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Commercial (2/8)

Company Name	Chinese Name	Year Founded	HQ Location	Real Estate Application	Sector	Website
Vray	惟锐科技	2015	Hangzhou, China	Find property	Viewing & Imagery	www.weiruivr.com
My Goal	美谷科技	2010	Beijing, China	Find property	Viewing & Imagery	www.vrmeigu.com
ConductorVR	指挥家	2014	Xiamen, China	Find property	Viewing & Imagery	www.zhjvr.com
51wofang	无忧我房	2011	Beijing, China	Find property	Viewing & Imagery	www.51wofang.com
51 World	N/A	2015	Beijing, China	Find property	Viewing & Imagery	www.51hitech.com
LLVision	亮亮视野	2014	Beijing, China	Find property	Viewing & Imagery	www.llvision.com
configReality	位形空间	2017	Shenzhen, China	Find property	Viewing & Imagery	www.configreality.com
Archifiction inc	一隅千象	2016	Hangzhou, China	Find property	Viewing & Imagery	www.archifiction-inc.com
Zhihe Electronic Technology	攻城兵	2014	Nanjing, China	Construct property	Construction & Equipment Finance	www.gongchengbing.com
WZ Group	网筑集团	2014	Hangzhou, China	Construct property	Construction & Equipment Finance	www.wzgroup.com
xKool	小库科技	2016	Shenzhen, China	Construct property	Data analytics	www.xkool.ai
Red Date Technology	红枣科技	2014	Beijing, China	Construct property	Planning & Construction	www.reddatetech.com
Arical	N/A	2018	Hong Kong	Construct property	Planning & Construction	www.arical.ai
Bimu Software	比木软件	2018	Jinan, China	Construct property	Planning & Construction	www.cccbim.com
DiHouYunTu	地厚云图	2015	Beijing, China	Construct property	Planning & Construction	www.engineerhope.com
ELAB (Shanghai)	定卓网络	2015	Shanghai, China	Construct property	Planning & Construction	www.elab-plus.com
Freedo	飞渡科技	2016	Beijing, China	Construct property	Planning & Construction	www.freedoonline.com
GH Yoho	工会有活	2017	Beijing, China	Construct property	Planning & Construction	www.ghyoho.com
Gzy360	公装云	2015	Shenzhen, China	Construct property	Planning & Construction	www.gzy360.com
HuaZhu Technology	华筑	2015	Xi'an, China	Construct property	Planning & Construction	www.1357.cn
Jane Box	简盒建筑科技	2017	Shanghai, China	Construct property	Planning & Construction	www.jane-box.com
JianZhuGang	建筑港	2015	Shenzhen, China	Construct property	Planning & Construction	www.jianzhugang.com
KuaiGongBang	快工帮	2016	Hangzhou, China	Construct property	Planning & Construction	www.zjkgwl.com
Mini CAD	迷你CAD	2015	Shanghai, China	Construct property	Planning & Construction	www.aec188.com
Shanghai Feiwei	飞未	2012	Shanghai, China	Construct property	Planning & Construction	www.51jianku.com
Sixents Technology	六分科技	2018	Beijing, China	Construct property	Planning & Construction	www.sixents.com
Teoform Technology	椭圆方程	2016	Shenzhen, China	Construct property	Planning & Construction	www.teoform.com
VaShare	N/A	2017	Beijing, China	Construct property	Planning & Construction	www.vashare.com
Xiaokui Technology	智建管理	2015	Hangzhou, China	Construct property	Planning & Construction	www.sbuild.cn
Xiaoshui Intelligence	小水智能	2013	Beijing, China	Construct property	Planning & Construction	www.aipaas.com
ZhuJiCai	筑集采	2014	Shanghai, China	Construct property	Planning & Construction	www.zhujc.com
Cbi360.com	建筑网	2008	Hangzhou, China	Construct property	Planning & Construction	www.cbi360.net



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Commercial [3/8]

Company Name	Chinese Name	Year Founded	HQ Location	Real Estate Application	Sector	Website
Sheen City	光辉城市	2013	Chongqing, China	Construct property	Planning & Construction	www.sheencity.com
Zhi Jian Cloud	智建云	2007	Guangzhou, China	Construct property	Planning & Construction	www.zhijiancloud.com
HuaZhu	华筑信息	2016	Shanghai, China	Construct property	Planning & Construction	www.hz-bim.com
Meshkit	奇志科技	2013	Guangzhou, China	Construct property	Planning & Construction	www.meshkit.cn
Arcsite	设享云	2014	Shenzhen, China	Construct property	Planning & Construction	www.arcsiteapp.com
QuantUrban	量城科技	2015	Beijing, China	Construct property	Planning & Construction	www.quanturban.com
Digital Remote Sensing Technology	数字遥感科技	2016	Shenzhen, China	Construct property	Planning & Construction	N/A
One Sight	以见科技	2018	Shanghai, China	Construct property	Planning & Construction	www.yijianar.com
Dataojo	相数科技	2017	Beijing, China	Construct property	Planning & Construction	www.dataojo.com
Unitise Building	迅铸建筑科技	2016	Shanghai, China	Construct property	Planning & Construction	N/A
China Formwork	中模	2011	Beijing, China	Construct property	Planning & Construction	www.zonmoo.com
CNFS Data	中金标准数据	2013	Beijing, China	Finance property	Comps & Valuation	www.cnfsdata.com
Dr. Rabbit	兔博士	2013	Shanghai, China	Finance property	Comps & Valuation	sh.2boss.cn
Funcent	房讯通	2015	Hong Kong	Finance property	Comps & Valuation	www.fxtcn.com
Realinfo	N/A	2017	Hong Kong	Finance property	Comps & Valuation	www.realinfo.com
Yunfang Data	房估估	2013	Beijing, China	Finance property	Comps & Valuation	www.yunfangdata.com
Veztan (AICON)	智地	2016	Hong Kong	Finance property	Comps & Valuation	www.aicon.build
Creditplus (China)	中佳信	2016	Beijing, China	Finance property	Debt Financing Platforms	www.zhongjiixin.com
GuJinSuo	固金所	2014	Shenzhen, China	Finance property	Debt Financing Platforms	www.gujinsuo.com.cn
Iqianbang.com	爱钱帮	2013	Beijing, China	Finance property	Debt Financing Platforms	www.iqianbang.com
WeCorp Tech	微钛科技	2017	Beijing, China	Finance property	Debt Financing Platforms	www.wecorptech.com
Dianrong	点融	2013	Shanghai, China	Finance property	Debt Financing Platforms	www.dianrong.com
Orient Bangxin	东方邦信金融科技	2013	Shanghai, China	Finance property	Debt Financing Platforms	www.bxfinance.com
Hengxin	恒信网贷	2013	Liangshan, China	Finance property	Debt Financing Platforms	www.hengxindai.com
Lanmaoly	懒猫联银	2015	Beijing, China	Finance property	Debt Financing Platforms	www.lanmaoly.com
cashbus	现金巴士	2014	Shanghai, China	Finance property	Debt Financing Platforms	www.cashbus.com
Waqian	挖钱网	2017	Chengdu, China	Finance property	Debt Financing Platforms	www.waqian360.com
i-house.com	N/A	2017	Hong Kong	Finance property	Equity Financing Platform	www.i-house.com
Wealth Migrate	N/A	2010	Hong Kong	Finance property	Equity Financing Platform	www.wealthmigrate.com
WeHome	唯家	2016	Beijing, China	Finance property	Equity Financing Platform	www.wehome.io
Duocaitou.com	多彩投	2014	Beijing, China	Finance property	Equity Financing Platform	www.duocaitou.com
Zhongchou Wangjin	众筹网金	2014	Shanghai, China	Finance property	Equity Financing Platform	www.cncrowd.com

Chinese PropTech Startups

Commercial [4/8]

Company Name	Chinese Name	Year Founded	HQ Location	Real Estate Application	Sector	Website
Liquefy	N/A	2017	Hong Kong	Finance property	Equity Financing Platform	www.liquefy.com
ifepay	信条管家	2018	Chengdu, China	Finance property	Transaction Management	www.ifepay.com
Jutubao	聚土网	2015	Chongqing, China	Finance property	Transaction Management	www.Jutubao.com
Louxun Zhaofang	楼讯	2017	Shenzhen, China	Finance property	Transaction Management	www.louxun.com
MoTong Network	摩通网络	2015	Nanjing, China	Finance property	Transaction Management	www.fcanmou.com
UPRETS	N/A	2018	Hong Kong	Finance property	Transaction Management	www.uprets.io
VanJian.com	万间科技	2015	Tianjin, China	Manage property	BIM / Digital twin	www.vanjian.com
Modelo	模袋智慧	2018	Shanghai, China	Manage property	BIM / Digital twin	www.modelo.io
hwbim.com	红瓦科技	2015	Shanghai, China	Manage property	BIM / Digital twin	www.hwbim.com
Dfocus	耘申信息	2015	Shanghai, China	Manage property	Building Automation & IoT	www.dfocusspace.com
Raspect	维视拍	2017	Hong Kong	Manage property	Building Automation & IoT	www.raspect.co
Wang Xiaobao	旺小宝	2015	Chengdu, China	Manage property	Building Automation & IoT	www.wangxiaobao.com
Controlsys	思控智能	2008	Shanghai, China	Manage property	Building Automation & IoT	www.controlsys.cn
Kuban	酷办	2016	Shanghai, China	Manage property	Building Automation & IoT	www.kuban.io
Equota Energy	亿可能源	2014	Shanghai, China	Manage property	Building Automation & IoT	www.equotaenergy.com
EdgeOn IOT	轻停网络	2017	Beijing, China	Manage property	Building Automation & IoT	www.edgeoniot.com
Veccds	查知科技	2014	Shenzhen, China	Manage property	Building Automation & IoT	www.veccds.com
GiConnect	巨联科技	2018	Guangzhou, China	Manage property	Building Automation & IoT	www.giconnect.cn
Airluna	朝创科	2016	Hong Kong	Manage property	Building Automation & IoT	www.a-sa.jp
Lingtai Technology	领泰科技	2017	Shanghai, China	Manage property	Building Automation & IoT	N/A
Bianmu Technology	边牧科技	2014	Shenzhen, China	Manage property	Building Automation & IoT	N/A
Fengtiao Jieneng	丰调节能	2015	Shanghai, China	Manage property	Building Automation & IoT	N/A
24e	全天智能	2016	Shenzhen, China	Manage property	Building Automation & IoT	www.24e.co
Guanyuan Data	观远数据	2016	Hangzhou, China	Manage property	Building Automation & IoT	www.guandata.com
Cein	识益生物	2014	Beijing, China	Manage property	Building Automation & IoT	N/A
Jieshun	顺易通/捷停车	2007	Shenzhen, China	Manage property	Building Automation & IoT	www.jieshun.cn
Inbest	盐巴科技	2015	Shanghai, China	Manage property	Building Automation & IoT	www.energyriver.com.cn
ZifiSense	纵行科技	2013	Xiamen, China	Manage property	Building Automation & IoT	www.zifisense.co.uk
Otureo	泓观科技	2015	Beijing, China	Manage property	Building Automation & IoT	www.otureo.com
Infinite City	无限城市	2009	Beijing, China	Manage property	Building Automation & IoT	www.infinite-city.com
Reconova	瑞为技术	2012	Xiamen, China	Manage property	Building Automation & IoT	www.reconova.com
Persagy	博瑞尚格	2009	Beijing, China	Manage property	Building Automation & IoT	www.persagy.com

Chinese PropTech Startups

Commercial [5/8]

Company Name	Chinese Name	Year Founded	HQ Location	Real Estate Application	Sector	Website
Envision Group	远景	2008	Shanghai, China	Manage property	Building Automation & IoT	www.envision-group.com/cn/
Extreme Vision	极视角	2015	Nanshan, China	Manage property	Building Automation & IoT	www.extremevision.com.cn
Bos Winner	盈嘉互联	2015	Beijing, China	Manage property	Building Automation & IoT	www.boswinner.com
AiBee	爱笔	2017	Beijing, China	Manage property	Building Automation & IoT	www.aibee.com
Terminus Technology	特斯连	2014	Beijing, China	Manage property	Building Automation & IoT	www.ts-smart.com
Yiliu Technology	易流科技	2009	Shenzhen, China	Manage property	Building Automation & IoT	www.e6yun.com
17duu	17度	2013	Shenzhen, China	Manage property	Leasing & Asset Management	www.17duu.com
Counect	互帮国际	2010	Beijing, China	Manage property	Leasing & Asset Management	www.coushier.com
Creams	匠人科技	2015	Hangzhou, China	Manage property	Leasing & Asset Management	www.creams.io
NOVA Property Investment	盛煦存量地产	2015	Shanghai, China	Manage property	Leasing & Asset Management	www.novaasset.biz
QiaoQian	乔迁之喜	2015	Beijing, China	Manage property	Leasing & Asset Management	www.qiaoqian.com
Uban.com	优办	2015	Beijing, China	Manage property	Leasing & Asset Management	www.uban.com
SpacesForce	原力空间	2016	Chengdu, China	Manage property	Leasing & Asset Management	www.spacesforce.com
Portalar	普塔拉科技	2016	Shenzhen, China	Manage property	Leasing & Asset Management	www.portalar.cn
Xencio Data Technology	见知数据	2015	Shanghai, China	Manage property	Leasing & Asset Management	www.xencio.com
Green Cloud	绿云	2010	Hangzhou, China	Manage property	Property management	www.ihotel.cn
Keychain Pay	N/A	2016	Hong Kong	Manage property	Property Management	www.keychainpay.com
Memor Home	麦家公寓	2016	Hangzhou, China	Manage property	Property management	www.memorhome.com
Segi	四格互联	2013	Shenzhen, China	Manage property	Property Management	www.segi.com
Shenzhen Qijia Internet Technology	小区管家	2012	Shenzhen, China	Manage property	Property Management	www.xiaoquguan-jia.cn
Yipingfangmi	壹平方	2015	Chongqing, China	Manage property	Property management	www.1m2.net
Yuxiaoer	寓小二	2015	Shanghai, China	Manage property	Property Management	www.yuxiaoer.com
Zhongzheng Information	中正信息	2015	Shenzhen, China	Manage property	Property Management	www.zzstc.cn
indeco	领筑智造	2016	Beijing, China	Manage property	Property Management	www.in-deco.com
GIGA	循绿	2011	Shanghai, China	Manage property	Property Management	www.gigabase.org
Bright Beacon	智石科技	2014	Chongqing, China	Manage property	Property Management	www.brtbeacon.com
SaBa Hospitality	N/A	2017	Macau	Manage property	Property Management	www.sabahospitality.com
Palmap	图聚智能	2012	Shanghai, China	Manage property	Property Management	www.palmap.cn
Fushion Tree	树融科技	2017	Shanghai, China	Manage property	Property Management	www.fusiontree.cn
Maimai	麦麦养老	2014	Chengdu, China	Manage property	Property Management	www.maimai100.cn
Helloufu	优服管理	2015	Beijing, China	Manage property	Property management	www.hellouf.com
foocaa	富卡	2013	Dongguan, China	Manage property	Property Management	www.foocaa.com



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Company Name	Chinese Name	Year Founded	HQ Location	Real Estate Application	Sector	Website
Seeder Energy	N/A	2016	Shanghai, China	Manage property	Property Management	www.seederenergy.com
RT Map	智慧图	2011	Beijing, China	Manage property	Property Management	www.rtmap.com
Touty	矩云	2017	Shanghai, China	Manage property	Sales & Marketing	www.touty.io
Urbanchain.world	UrbanChain	2016	Hong Kong	Manage property	Sales & Marketing	www.Urbanchain.world
Duiba	兑吧	2014	Hangzhou, China	Manage property	Sales & Marketing	www.duiba.com.cn
Cool Hobo	胡罗帕	2015	Shenzhen, China	Manage property	Sales & Marketing	www.coolhobo.com/en/home
Lianlian Technology	脸脸科技	2013	Hangzhou, China	Manage property	Sales & Marketing	www.dface.cn
Dsee.Lab	达斯琪数字科技	2016	Nanjing, China	Manage property	Sales & Marketing	www.dseelab.com/home
Changjinglu	场景鹿	2017	Hangzhou, China	Manage property	Sales & Marketing	www.changjinglu.net
Minview	小风景	2018	Beijing, China	Manage property	Sales & Marketing	www.xfengjing.com
SeeekLab	此刻装置	2014	Xiamen, China	Manage property	Sales & Marketing	www.seeeklab.com
Winsense	赢识科技	2018	Beijing, China	Manage property	Sales & Marketing	www.winsenseos.com
Prism Entertainment	棱镜光娱	2017	Hangzhou, China	Manage property	Sales & Marketing	www.mholos.com
Convertlab	营销实验室	2015	Shanghai, China	Manage property	Sales & Marketing	www.convertlab.com
Dadaozhichuang	大道智创	2015	Shenzhen, China	Robotics	N/A	www.dadaoii.com
DeepBlue	深蓝科技	2014	Shanghai, China	Robotics	N/A	www.deepblueai.com
Eventec	超凡创新科技	2017	Chengdu, China	Robotics	N/A	www.eventec.cn
exrobots	EX机器人	2013	Dalian, China	Robotics	N/A	www.exrobots.net
Geekplus	极智嘉	2015	Beijing, China	Robotics	N/A	www.geekplus.com.cn
Turing Video	图灵视频	2017	Beijing, China	Robotics	N/A	www.turingvideo.cn
Yxwise	映星智能	2018	Shanghai, China	Robotics	N/A	www.yxwise.com
Zhen Robotics	真机智能	2016	Beijing, China	Robotics	N/A	www.zhenrobot.com
Chengjia	城家	2015	Shanghai, China	Asset utilization	Co-living	www.cjia.com
Joy.u	江寓	2017	Wuhan, China	Asset utilization	Co-living	www.jiangroom.com
MiMiKongJian	秘密空间	2017	Beijing, China	Asset utilization	Co-living	www.mmkongjian.com
Miss F	海星租房	2016	Hangzhou, China	Asset utilization	Co-living	www.haixingzufang.cn
NeX Home	领鹰	2015	Shanghai, China	Asset utilization	Co-living	www.nex-home.cn
Weshare Community	微舍共享社区	2016	Shanghai, China	Asset utilization	Co-living	www.wesharelive.com
Danke Apartment	蛋壳公寓	2015	Beijing, China	Asset utilization	Co-living	www.danke.com
52Ejia	E+青年公寓	2017	Nanjing, China	Asset utilization	Co-living	www.52ejia.cc
MOMC	摩码公寓	2009	Beijing, China	Asset utilization	Co-living	www.52momc.com
Meiliwu	美丽屋	2015	Beijing, China	Asset utilization	Co-living	www.meiliwu.com

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Company Name	Chinese Name	Year Founded	HQ Location	Real Estate Application	Sector	Website
Gowo	go窝公寓	2015	Guangzhou, China	Asset utilization	Co-living	www.gomyroom.cn
Warm+	我们家公寓	2014	Shenzhen, China	Asset utilization	Co-living	www.warmjar.com
Mofang Gongyu	魔方公寓	2009	Shanghai, China	Asset utilization	Co-living	www.52mf.com.cn
5Lmeet	共享际	2015	Beijing, China	Asset utilization	Co-working & Office Spaces	www.5lmeet.com
Distrii	办伴	2015	Shanghai, China	Asset utilization	Co-working & Office Spaces	www.distrii.com
Fountown	方糖小镇	2015	Shanghai, China	Asset utilization	Co-working & Office Spaces	www.ftown.com
Kr Space	氪空间	2016	Beijing, China	Asset utilization	Co-working & Office Spaces	www.krspace.cn
Mixpace	米域	2016	Shanghai, China	Asset utilization	Co-working & Office Spaces	www.mixpace.com
naked Hub	裸心社	2015	Shanghai, China	Asset utilization	Co-working & Office Spaces	www.nakedhub.com
NashWork	纳什空间	2013	Beijing, China	Asset utilization	Co-working & Office Spaces	www.nashwork.com
People Squared	联合创业办公社	2010	Shanghai, China	Asset utilization	Co-working & Office Spaces	www.people-squared.com
Raise Office	乐活办公空间	2015	Shanghai, China	Asset utilization	Co-working & Office Spaces	N/A
Stey	中瑞鼎峰集团	2017	Beijing, China	Asset utilization	Co-working & Office Spaces	www.stey.com
WorkTech Asia	N/A	2017	Hong Kong	Asset utilization	Co-working & Office Spaces	www.worktechasia.com
MyDreamPlus	梦想加	2015	Beijing, China	Asset utilization	Co-working & Office Spaces	www.mydreamplus.com
Thinkool	星库空间	2015	Beijing, China	Asset utilization	Co-working & Office Spaces	www.thinkool.com.cn
Wujie Space	无界空间	2015	Beijing, China	Asset utilization	Co-working & Office Spaces	www.wujiespace.com
M3 Office	马上办公	2014	Shanghai, China	Asset utilization	Co-working & Office Spaces	www.ma3office.com
weOffice	我们办公	2015	Beijing, China	Asset utilization	Co-working & Office Spaces	weoffice.crknow.com
Dobest Technology	豆办科技	2016	Hangzhou, China	Asset utilization	Co-working & Office Spaces	www.51dobest.com
Wukongbox	悟空宝盒	2016	Shanghai, China	Asset utilization	Co-working & Office Spaces	www.wukongbox.com
InnCube	众舍空间	2015	Beijing, China	Asset utilization	Co-working & Office Spaces	www.inn-cube.com
Weplus	酷窝	2015	Shanghai, China	Asset utilization	Co-working & Office Spaces	www.weplus.com
Coco Space	可可空间	2013	Shanghai, China	Asset utilization	Co-working & Office Spaces	www.cocospace.com.cn
Changdihui	场地汇	2014	Beijing, China	Asset utilization	Co-working & Office Spaces	www.cdh360.com
Ucommune	优客工场	2015	Beijing, China	Asset utilization	Co-working & Office Spaces	www.ucommune.com
Yituo	奕拓融资	2012	Guangzhou, China	Asset utilization	Co-working & Office Spaces	N/A
Ckzone	创客天下	2015	Beijing, China	Asset utilization	Co-working & Office Spaces	www.ckzone.cn/about_us
Booqed	N/A	2016	Hong Kong	Asset utilization	Event Space	www.booqed.com
Caugoo	高阁	2014	Guangzhou, China	Asset utilization	Event Space	www.caugoo.com
Jike Alliance	吉刻联盟	2015	Shanghai, China	Asset utilization	Event Space	www.jikealliance.com
KEYS Chaosu	潮宿	2015	Shanghai, China	Asset utilization	Event Space	www.enjoykeys.com



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Company Name	Chinese Name	Year Founded	HQ Location	Real Estate Application	Sector	Website
Man Gu Niang	慢姑娘	2018	Wuhan, China	Asset utilization	Event Space	www.mgnpd.cn
Panda Eyes	黑眼圈	2016	Shanghai, China	Asset utilization	Event Space	www.pandaeyes.club
YUNSPACE	星期网络科技	2011	Shanghai, China	Asset utilization	Event Space	www.yunspace.com.cn
Iyumi.com	寓米	2013	Guangzhou, China	Asset utilization	Event Space	www.iyumi.com
Comwin Holdings	柯金	2013	Hefei, China	Asset utilization	Retail & Industrial Utilization	www.hfcomwin.cn
DuanZhu	短猪	2017	Hangzhou, China	Asset utilization	Retail & Industrial Utilization	www.duanzhu365.com
Qiatai Xinx	洽太信息	2017	Shanghai, China	Asset utilization	Retail & Industrial Utilization	N/A
WhaleHouse	鲸仓	2014	Shenzhen, China	Asset utilization	Retail & Industrial Utilization	www.whalehouse.com
Xingbianli	猩便利	2017	Shanghai, China	Asset utilization	Retail & Industrial Utilization	www.xingbianli.com
Wangyuwangka	网鱼网咖	2013	Shanghai, China	Asset utilization	Retail & Industrial Utilization	www.wywk.cn
CityHome	城宿	2017	Beijing, China	Asset utilization	Short-term Rental	www.city-home.cn
Dingdandao	订单来了	2014	Hangzhou, China	Asset utilization	Short-term Rental	www.dingdandao.com
mamahome	旅家网络	2014	Shanghai, China	Asset utilization	Short-term Rental	www.52mamahome.com
Yiranju	宜然居	2015	Beijing, China	Asset utilization	Short-term Rental	www.yrj-ihome.com
Yuebnb	想住科技悦宿	2018	Beijing, China	Asset utilization	Short-term Rental	www.yuebnb.com
Love Palace	爱殿别墅	2015	Guangzhou, China	Asset utilization	Short-term Rental	www.lovepalace.cn
Xiaozhu	小猪	2012	Beijing, China	Asset utilization	Short-term Rental	www.xiaozhu.com
Tujia	途家	2011	Beijing, China	Asset utilization	Short-term Rental	www.tujia.com
Muniao	木鸟	2012	Beijing, China	Asset utilization	Short-term Rental	www.muniao.com
Belvedor	住百家	2012	Beijing, China	Asset utilization	Short-term Rental	N/A
Mayi.com	蚂蚁短租	2011	Beijing, China	Asset utilization	Short-term Rental	www.mayi.com
Magic House	神奇屋	2016	Guangzhou, China	Asset utilization	Unmanned store	www.tengstech.com
BingoBox	缤果盒子	2016	Zhangshan, China	Asset utilization	Unmanned store	www.bingobox.com
Hive Box	丰巢	2015	Shenzhen, China	Asset utilization	Unmanned store	www.fcbox.com
Bianlifeng	便利蜂	2016	Beijing, China	Asset utilization	Unmanned store	www.bianlifeng.com
Zone Zero	零号	N/A	N/A	Asset utilization	Unmanned store	N/A
Panda Cube	熊猫立方	2014	Shanghai, China	Asset utilization	Unmanned store	N/A
Xiaomai	小麦铺便利店	2013	Beijing, China	Asset utilization	Unmanned store	www.imxiaomai.com
F5 Future Store	F5未来商店	2014	Guangzhou, China	Asset utilization	Unmanned store	www.f5-store.com
EasyGo	EasyGo 未来便利店	2017	Guangzhou, China	Asset utilization	Unmanned store	www.ieasygo.cn
xedaojia.com	小e微店	2015	Beijing, China	Asset utilization	Unmanned store	www.xedaojia.com/web/index.html
SandStar	视达	2017	Beijing, China	Asset utilization	Unmanned store	www.sandstar.com



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