

China Tour, April 2019

A lot of food for thoughts from a country which is itself a Digital giant



Sogeti organized a Study Tour of China beginning of April 2019. Program aimed at discovering how digital innovations are developing in China and what could be the next steps and impacts

3 cities, 3 giants and a lot of field discovery

Cities

Beijing, Shanghai, Hangzhou

Giants

Baidu (~Google)

Alibaba (~Amazon)

Vanke (real estate)

Digital Agency

Studio Redu

Field discovery

Unmanned stores

Shopping malls

Flagship stores

10 customers, 7 companies

Volvo Trucks, SW

Lego, toys, DN

PostNL, logistics, NL

Rabobank, banking, NL

Achmea, insurance, NL

Volksbank, banking, NL

RDW, gov. vehicle authority, NL

With global & local support

SogetiLabs

Capgemini Invent China

ChinaTalk Agency (NL – China)

Finding #1a: China is a huge country and everything goes with big numbers in terms of geography ...



- ❑ The current population of **China** is **1,4 billion**
- ❑ China population is equivalent to **18.41%** of the total world population.
- ❑ China ranks number **1** in the list of countries (and dependencies) by population.
- ❑ The population density in China is 151 per Km².
- ❑ The total **land** area is 9,388,211 Km²
- ❑ **60.4 %** of the population is **urban** (857,055,542 people in 2019)
- ❑ The **median age** in China is **37.3 years**.

Finding #1b: ... and similarly for its economy, with big development in Digital

Macro-economics data points

- GDP \$14.172 trillion (2019 est.)
\$27.449 trillion (PPP2019e)
- GDP growth 6.5% (2018e) 6.2% (2019f)
- GDP per capita rank 71st (nominal, 2017)
- GDP per sector
agriculture: 7.9%
industry: 40.5%
services: 51.6% (2017)

There is a big diversity within China, between the cities and the country side, and similarly there is a big diversity between the cities themselves (Tier1, Tier2, ...)

Top companies

	Revenue (\$B)	Profit (\$B)
Petroleum & Chemical Corp.	349.54	7.57
PetroChina Co Ltd	299.18	3.38
China State Construction Engineering Corp Ltd	155.51	4.88
Ping An Insurance Co of China Ltd	131.95	13.19
SAIC Motor Corporation Limited	128.95	5.08
China Mobile Ltd	109.68	16.93

Tech Giants in China

China has world class companies when it comes to technology at large. Example in TelCo both operators (eg China Mobile) and manufacturers (eg Huawei).

China is developing giants in Digital with the BATX (Baidu, Alibaba, Tencent, Xiaomi)

...Today's Top 20 Worldwide Internet Leaders Today = USA @ 11...China @ 9

Public / Private Internet Companies, Ranked by Market Valuation (5/29/18)

Rank 2018	Company	Region	Market Value (\$B)	
			5/29/13	5/29/18
1)	Apple	USA	\$418	\$924
2)	Amazon	USA	121	783
3)	Microsoft	USA	291	753
4)	Google / Alphabet	USA	288	739
5)	Facebook	USA	56	538
6)	Alibaba	China	--	509
7)	Tencent	China	71	483
8)	Netflix	USA	13	152
9)	Ant Financial	China	--	150
10)	eBay + PayPal*	USA	71	133
11)	Booking Holdings	USA	41	100
12)	Salesforce.com	USA	25	94
13)	Baidu	China	34	84
14)	Xiaomi	China	--	75
15)	Uber	USA	--	72
16)	Didi Chuxing	China	--	56
17)	JD.com	China	--	52
18)	Airbnb	USA	--	31
19)	Meituan-Dianping	China	--	30
20)	Toutiao	China	--	30
Total			\$1,429	\$5,788

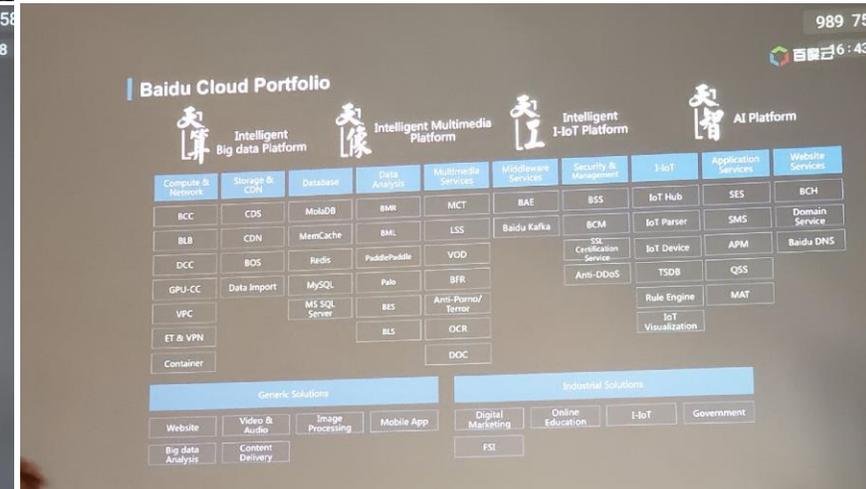
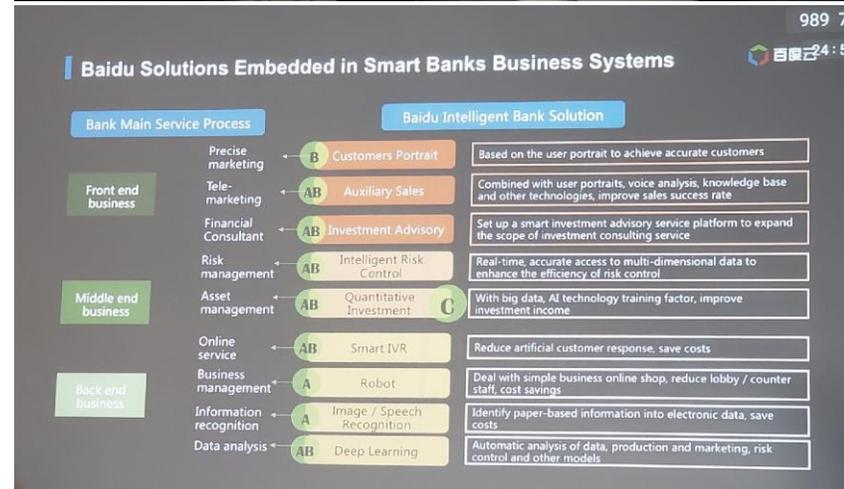
Finding #2a: Size of local market helps to create giants in many segments, including Digital & Innovation. Example #1 Baidu



Baidu is the Chinese equivalent to Google, addressing mostly China

Revenue FY18 = \$15b

- More than 80% of market share (search engine). Daily active users ~160 millions
- Offers full marketing analysis / segmentation with geo data
- >100 millions appliances sold (voice recognition)
- Working on autonomous cars (Apollo program)
- Offer Cloud services with business APIs
- Their main data center is of 120000m2



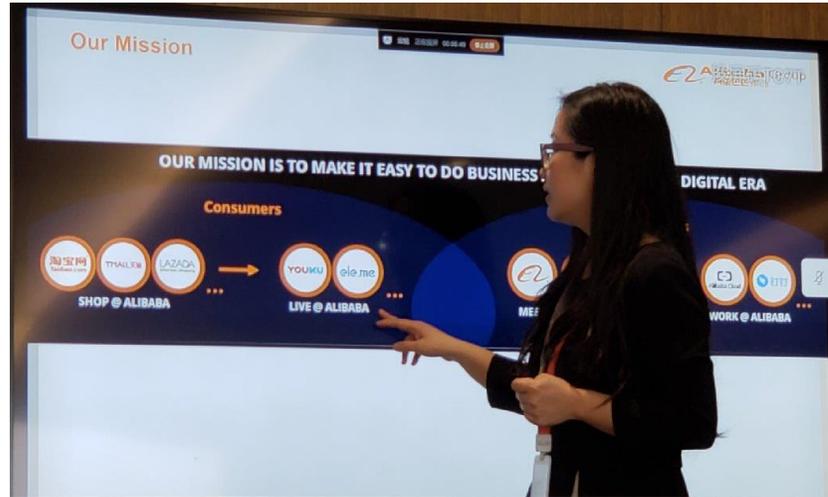
Finding #2b: Size of local market helps to create giants in many segments, including Digital & Innovation. Example #2 Alibaba



Alibaba is the Chinese equivalent to Amazon, addressing local and global markets

Revenue Q4 18 = \$17b

- >800 millions of customers
- Generated >1b delivery worth of >\$30b in one day on nov 11th
- Active online and offline, including massive investments offline (120 malls in China)
- Aim at offerings superior / seamless customer experience offline and online
- Target an end-to-end positioning in Digital (retail, entertainment, payments, ...) consolidating all in a powerful data bank – which can be shared with partners
- Cloud worth of \$1b/Q



December Quarter Segment Reporting



	Core Commerce	Cloud Computing	Digital Media & Entertainment	Innovation Initiatives & Others	Un-allocated ⁽²⁾	Consolidated
Dec Q 18 Revenue (MM)	RMB 102,843 US\$ 14,958 40% YoY	RMB 6,611 US\$ 962 84% YoY	RMB 6,491 US\$ 944 20% YoY	RMB 1,333 US\$ 193 73% YoY	-	RMB 117,278 US\$ 17,057 41% YoY
Dec Q 18 Adjusted EBITA (MM)	RMB 46,079 US\$ 6,702	RMB (274) US\$ (40)	RMB (6,034) US\$ (878)	RMB (1,596) US\$ (232)	RMB (1,608) US\$ (234)	RMB 36,567 US\$ 5,318
Dec Q 18 Adjusted EBITA Margin (%)	45%	(4%)	(93%)	(120%)		31%

Alibaba Business Operating System



Finding #3a: There are huge investments in retail and customer experience. Example #1 Alibaba – brands Hema / Freshippo



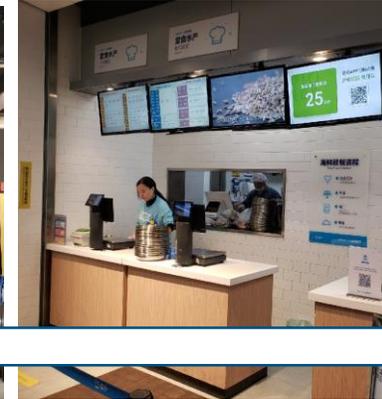
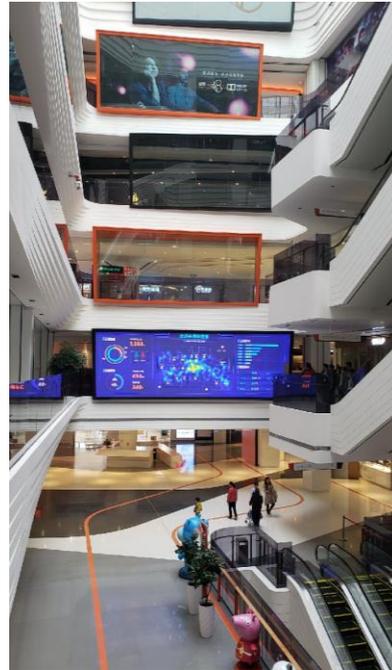
Alibaba main business is still in retail, addressing multiple markets:

- Online and Offline
- Tier1, Tier2 cities in China
- Other cities in China
- Global market

Alibaba has developed new stores, with the objective to increase the customer experience (through physical and digital) and from that increase the revenue per m2. They announce 3X efficiency at their new stores. They sell these service to others, and they partner in China and in other markets (here with Starbucks)

In supermarket, they work on automation and end-to-end experience (eg fresh food collection up to the cooking and restaurant)

They track all behaviors in the shops, to learn and adapt. They also work on innovative concept with designers to observe how their products are appreciated and then react



Finding #3b: There are huge investments in retail and customer experience. Example #2 Unmanned stores (testing the concept at large)



RFID sticker is added to each product. Person is recognized by account (QR Code) and face recognition. Products are recognized via RFID, and mobile payment concludes the process.

Process is based on image recognition (buyer, products). A sticker is on product to secure they are not stolen.

Mobile payment with Alipay. Shop itself can be easily relocated in another area (it is a big moving box)

Finding #4a: Many initiatives in customer experience aims at supporting the brand with size and entertainment – Example #1 Very large flagship stores

There are massive flagship stores, especially in Shanghai. Their size, architecture and the huge choice create a strong experience and confirm the strength of the brand.

They have the objective to entertain the customers and visitors.

They may partner with local champions to get access to the market and/or accelerate.



Shanghai



Shanghai



Shanghai



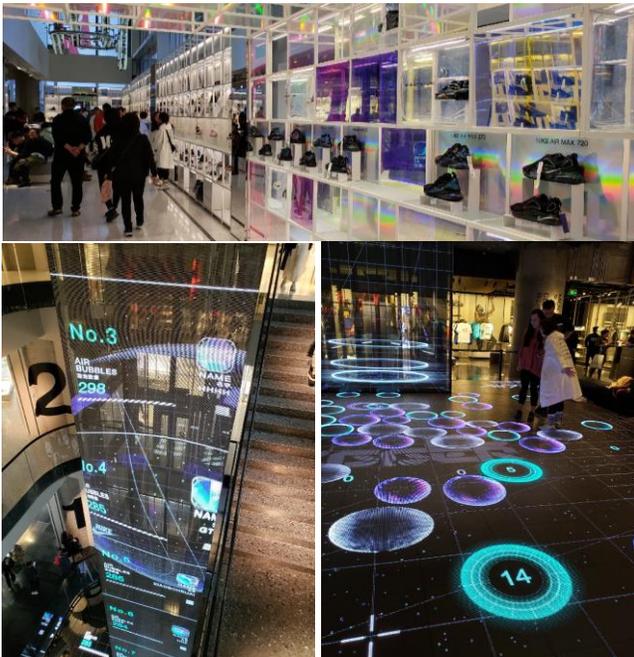
Finding #4b: Many initiatives in customer experience aims at supporting the brand with size and entertainment – Example #2 Flagship stores enhanced with gaming or digital solutions

Augmented reality is deployed in a significant number of stores, to create new experiences and help the customers to chose a product which fit them best.

Several of these solutions offers seamless online – offline experiences as the products you have chosen can be loaded as well on your mobile app.

At least, this give a strong entertainment and a joyful experience.

Shanghai



淘宝网 Taobao.com Beijing



Luckin coffee, local big competitor to Starbucks only proposes interface by mobile. No cashier

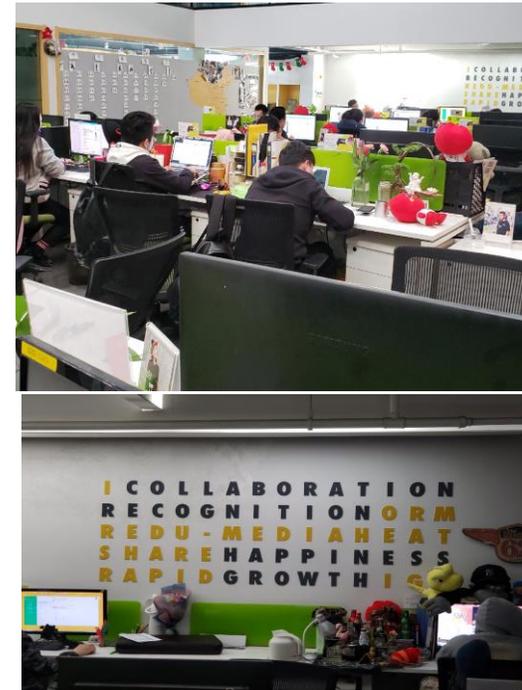
Finding #5: Social networks are powerful, attracting people who want to be famous, and companies who want to leverage social selling. Which create a business for Digital Influencers

We visited Redu Media, an agency helping people (young persons) to become famous (measured by followers), and can then sell their renown to promote products.

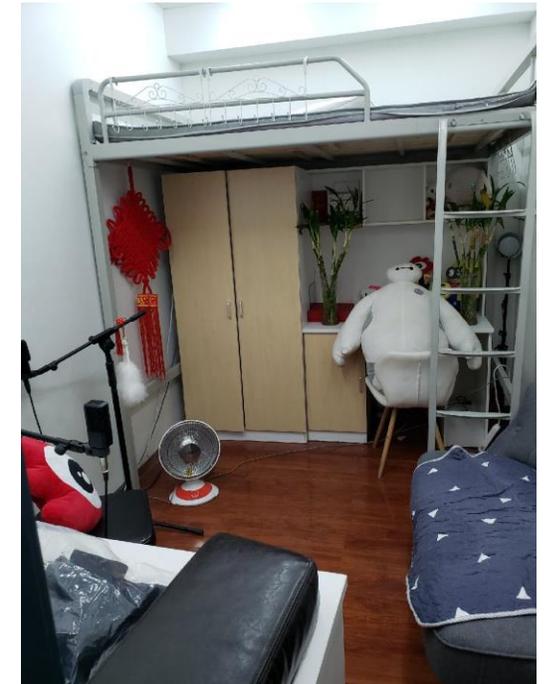
Redu manage a pool of talents, some of them may have more than 100 million followers!



The stars and prizes. Some reaching 100 millions followers



The work environment, with studios and supporting teams



Finding #6a: China is a country where exchanges are powered by mobile phones, with few leading apps – WeChat is leading

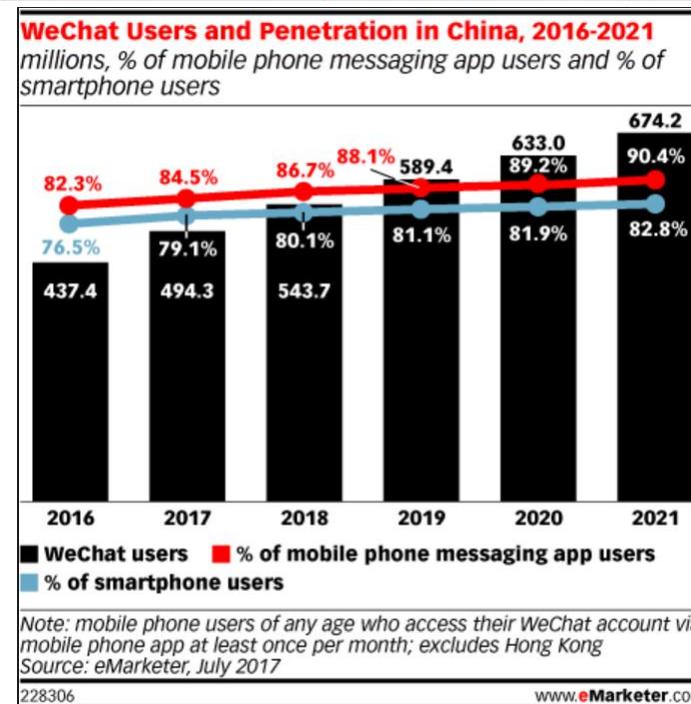


Ranking	App Name	App Category	Monthly UV(000)
1	WeChat (tencent)	IM	1,035,648
2	qq (tencent)	IM	608,459
3	Taobao (alibaba)	Shopping	607,707
4	qqlive (tencent)	Online video	603,706
5	Qiyivideo (baidu)	Online video	584,056

There were approximately 1.1 billion monthly active users of mobile internet in China as of June 2018.

There are as many usage as in Western part of the world (if not more), but some apps are clearly dominating the share of use, the one from the Chinese internet giants Tencent, Alibaba and Baidu.

Clearly, Tencent with WeChat and related apps, dominates offering an almost full scope of usage from messaging, to streaming, payment etc



Finding #6b: QR Codes are everywhere, helping to connect online and offline worlds

Video: China's Crazy QR Code and 'Sharing' Economy

ChinaTalk's Ed Sander gave a guest lecture about the WeChat ecosystem to international students of the HAN University of Applied Sciences in Arnhem (a comparable lecture can be watched [here](#)). After the main presentation and answering many questions from the enthusiastic students there was some time left for a little 'encore'. Ed took a final ten minutes to share some of the craziest examples of mobile payment and the 'sharing' economy, which in China are both facilitated by the scanning of QR codes.

You can watch a slidecast, in which we combine the slides and audio of the lecture, below.



<https://youtu.be/OMrNzc35k40>

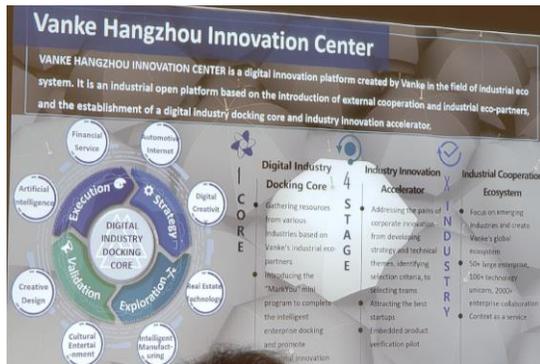
Also for the Dutch audience: <http://www.chinatalk.nl/waarom-zijn-qr-codes-wel-populair-in-china/>

Finding #7: There is money for innovation. There are huge projects on-going. As an example, a new city dedicated to innovation and digital is being built close to Alibaba HQ financed by a giant in real estate, Vanke



Vanke is the largest residential real estate developer in China, with assets worth of \$195B.

In the city of Hangzhou, they have decided to create an Enterprise innovation center with the ambition to attract >100000 people in the area.



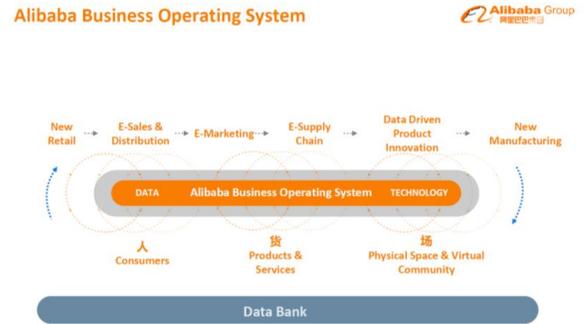
Digital Innovation will go across industries, will host universities, as well as incubators. Some topics they expect to develop:

- New retail scenarios, leveraging popup store to test the concepts
- Digital printing and personalization (with HP)
- Etc

Several startups are already located in the zone. Some already considered as a Licorn like **Coohom**. Their mission statement is to "Create and visualize your future home in 3D, 4K rendering, AR, and VR". They already have 20 million customers.



Finding #8: China's giants know a lot about their customers, meaning they also know also about the citizens. Which triggers question about usage of these information and privacy



Baidu is saying "We can help companies to define where to engage with which customers to sell what products. Imagine you would like to sell a product targeting women, with income above xxx, age of yyy etc. We can help you define the right zone"

They consider that they protect the data of their customers, but in their view it certainly means, protect from other parties.

They also say "we manage the search engine which has more than 80% of the market share in China. It gives us the ability to know the intention of the people, which is a matter of national security."

Alibaba was not so direct, as they also address a global market when Baidu mostly focused on China. However, Alibaba "data bank" is central to their operations and business value (certainly not different to similar Western companies). It goes across all their businesses, both online and offline.

As compared to GDPR, the perceptions and reality of China are different:

- Perception of privacy is so vastly different, when you consider than a large part of the population is leaving in less than 30m2 for a whole family
- There are connections between giants and the state

However, interestingly, it was important to the companies we discussed with, to showcase documents certifying they are taking much care of people's privacy. And even that they perform at a highest standard than GDPR.



Finding #9: People are concerned with the stability of the society, and the state is deploying massive amount of surveillance technology



China has a big surveillance initiative leveraging around 300 million cameras across the country, ie around 1 camera for 5 citizens (in the USA in 2014, 40 million of security camera were already in place, ie 1 camera for 10 citizens).

These camera fuel facial recognition system(s), the largest one being at country level but other local initiatives exist.

It certainly contributes to the “social stability” and “security” that many people mentioned. As foreigners, it gave a strange feeling especially at the Tiananmen place, where there is a high coverage (see picture). In the streets of Beijing, we also encountered some police robots (see picture).

From a Western culture, it certainly questions the notion of freedom. People have big expectations that the State will continue to help the country develop, and “freedom” was not central as compared to get food, be in good health, get children a better education, create and develop a business.

All these cameras seem to be a price to pay for collective security. “Deviant” behavior have a high price to pay, and as a consequence allow the development of the automated store / unmanned store that we saw. In many places of the world, the risk of theft would be too important.

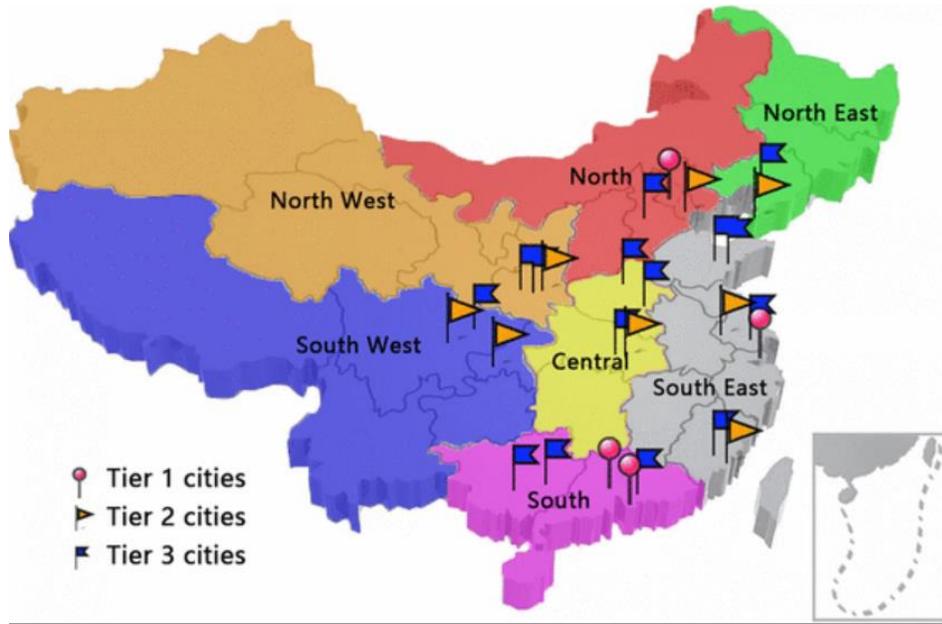
We saw a very contrasted situation between high level of surveillance of the behavior (online and offline), and incredible entrepreneurship spirit and appetite to take risks (cf startups, new concept stores, ...).

From our discussions with Chinese people, it is uncertain to foresee how the new generation will behave.



Finding #10: China has international plans, but is first looking at its population at large

Expand the internal market and provide wealth to the population



We visited Tier1 cities, and the development status is by far not same in each city and regions. There is a big expectation from everyone we met that China will develop to the benefit of its people (health, food, security, education). Climate issues have been very much part of the concerns (“people of China paid the price of the development”). In Beijing and Shanghai, scooters and small vehicles were almost all electrical already.

Address the overseas Chinese population

Regions with significant populations		
Thailand	9,349,900 ^[4]	
Malaysia	6,642,000 ^[5]	
United States	5,025,817 ^[6]	
Indonesia	2,832,510 ^[7]	
Singapore	2,571,000 ^[8]	
Canada	1,769,195 ^[9]	
South Korea	1,643,611 ^{[note 1][10]}	
Myanmar	1,637,540 ^{[11][12]}	
Philippines	1,350,000 ^[13]	
Australia	1,213,903 ^[14]	
Cambodia	982,600 ^[15]	
Peru	900,000–1,300,000 ^[16]	
Vietnam	823,071 ^[17]	
Japan	922,000 ^{[9][18]}	
France	700,000 ^[19]	
United Kingdom	466,000 ^[20]	
Venezuela	420,000 ^[21]	
South Africa	300,000–400,000 ^[22]	
Russia	200,000–400,000 ^{[23][24]}	

Majority populations	
Singapore	3,496,710
Minority populations	
Indonesia	7,566,200
Thailand	7,153,240
Malaysia	7,070,500
United States	3,376,031
Canada	1,612,173
Peru	1,300,000
Vietnam	1,263,570
Philippines	1,146,250
Myanmar	1,101,314
Russia	998,000
Australia	669,896
Japan	519,561
United Kingdom	347,000
Cambodia	343,855
France	230,515
India	189,470
Laos	185,765

Chinese (or Chinese origin) population outside China is estimated between 40 to 70 million of people, with not a full alignment between sources (see above). That population lives in majority in South-East Asia, but is present all over the globe. This population is an asset when it comes to business and culture.

Finding #11: The belt & road initiative has a geopolitic and economic ambition

An incredible ambition and diverse reactions

The aim of the \$900 billion scheme, is to kindle a “new era of globalization”, a golden age of commerce that will benefit all. Beijing says it will ultimately lend as much as \$8 trillion for infrastructure in 68 countries.[...]

The economic benefits, both domestically and abroad, are many, but perhaps the most obvious is that trading with new markets could go a long way towards keeping China’s national economy buoyant.

Among domestic markets set to gain from future trade are Chinese companies – such as those in transport and telecoms – which now look poised to grow into global brands.[...]

The scheme is essentially a “domestic policy with geostrategic consequences, rather than a foreign policy,” Charles Parton, a former EU diplomat in China.[...]

There's no doubt that China is growing into a geopolitical heavyweight, stepping into the breach left by the United States on matters of free trade and climate change.

“As some Western countries move backwards by erecting 'walls', China is contriving to build bridges, both literal and metaphorical,” ran a recent commentary by Xinhua, a Chinese state-run media agency.[...]

Chinese companies are already behind several energy projects, including oil and gas pipelines between China and Russia, Kazakhstan and Myanmar. Roads and infrastructure projects are also underway in Ethiopia, Kenya, Laos and Thailand.

Pakistan is one of the New Silk Road’s foremost supporters [...]

“While countries welcome Beijing's generosity, they are simultaneously wary of its largesse. China's growing influence is a concern for nations whose political interests do not always align with Beijing's,” explains Paul Haenle, director of the Carnegie-Tsinghua Centre for Global Policy. [...]

Excerpt from World Economic Forum, A Bruce-Lockart, 26 June 2017

The silk roads



People in China have a very long historical perspective on China’s past grandeur which we perceived in the discussions. It seems that there is a big pride that China is looking forward to a development overseas as a leader.

Educated people having lived in Western countries, expressed that China is looking for a joint approach, offering its help for the good.

Access to resources and related risks were not discussed.

About Sogeti

Part of the Capgemini Group, Sogeti operates in more than 100 locations globally. Working closely with clients and partners to take full advantage of the opportunities of technology, Sogeti combines agility and speed of implementation to tailor innovative future-focused solutions in Digital Assurance and Testing, Cloud and Cybersecurity, all fueled by AI and automation. With its hands-on 'value in the making' approach and passion for technology, Sogeti helps organizations implement their digital journeys at speed.

The Capgemini Group is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of over 200,000 team members in more than 40 countries. The Group reported 2018 global revenues of EUR 13.2 billion.

Learn more about us at
www.sogeti.com



This message contains information that may be privileged or confidential and is the property of the Capgemini Group.

Copyright© 2019 Sogeti. All rights reserved.