Decoding the Chinese Internet
A white paper on China's Internet economy

September 2017
Agenda

Foreword

Characteristics of the Chinese Internet market
  • Market characteristics
  • User characteristics
  • Competition characteristics
  • Summary of Chinese characteristics

Decoding the characteristics of the Chinese Internet market
  • Question 1: How has the Chinese Internet market maintained such strong growth?
  • Question 2: Why is the Chinese Internet market particularly dynamic and volatile?
  • Question 3: What are the key factors for success in the Chinese Internet market? Why have global giants failed in this market?
  • Question 4: How will the characteristics of the Chinese Internet market evolve in the future?
  • Question 5: What will be the impact of more Chinese Internet companies going global?
Foreword

Context: The Chinese Internet is attracting increasing global attention

- **2008**: Number of Internet users in China reached 253 million, overtaking the 220 million in the U.S.
- **2013**: Alibaba’s GMV reached $248 billion, greater than that of Amazon and eBay combined.
- **2014**: P2P lending volume in China reached $66.9 billion, 4 times that in the U.S.
- **2015**: Mobile payment transaction volume in China reached $8.5 trillion, 70 times that of the U.S.
- **2016**: Shared bikes, a concept that originated in China, attracted U.S. startups to follow suit. OFO, after only 2 years, made the CrunchBase unicorn list with a $1 billion valuation.
- **2017**: As of April, Ant Financial’s Yu’ebao surpassed JP Morgan, with $165.6 billion AUM, becoming the world’s biggest money market fund.

China and the U.S. are the dual engines driving the global Internet economy. However, these two markets are vastly different. Jack Ma, chairman of Alibaba said, “If the US is a car-based country, then China today is driven by the Internet and mobile phones.”

This report aims to unveil the key characteristics of the Chinese Internet market, and explore their root causes.

This report was led by the Boston Consulting Group, in collaboration by the leading Chinese Internet giants Alibaba and Baidu. We hope that it will encourage further consideration and discussions on the Chinese Internet market.

Sources: Literature research, BCG analysis.
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Market characteristics

Size: China is one of the world's largest Internet markets
The largest by Internet users and 2nd largest by online spending

710m Internet users in China, almost as many as India and the US combined

<table>
<thead>
<tr>
<th>Country</th>
<th>Internet Users (100 Mn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>7.1</td>
</tr>
<tr>
<td>India</td>
<td>4.6</td>
</tr>
<tr>
<td>US</td>
<td>2.9</td>
</tr>
<tr>
<td>Brazil</td>
<td>1.4</td>
</tr>
<tr>
<td>Japan</td>
<td>1.2</td>
</tr>
<tr>
<td>Russia</td>
<td>1.0</td>
</tr>
<tr>
<td>Nigeria</td>
<td>0.9</td>
</tr>
<tr>
<td>Germany</td>
<td>0.7</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.6</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.6</td>
</tr>
</tbody>
</table>

China is leading the world except the US in online spending

<table>
<thead>
<tr>
<th>Country</th>
<th>Online Spending ($bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>1,133</td>
</tr>
<tr>
<td>China</td>
<td>967</td>
</tr>
<tr>
<td>Germany</td>
<td>352</td>
</tr>
<tr>
<td>UK</td>
<td>335</td>
</tr>
<tr>
<td>France</td>
<td>309</td>
</tr>
<tr>
<td>Brazil</td>
<td>217</td>
</tr>
<tr>
<td>India</td>
<td>209</td>
</tr>
<tr>
<td>Japan</td>
<td>180</td>
</tr>
<tr>
<td>Russia</td>
<td>155</td>
</tr>
<tr>
<td>Italy</td>
<td>74</td>
</tr>
</tbody>
</table>

Sources: CNNIC, Internet Live Stats, BCG analysis.

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Draft—for discussion only
Market characteristics

**Growth: China is one of the fastest-growing Internet markets**

High growth witnessed in both Internet users and online spending

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**Number of Internet users in China**

- Grew at 25% p.a. over the past 15 years

**Chinese online spending**

- Grew at 32% p.a. over the past 5 years

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**CAGR of online spending in selected countries 2012-2016**

- China: 32%
- India: 31%
- Russia: 16%
- Brazil: 12%
- US: 8%
- Germany: 7%
- France: 6%
- South Korea: 6%
- Japan: 5%

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Sources: CNNIC, Internet Live Stats, BCG analysis.
Market characteristics

**Potential:** Huge potential is yet to be unlocked despite rapid growth, with Internet penetration lagging behind G20 peers

Internet penetration of G20 countries (% as of July 2016)

Sources: Internet Live Stats.
Internet-driven economy: Internet-related activities contribute 6.9% of China's GDP, among the highest in the world

China is the world's 2nd most Internet-driven economy

Note: eGDP is an indicator developed by BCG to size the Internet economy of a country. It was used for the first time in “The Connected World” series report – The Internet Economy in the G20, a collaboration between BCG and Google in 2012. eGDP is calculated based on consumption, investment, state expenditure, imports and exports related to online retailing, network access and equipment. South Korea and India are rank highly due to the higher output value of ICT equipment imports and exports. If these areas are excluded from the calculation, China tops the list (6.4%), while South Korea and India drop to the 3rd (5.8%) and 8th place (3.2%) respectively. Sources: National Bureau of Statistics of China, BCG analysis.
Impact: The global influence of Chinese Internet players is rising

China accounts for 5 of the 10 largest public Internet companies in the world (as of June 30, 2017)

<table>
<thead>
<tr>
<th>Company</th>
<th>Market Capitalization ($bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google</td>
<td>636</td>
</tr>
<tr>
<td>Amazon</td>
<td>463</td>
</tr>
<tr>
<td>Facebook</td>
<td>438</td>
</tr>
<tr>
<td>Alibaba</td>
<td>356</td>
</tr>
<tr>
<td>Tencent</td>
<td>336</td>
</tr>
<tr>
<td>Priceline</td>
<td>92</td>
</tr>
<tr>
<td>Netflix</td>
<td>64</td>
</tr>
<tr>
<td>Baidu</td>
<td>62</td>
</tr>
<tr>
<td>Jingdong</td>
<td>56</td>
</tr>
<tr>
<td>NetEase</td>
<td>39</td>
</tr>
</tbody>
</table>

Chinese unicorns accounted for 29% of the world’s total unicorns by quantity and 41% by valuation

<table>
<thead>
<tr>
<th>Country</th>
<th>Quantity Distribution (%)</th>
<th>Valuation Distribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>50%</td>
<td>46%</td>
</tr>
<tr>
<td>China</td>
<td>29%</td>
<td>41%</td>
</tr>
<tr>
<td>Other</td>
<td>21%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Note: Based on CrunchBase unicorn list as of May 31, 2017, which contained 63 Chinese unicorns and 112 U.S. unicorns valued at $1Bn or more.

Sources: CrunchBase, BCG analysis.
Market characteristics

**Market structure:** Market share of e-commerce and online finance are substantially larger in China than in US

China vs the U.S.: Internet market revenue breakdown 2016 (% estimate)

- **E-commerce**
  - China: 44%
  - U.S.: 27%
- **Social network/entertainment**
  - China: 23%
  - U.S.: 5%
- **Online finance**
  - China: 12%
  - U.S.: 13%
- **Basic applications**
  - China: 17%
  - U.S.: 17%
- **Public services**
  - China: 6%
  - U.S.: 15%
- **Other business/living services**
  - China: 3%
  - U.S.: 12%

**Sources:** eMarketer, Analysys International, iResearch, Company financial statements, BCG analysis.
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**User demographics: Chinese Internet users are on average 14 years younger than their US counterparts**

### Age distribution of Chinese Internet users 2016

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Penetration by age group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 20</td>
<td>24%</td>
</tr>
<tr>
<td>20-29</td>
<td>30%</td>
</tr>
<tr>
<td>30-39</td>
<td>24%</td>
</tr>
<tr>
<td>40-49</td>
<td>13%</td>
</tr>
<tr>
<td>50-59</td>
<td>5%</td>
</tr>
<tr>
<td>60+</td>
<td>4%</td>
</tr>
</tbody>
</table>

Average age: ~28

### Age distribution of US Internet users 2016

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Penetration by age group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 25</td>
<td>20%</td>
</tr>
<tr>
<td>25-34</td>
<td>17%</td>
</tr>
<tr>
<td>35-44</td>
<td>17%</td>
</tr>
<tr>
<td>45-54</td>
<td>18%</td>
</tr>
<tr>
<td>55-65</td>
<td>15%</td>
</tr>
<tr>
<td>65+</td>
<td>13%</td>
</tr>
</tbody>
</table>

Average age: ~42

Other than the younger population, the substantially lower Internet penetration among older people has contributed to the younger Internet user base in China.

Device preference: Chinese Internet users prefer to access the Internet using a mobile phone; 25% are mobile-native.

China is ahead of the US by 12.4% in mobile phone penetration for Internet access.

1 in 4 Chinese Internet users is mobile native.

Penetration of devices for Internet access (2015, %)

- **Mobile**
  - China: 90
  - US: 78
  - Increase: +12%

- **Desktop / laptop**
  - China: 76
  - US: 83
  - Decrease: -8%

- **Tablet**
  - China: 32
  - US: 51
  - Decrease: -20%

Percentage of users who access the Internet only on mobile (2016, %)

- **China**
  - 25%

- **US**
  - 11%

**User characteristics**

**App preference:** Chinese mobile Internet users are more willing to try new apps but also drop them sooner

**Example:** Mobile Internet users

### Number of apps installed per Internet user 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Tier 1 cities</th>
<th>Tier 2 cities</th>
<th>Tier 3 cities</th>
<th>Tier 3+ cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>33</td>
<td>26</td>
<td>32</td>
<td>46</td>
</tr>
<tr>
<td>Japan</td>
<td>36</td>
<td>42</td>
<td>39</td>
<td>38</td>
</tr>
<tr>
<td>South Korea</td>
<td>40</td>
<td>46</td>
<td>42</td>
<td>39</td>
</tr>
<tr>
<td>France</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World avg.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### App user retention 2015 (apps without push messaging, %)

- **US:** 15% of apps are used 11+ times by Chinese Internet users
- **China:** 43% of apps are used only once by Chinese Internet users

### User characteristics

**App preference:** many apps adopted much faster in China than in the US

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E-commerce</strong></td>
<td></td>
<td></td>
<td>14 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Amazon</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Taobao</em></td>
<td></td>
<td></td>
<td>9 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Online finance: mobile payment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Yet to reach 50%)</td>
</tr>
<tr>
<td><em>Apple Pay</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 years</td>
</tr>
<tr>
<td><em>Alipay</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social networks: Instant messaging</strong></td>
<td></td>
<td></td>
<td>(Yet to reach 50%)</td>
<td></td>
<td>3 years</td>
</tr>
<tr>
<td><em>WhatsApp</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>WeChat</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Public services: Ride-sharing</strong></td>
<td></td>
<td></td>
<td>(Yet to reach 50%)</td>
<td></td>
<td>3 years</td>
</tr>
<tr>
<td><em>Uber</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Didi</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Entertainment: Online video</strong></td>
<td></td>
<td></td>
<td>(Yet to reach 50%)</td>
<td></td>
<td>6 years</td>
</tr>
<tr>
<td><em>Netflix</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Youku</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. User penetration is defined as the ratio of an app’s registered users to the total number of Internet users of the year. 
Source: BCG analysis.
Online spending preference: Chinese Internet users shop more frequently, both on desktop and mobile

### Online shopping frequency on desktop (2016)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>China</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1 time per month</td>
<td>6%</td>
<td>22%</td>
</tr>
<tr>
<td>1-4 times per month</td>
<td>30%</td>
<td>44%</td>
</tr>
<tr>
<td>≥1 time per week</td>
<td>48%</td>
<td>24%</td>
</tr>
<tr>
<td>≥1 time per day</td>
<td>16%</td>
<td>10%</td>
</tr>
</tbody>
</table>

### Online shopping frequency on mobile (2016)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>China</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1 time per month</td>
<td>3%</td>
<td>17%</td>
</tr>
<tr>
<td>1-4 times per month</td>
<td>26%</td>
<td>40%</td>
</tr>
<tr>
<td>≥1 time per week</td>
<td>46%</td>
<td>28%</td>
</tr>
<tr>
<td>≥1 time per day</td>
<td>24%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Source: "Understanding e-commerce in China and the U.S." by IAB (Interactive Advertising Bureau).
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Competitive landscape: competition is intensifying; ecosystems led by Internet giants are forming and expanding

CR3 of the Chinese Internet Industry by segment (%)
(The horizontal axis indicates the relative revenue of each segment; the vertical axis indicates the market shares of top 3 players within each segment, based on revenue or transaction volume)

1. Within “Other” (companies outside of top 3), there may also be players belonging to Baidu, Alibaba and Tencent alliances; 2. DiDi: held by both Tencent and Alibaba; Baidu also became DiDi's shareholder due to prior investment in Uber, which was later acquired by DiDi; 3. All statistics are based on 2016 data.

Sources: iResearch, iiMedia, Sootoo Research, Analytics, BDR, Trustdata, annual reports, BCG analysis.
Competition characteristics

**Competition patterns:** highly fad-driven, leading to large number of companies at peak, few survivors, and shorter company life span

**Fad 1: Group buying**

- # of companies

```
<table>
<thead>
<tr>
<th>Year</th>
<th># of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Fewer than 50</td>
</tr>
<tr>
<td>2010</td>
<td>Fewer than 650</td>
</tr>
<tr>
<td>2012</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
</tr>
</tbody>
</table>
```

**Fad 2: P2P lending**

- # of players

```
<table>
<thead>
<tr>
<th>Year</th>
<th># of players</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>Fewer than 100</td>
</tr>
<tr>
<td>2013</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
</tr>
</tbody>
</table>
```

**Fad 3: Live streaming**

- # of players

```
<table>
<thead>
<tr>
<th>Year</th>
<th># of players</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Fewer than 50</td>
</tr>
<tr>
<td>2012</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
</tr>
</tbody>
</table>
```

Note: The U.S. stats (number of companies) are synthesized based on data from Venture Radar, TechCrunch and CB insights, and cross-checked with stats from other sources. Some extent of underestimation may exist given most data are disclosure-based.

Sources: iResearch, WDZJ.com, Wallstreet Fintech Club, Venture Radar, TechCrunch, CB Insights, BCG analysis.
Competition patterns: On the flipside, overnight success is more likely in China

Chinese Internet startups: Distribution of time to $1bn valuation\(^1\) (1997-2017)

- \(~46\%\) unicorns made it within 2 years
- Average time to unicorn: 4 years

U.S. Internet startups: Distribution of time to $1bn valuation\(^1\) (1997-2017)

- \(~9\%\) unicorns made it within 2 years
- Average time to unicorn: 7 years

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1. Sample contains 63 Chinese and 112 US unicorn companies which were founded during 1997-2015
Sources: CrunchBase, BCG analysis.
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## Key characteristics of the Chinese Internet economy

**Large scale and unique**

- China is one of the two largest global Internet markets, exerting a significant influence
  - China has an Internet user base of 710m, almost equivalent to India and the US combined, and generates the second most online spending in the world
  - China ranks highly in terms of the quantity and valuation of Internet giants and unicorns

**Rapid development**

- The Chinese Internet market developed rapidly in the past and still has substantial future growth potential.
  - In recent years, the number of Internet users has been growing at 25% p.a. and online spending has been growing at 32% p.a.
  - Huge potential is yet to be unlocked with only 52% Internet penetration, among the lowest in the G20
- Adoption of many Internet products and services in China quicker than in the US
  - Transaction volume of mobile payments in China has reached 70 times that of the US, many emerging apps in China achieved >50% user coverage within three years
  - China has younger Internet users, who are more willing to try new apps and services

**Highly dynamic and volatile**

- The Chinese Internet market is highly dynamic and volatile
  - Fierce competition between a vast number of players accelerates and magnifies the emergence, peak, and decline of each fad, leading to shorter industry life cycles, higher market volatility, and shorter company life spans
Key questions concerning the Chinese Internet economy

Question 1: How has the Chinese Internet market maintained such strong growth despite its large scale?

Question 2: Why is the Chinese Internet market so dynamic and volatile?

Question 3: What are the key factors for success in the Chinese Internet market? Why have so many global giants failed in this market?

Question 4: How will the characteristics of the Chinese Internet market evolve in the future?

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Three core driving forces have propelled the Chinese Internet boom, of which "leapfrogging" is the most important.

**Industries impacted by each driving force**

1. **Overall economic dividend**
   - Demographic dividend: a considerable base of young consumers
   - Talent dividend: large supply of cheap engineers
   - Capital dividend: loose monetary policy and vibrant capital market
   - Infrastructure dividend: significant government-led investment in infrastructure

2. **High transparency**
   - Open information: Internet-based products, services, and business models enable fast info and knowledge transmission
   - Shared resources: open source allows for faster technological advancement

3. **"Leapfrogging"**
   - Compared with developed countries, many traditional industries in China are backward and have underserved needs and room for growth (e.g. retail coverage, non-cash payments etc.)
   - Internet-based solutions solve these pain points outright and have even become the predominant force in some domains

Source: BCG analysis.
Unlike mature nations, underdeveloped traditional industries in China created **leapfrog growth** opportunities for the Internet.

### Two types of development paths

**Industrial era**  
- Limited room for development given maturity of traditional industries; consumer habits well established

**IT era**  
- The Internet produced incremental industry upgrades on top of existing solid foundations

**Internet era**  
- Market maturity was still low when China entered the Internet era, with ample underserved segments and room for development in traditional industries
- Internet-based solutions achieved “leapfrog growth” by addressing these pain points and filling market voids, and even became the predominant force in some domains

### Role of the Internet

**“Incremental upgrading”**
- Limited room for development given maturity of traditional industries; consumer habits well established
- The Internet produced incremental industry upgrades on top of existing solid foundations

**“Leapfrogging”**
- Market maturity was still low when China entered the Internet era, with ample underserved segments and room for development in traditional industries
- Internet-based solutions achieved “leapfrog growth” by addressing these pain points and filling market voids, and even became the predominant force in some domains

Source: BCG analysis.
The impact of "leapfrogging" is reflected in the unique structure of the Chinese Internet market

For example, e-commerce and online finance represent a big proportion of the market

China vs. the US: Internet revenue breakdown 2016 (%)

China vs. the US: Online finance revenue breakdown 2016 (%)

1. E-commerce includes C2C, B2C and B2B e-commerce; 2. Social network/entertainment include social media, online games, online video and online music; 3. Online finance includes 3rd party online payment, mobile payment, online asset management, online credit, online insurance; 4. Basic applications include maps and online news; 5. Public services include ride sharing, online healthcare and online education; 6. Other business/living services include online tourism and local living services.

Note: Percentages are calculated based on revenue by segment; 3rd party online payment within online finance has some overlaps with other online transactions.

Sources: eMarketer, Analysys International, iResearch, company financial statements, BCG analysis.

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When e-commerce started in China, offline retail had low coverage, and was highly fragmented and inefficient.

Compared with the US, offline retail in China was not mature enough to fully address consumer demands.

1. Insufficient offline retail coverage...

2. Majority of market occupied by fragmented and inefficient independent channels.

**Retail floor space per thousand ppl (m², 2005)**

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chain retail channel</td>
<td>1,105</td>
<td>1,100</td>
</tr>
<tr>
<td>Independent retail channel, i.e. mom-and-pop stores</td>
<td>18</td>
<td>50</td>
</tr>
</tbody>
</table>

**Groceries sales channel breakdown (2005)**

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chain retail channel</td>
<td>47%</td>
<td>82%</td>
</tr>
<tr>
<td>Independent retail channel, i.e. mom-and-pop stores</td>
<td>53%</td>
<td>18%</td>
</tr>
</tbody>
</table>

The rise of e-commerce compensated for the under-coverage and efficiency gaps in offline retail

E-commerce leveraged the rapidly penetrating Internet to serve nationwide

E-commerce bypassed distribution layers to deliver highly efficient transactions

Transaction efficiency of online retail versus offline retail (taking 2009–2011 data as an example)

Sales output per 1 RMB of input (RMB)

E-commerce

The unique demographic environment enabled efficient logistics, facilitating e-commerce development

Massive supply of low-cost labor

<table>
<thead>
<tr>
<th>Average courier salary 2016 ($/hour)</th>
<th>Number of couriers 2016 (10K)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China: 4</td>
<td>203</td>
</tr>
<tr>
<td>US: 13</td>
<td>72</td>
</tr>
</tbody>
</table>

Higher Chinese residential density greatly boosted logistics efficiency

China vs. US: population density 2016 (ppl/km²)

<table>
<thead>
<tr>
<th>China</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>143</td>
<td>34</td>
</tr>
</tbody>
</table>

Sources: Glassdoor, BCG analysis.
Therefore, e-commerce "leapfrogged"; China's e-commerce share of total retail sales was 1.5x the U.S. in 2016.

China vs US: online retail as % of total retail sales

China outpaced the U.S. for the first time in e-commerce penetration.

When mobile payments were introduced, cash dominated offline transactions in China, while the US had a well-established credit card ecosystem.

**Payment methods in China vs the US in 2011 (%)**

- **China**
  - Cash: 65%
  - Credit card: 17%
  - Online: 18%
  - Others (e.g., checks): 14%

- **US**
  - Cash: 26%
  - Credit card: 41%
  - Online: 19%
  - Others (e.g., checks): 14%

Sources: Euromonitor, BCG analysis.
Consumers were not used to paying by credit card due to weak payment infrastructure and low credit card penetration.

Underdeveloped payment infrastructure with low POS penetration

- Large number of micro businesses: many micro businesses are not qualified to apply for POS terminals due to complicated application criteria and procedure
- Stringent review by acquirers on issuance of POS: acquirers in China are strict with issuance of POS terminals given precedent of POS fraud

Low penetration of credit cards

- Underdeveloped individual credit scoring system: a complicated review process is required for card applicants given inadequate credit scoring records
- Late adoption of credit card and consumer education in early stage: China is a late adopter of credit cards and consumers are less aware of credit card usage

Sources: Payment & Clearing Association of China, BCG analysis.
Mobile payments directly replaced cash payments and achieved explosive growth in China

Mobile payments rose as the substitute for cash payment in China...

... with the transaction volume surging to 70x that of the US by 2016

Payment method 2015 vs. 2011 (%)

<table>
<thead>
<tr>
<th></th>
<th>2015 China</th>
<th>2011 China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>47</td>
<td>65</td>
</tr>
<tr>
<td>Credit card</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td>Online</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2015 U.S.</th>
<th>2011 U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>26</td>
<td>18</td>
</tr>
<tr>
<td>Credit card</td>
<td>41</td>
<td>14</td>
</tr>
<tr>
<td>Online</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Other (e.g. checks)</td>
<td>19</td>
<td>12</td>
</tr>
</tbody>
</table>

3rd-party mobile payment value ($bn)

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>8,521</td>
<td>112</td>
</tr>
</tbody>
</table>

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Foreword

Characteristics of the Chinese Internet market
• Market characteristics
• User characteristics
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Decoding the characteristics of the Chinese Internet market
• Question 1: How has the Chinese Internet market maintained such strong growth?
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• Question 5: What will be the impact of more Chinese Internet companies going global?
Chinese Internet companies focus more on application-driven than tech-driven innovation, according to a survey of around 40 industry experts\(^1\)

**Key sources of value creation**

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tech-driven innovation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companies that invent technologies or create value principally from technologies</td>
<td>10% (6)</td>
<td>39% (44)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Application-driven innovation</strong></td>
<td>90% (57)</td>
<td>61% (68)</td>
</tr>
<tr>
<td>Companies that create value from content, apps, and business model innovations, and applying or optimizing mature technologies</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

1. Including 15 experts from Baidu, 15 experts from Alibaba, 5 experts from DiDi, and 5 experts from BCG. Survey was based on CrunchBase unicorn list as of May 31, 2017, which contained 63 Chinese unicorns and 112 U.S. unicorns valued at $1Bn or more. Sources: CrunchBase, BCG analysis.
Though they are application-driven, Chinese Internet companies have made many unique innovations by combining tech with app and business model.

Alipay's innovations as an example (compared with Paypal)

Unique innovations by Alipay

Credit scoring

Wealth mgmt

C2B commercial transactions

C2G public transactions

C2C personal transactions

User acquisition

Emerging business

User experience

Security solution

Payment method

Media of payment

Unique innovations by Alipay

- Catering consumption
- Chain stores & supermarkets
- Medical
- Shared bikes
- Insurance
- Education
- Transportation
- Tourism
- eGovernment
- Utility bill
- "Ant Forest"
- Caring donation
- ...  

Credit scoring

- Paypal Credit
- Consumer loan & instalment
- Credit-based everyday item lending
- Credit-based lodging
- Credit-based cell phone leasing
- Credit-based cell phone plans

Paypal MMF

Yu'ebao

Credit-based cell phone plans

Payment method

- "Escrow transactions"
- "Express Payment"
- (E.g. QR payment, fingerprint payment, facial recognition payment...

Security solution

Transfer

- Paypal.me
- AA payment
- Red envelope
- ...  

Media of payment

- "Sesame Credit"
- "Ant Forest"
- ...
Alipay's many unique innovations were driven by market requirements with Chinese characteristics

Unique Alipay innovations

<table>
<thead>
<tr>
<th>Security solution</th>
<th>Payment method</th>
<th>Credit reference (“Sesame Credit”)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escrow transaction</td>
<td>“Express Payment”</td>
<td>Credit-based everyday item lending</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Credit-based lodging</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Credit-based cell phone leasing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Credit-based cell phone plans</td>
</tr>
</tbody>
</table>

Starting point

- E-commerce had just been introduced into China; lack of trust between online consumers and merchants
- Complicated online banking procedures and poor user experience
- Lack of well-established individual credit scoring infrastructure

Market requirement with Chinese characteristics

1. Certain domains in China are immature, therefore require innovative solutions which can make up for the missing pieces and achieve immediate results

2. Online/offline integrated application scenarios can be leveraged to realize fastest customer acquisition

Source: BCG analysis.

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Alipay's healthcare application case: integration of online and offline outpatient process to optimize traditional healthcare services

Case study: Guangzhou Women and Children's Medical Center
Average time spent by a patient in hospital (minutes)

<table>
<thead>
<tr>
<th></th>
<th>Traditional channel</th>
<th>Alipay channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Waiting for registration</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>2 Registration to consultation</td>
<td>43</td>
<td>26</td>
</tr>
<tr>
<td>3 Consultation to payment Payment to dispensing</td>
<td>23</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

No more waiting for registration
- Selection of department (doctor) and time slot
- Payment and registration on Alipay
- Reminder of registered time and attention items
- Queuing status of current department viewable on mobile

Reduced the time from registration to consultation by ~40%
- Notification on when to see doctors and get drugs
- Inquiry of the queuing status on mobile phone
- Real-time inspection bill alert and one-click payment
- Redirection to diagnosis room for inspection after completion of payment
- Real-time e-diagnosis report available on mobile

Reduced the time from consultation to payment by ~80%
- Real-time medicine billing alerts and one-click payment
- Redirection to pharmacy for drug claim after completion of payment
- Detailed bill breakdown available on mobile and one-click payment of the out-of-pocket portion

Sources: Alibaba, Literature research, BCG analysis.
Company innovation behaviors driven by Chinese market requirements lead to higher market dynamics and volatility

<table>
<thead>
<tr>
<th>Market requirement with Chinese characteristics</th>
<th>Innovation behaviors of companies</th>
<th>Impact on the Chinese Internet market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certain domains in China are immature, therefore require innovative solutions which can make up for the missing pieces and achieve immediate results</td>
<td>Focus on micro innovation and modification-based innovation</td>
<td>Lower innovation threshold, larger quantity of players, fads being more easily formed</td>
</tr>
<tr>
<td>Online/offline integrated application scenarios can be leveraged to realize fastest customer acquisition</td>
<td>Emphasis on immediate results and implementation</td>
<td>More frequent innovation, more product and application variations, higher market volatility</td>
</tr>
<tr>
<td></td>
<td>Focus on online and offline integration</td>
<td></td>
</tr>
</tbody>
</table>

Source: BCG analysis.
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Unique KSFs are required for Internet players to succeed in the unique Chinese market

<table>
<thead>
<tr>
<th>KSFs</th>
<th>An Internet market with Chinese characteristics</th>
</tr>
</thead>
</table>
| **1. Localization**  
(“China-for-China”) capabilities | • Different economic, social and cultural environments lead to huge deviation in user needs between China and the US.  
• Multi-level economic and social structures lead to highly diverse user needs within China  
• The Chinese Internet's focus on **application-driven innovation** poses requirement for companies to have in-depth understanding of Chinese consumer needs and customize product offerings |
| **2. Quick market response** | • **Application-driven** market leads to more micro and modification-based innovations  
• Such micro and modification-based innovations require staying close to changes in consumer demand, agility to market, and immediate results |
| **3. Online/offline integration capabilities** | • In some domains, the Chinese Internet companies played the role of driving "**leapfrogging**" of traditional industries and had to engage in offline operations  
• To quickly expand scale, Chinese Internet companies need an offline team to develop business and educate the market |
| **4. Ecosystem building capabilities** | • To achieve "**leapfrog growth**", Chinese Internet players need to build integrated online/offline ecosystems in vertical sectors  
• The Chinese Internet market features “ecosystem-based competition,” which requires companies to have strong ecosystem capabilities |

Source: BCG analysis.
Quick market response case study: QQ vs MSN

QQ vs. MSN: MSN launched 4 key offerings later than QQ and was slow in handling Chinese customer complaints

1. QQ giant attachment supports online transmission of files no larger than 1 Gigabyte.

Sources: zol.com, Literature research.
Online/offline integration capability case study: The Chinese Internet is more demanding for offline operations than the U.S.

**China vs. the U.S. by team size of Internet companies**

**O2O take-out service**
- Own and outsourcing take-out delivery team
  - Tens of thousands
  - ~1000
  - Limited involvement in delivery

**P2P**
- Offline branches to enhance customer acquisition and risk control
  - ~30k
  - ~1500
  - Online customer acquisition and risk control

**Short-term lodging**
- Offering online search and booking services, an offline apartments and related services
  - ~5000
  - ~60
  - Mostly an online platform to bridge tenants and house owners

Sources: Literature research, BCG analysis.
Ecosystem building case study: Didi's powerful ecosystem is an indispensable contributor to its success

Didi's ecosystem

**GPS Navigation**
- Partners with the top 3 mobile map apps in China
- Over 500 million mobile users
- Over 40 million daily active users

**Payment**
- Hundreds of millions of monthly active payment users

**Marketing channels**
- WeChat wallet drives traffic to Didi; WeChat users can use Didi car-hailing service without installing the Didi app
- After payment using WeChat, the user will be automatically subscribed to the Didi public WeChat account
- Didi’s official Weibo account has 1.91 million followers, creating strong word of mouth
- Red packet sharing feature, enabling one-click sharing with friends on WeChat, Moments, Weibo, and Alipay

Sources: Literature research, BCG analysis.
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# Chinese Internet market characteristics: future trends

## Overall rapid development will continue, with certain driving forces weakening

**Overall economic dividend** will decline, but the other driving forces shall remain:
- **Demographic dividend** (↓): the aging of population will continue and reduce advantages in younger demographics
- **Talent dividend** (−): the reflux of overseas talents will accelerate, but advantage in labor cost will shrink
- **Capital dividend** (↓): monetary policy is expected to tighten a bit, and capital market will mature and rationalize
- **Infrastructure dividend** (−): government-led and policy-promoted investment in infrastructure will continue

Leading Internet players, e.g. BAT have laid strong foundations for future development of the industry and accelerated emergence of new players.

## New development models will create new rapid development opportunities

Advantages derived from "leapfrogging" will help Chinese Internet players lead the way in new development models:
- For example, the core of New Retail model lies in deep integration of online and offline
- Advantages derived from “leapfrogging”: The role of the Internet offers new solutions to address needs that are underserved by traditional industries, therefore Chinese Internet companies have naturally focused on online and offline integration and ecosystem building

Alibaba is a showcase of a Chinese Internet player as a fast mover with a new development model.

## Market will remain dynamic but be less volatile

Chinese Internet players are likely to shift from application-driven to tech-driven innovation. Take AI for example:
- China is almost able to compete with US and Japan in AI technology
- The massive user base and wide variety of application scenarios in China will reinforce the AI technology optimization cycle

The gradual shift to tech-driven innovation will to some extent change market behaviors and stabilize the market.

Source: BCG analysis.
Overall rapid development will continue

BAT have laid the foundation for the future development of the industry and accelerated the emergence of new Internet players

Shared bikes: reliance on strong foundations to achieve rapid go-to-market and explosive growth

E.g. Leading shared bike player OFO received total orders of over 5 million one year after its launch, and over 10 million another 3 months later

User habits
Transaction behaviors formed via development of new communication technologies (e.g. QR code payments)

Mobile payment
Pervasive third-party mobile payment tools (WeChat Payment, Alipay) covering online and offline scenarios

Traffic entrance
Hundreds of millions of customers on WeChat and Alipay’s platforms offer a massive user base for emerging apps (users don’t have to download these apps)

Location based service
Electronic fence solution for better management of shared bikes

Sources: Baidu, BCG analysis.
China Internet report-EN-FINAL.pptx
Advantages from “leapfrogging” will help Chinese Internet players pioneer new development models in certain sectors

Advantages derived from “leapfrogging” (E-commerce for example)...

Chinese e-commerce players have put more effort into offline services given weak infrastructure

- **Natural focus on online/offline integration**, leading to a more complete ecosystem

- A **holistic data chain** covering sales, payment and finance, which offers insights into consumer demand trends and can help optimize product planning and supply chain, and enable efficient end-to-end operations

- **Logistics networks of fast response and broad coverage**, which benefits inter-channel integration and customer experience optimization

- **Highly open retail ecosystem**, which can adapt to different market conditions

...can help Chinese Internet players pioneer new development models (for example "new retail")

“Pure e-commerce will vanish soon. When the moment comes, ‘e-commerce’ will be replaced by ‘new retail’...”

Jack Ma at Alibaba’s 2016 Computing Conference

- **“Digitalized consumers”** – Creating consistent customer experience

- **“Ubiquitous consumption scenarios”** – Integrating online/offline channels

- **“Production starts upon receiving the order”** – Operating efficiently end to end

Sources: Ali Research, BCG analysis.
Chinese players made good progress in new development models, e.g., Alibaba proposed the new concept of "5 new forces\(^1\) and a fair competition environment".

### "5 new forces\(^1\) and a fair competition environment"

<table>
<thead>
<tr>
<th>New Retail</th>
<th>New Manufacturing</th>
<th>New Financial services</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="New Retail" /></td>
<td><img src="image2" alt="New Manufacturing" /></td>
<td><img src="image3" alt="New Financial services" /></td>
</tr>
</tbody>
</table>

#### Progress and interim results

- Worked with Nestle to create “FLIPSIDE Cafe” and leveraged big data mining and estimation to boost sales conversions. Tmall flagship store achieved 20x of usual sales volume on day 1.
- Launched TAO CAFE, a self-service cafe that tracks consumer in-store behaviors and continuously improves the customer experience based on big data analytics.
- Launched Hema Supermarket to integrate online and offline channels, by first setting up offline stores to establish brand awareness and then directing consumers online.

- Tmall has established partnerships with 40 brands in 7 industries on custom manufacturing, e.g., with:
  - Mondelez on snack packaging, Malianghang on sound wave rings, Budweiser on recording bottles etc.
- Helped SOGAL leverage big data for custom manufacturing to improve user experience, delivery speed, and inventory efficiency.

- Ant Financial is committed to offering inclusive financial services.
- Over the past six years, Ant Microfinance has lent over 1tn RMB to small and micro businesses, with an average loan balance below RMB 30,000; over 1.75 million of the borrowers were in the agriculture business.

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Sources: Ali Research, Literature research.

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*The Boston Consulting Group*  
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We have noticed the rising trend of Chinese companies shifting from application-driven to tech-driven innovation.

China ranks 2nd for the number of AI companies (2016)

65% of AI companies in the world are in the U.S, China and UK.

Number of AI patent applications has surpassed Japan (2016)

The U.S, China, and Japan applied for 74% of AI patents globally.

Source: Wuzhen Institute.
China leads in the number of published papers and cited papers in deep learning

No. of published papers on deep learning

No. of cited papers on deep learning

However, China still lags behind the US in the quantity and quality of breakthrough research, and the influence of research

1. The statistics do not exclude number of self-citations. If excluded, China would rank the 2nd place by number of cited deep learning related papers in 2015 (second only to the US).

Sources: Web of Science - White House, Wuzhen Institute, Sinovation Ventures, Scimago Journal.

Market will remain dynamic but will be less volatile
Leading Chinese players have also made achievements in algorithms and open source platforms

**Machine translation: Baidu's Neural Machine Translation (NMT) system**

Baidu launched its Neural Machine Translation (NMT) system in May 2015
- It only took Baidu 8 months from ideation (in Sep. 2014) to the launch of Internet-based NMT system (May 2015)

“Baidu launched the world’s first Internet NMT. Google and Microsoft didn't launch similar systems until September 2016”
—Hua WU, Chairman of Technical Committee (TC), Baidu

NMT has significant technological highlights

"Unlike traditional approaches which separate sentences into small pieces, NMT makes full use of contextual information to code and decode the sentence as a whole so as to generate more a fluent translation"
—Hua WU, Chairman of Technical Committee (TC), Baidu

**Open source platform: Baidu’s PaddlePaddle, Apollo**

In 2016, Baidu open-sourced PaddlePaddle, a deep learning algorithm platform developed in 2013, and achieved fast iteration and upgrades by applying the platform to ~30 Baidu products and services
- E.g. estimated delivery time of take-outs, prediction of occurrence of online drive failures, accurate recommendation of information, identification and classification of massive images, virus and spam detection, machine translation and autonomous driving etc.

Demonstrated fast growth and dynamic activities despite short time since open-source
- PaddlePaddle generated 1326 topics within nine months after going open-source

Launched Project Apollo to provide an open, complete & reliable platform for its partners in automotive-autonomous driving sectors
- Will build an ecosystem consisting of OEMs, ADAS manufacturers, and suppliers of sensors and other auto components

Sources: Baidu, Literature research.
In April 2017, Baidu announced Project Apollo to create an open platform for autonomous driving technologies.

**Project plan**

“Baidu will provide its OEM and autonomous driving partners with an open, complete and secure software platform; offer a complete SW/HW and service system suite composed of a vehicle platform, a HW platform, a SW platform, and cloud data services; open code or capabilities in environment perception, route planning, vehicle control and in-vehicle OS, as well as the full set of development and testing tools; select and ally with vehicle and sensor partners with the highest synergy and compatibility so as to lower the entry barrier and help traditional OEMs set up their own autonomous driving systems more quickly.”

**Progress**

Over 60 auto companies and over 200 models have joined Baidu’s platform. Baidu is building an ecosystem consisting of OEMs, ADAS manufacturers, and suppliers of sensors and other components.

**Open source model may help Baidu realize leapfrog growth in autonomous driving solutions**

As an Internet company lacking in manufacturing expertise, Baidu will complete its ecosystem using an open source model. Baidu can exchange technology for data, which will promote its technological advancement.

Compared with their US counterparts, Chinese Internet companies have advantages in their open source model as they have closer relationship with OEMs.

- Traditional manufacturing in China is still underdeveloped, thus OEMs are more willing to embrace and partner with Internet companies. An example is the strategic partnership between Baidu and Chery Automobile.
  - “Chery and Baidu have jointly developed 20 L4-level autonomous cars. We will further cooperation with Baidu on technology sharing and R&D collaboration.”—Lu Weiyi, President of the Research Institute, Chery Automobile

**Baidu is the first company of its kind in the world to open up its own technologies and platforms and share capabilities to such an extent.**

Sources: Baidu, Literature research.
The massive user base and rich variety of applications will reinforce each other and accelerate algorithm optimization.

Reinforcement cycle

**Application**
- More accurate algorithms promote wider application
- Numerous use cases thanks to complexity and unique characterics of the Chinese market

**Algorithm**
- Computing power
- Quality applications generate massive amounts of data
- Massive amounts of data accelerate algorithm optimization

**Data**
- More accurate algorithms promote wider application
- Numerious use cases thanks to complexity and unique characteristics of the Chinese market

Baidu’s DuerOS
- Customized voice solutions for smart TV sets, set-top-box, projector, etc.
- DuerOS-powered smart speaker helps users access entertainment resources efficiently
- Low-cost and energy-conservative smart toys allow device and module manufacturers to accelerate product updates
- Allow wearables to have real intelligence and be able to deliver hands-free services
- Phone understands what the user says and acts as a personal assistant to help the user handle their busy lifestyle

Dialog-based AI system DuerOS
- Info search
- Chat & leisure
- Lifestyle services
- Smart home
- Knowledge & education
- ~100 capabilities in 10 categories

- Over 10m user profile tags; over 100m multi-round dialog requests/global total POIs
- Over 1bn knowledge graph entities/speech/audio
- Over 10bn knowledge/search requests/videos
- Over 100bn images; over 1tn web pages

Sources: Baidu, Literature research.

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Agenda

Foreword

Characteristics of the Chinese Internet market
  • Market characteristics
  • User characteristics
  • Competition characteristics
  • Summary of Chinese characteristics

Decoding the characteristics of the Chinese Internet market
  • Question 1: How has the Chinese Internet market maintained such strong growth?
  • Question 2: Why is the Chinese Internet market particularly dynamic and volatile?
  • Question 3: What are the key factors for success in the Chinese Internet market? Why have global giants failed in this market?
  • Question 4: How will the characteristics of the Chinese Internet market evolve in the future?
  • Question 5: What will be the impact of more Chinese Internet companies going global?
Though they are late to expand globally, Chinese Internet players have started to explore overseas markets with established domestic leadership.

Chinese Internet giants currently only generate a small proportion of revenue overseas.

**2016 revenue breakdown (domestic vs overseas)**

<table>
<thead>
<tr>
<th>Company</th>
<th>Domestic</th>
<th>Overseas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>Facebook</td>
<td>54%</td>
<td>46%</td>
</tr>
<tr>
<td>Amazon†</td>
<td>36%</td>
<td>64%</td>
</tr>
<tr>
<td>Alibaba</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td>Tencent</td>
<td>95%</td>
<td>5%</td>
</tr>
<tr>
<td>Baidu</td>
<td>99%</td>
<td>1%</td>
</tr>
</tbody>
</table>

But they have gradually shifted their strategic focus to overseas expansion.

- **Alibaba**
  - Globalization strategy for five businesses: e-commerce, Ant Financial, Cainiao, cloud computing, and the UC web browser
  - Main strategy is to promote its technology and services as well as to invest in local players in overseas markets
  - Aims to generate 50% of total GMV overseas by 2025

- **Baidu**
  - Baidu leveraged its edges in software development, strategic acquisition & machine learning to offer AI-powered global products, and became the first Chinese Internet player in AI sector to go global
  - Prioritize markets with large population or emerging economies with huge growth potential (e.g. US, Japan, India, Brazil, Indonesia, Thailand, Egypt)
  - Build localized content platform, and use AI to empower products (e.g. Input method, DAP ad. Platforms...); 2 billion users across ~200 countries and regions, and 360 million monthly active users across the globe

- **Tencent**
  - Social networks: mainly promote WeChat and invest in local instant messaging software companies; prioritize emerging markets such as SE Asia, including Indonesia, Thailand, and Malaysia
  - Games: make acquisitions globally and form strategic alliances
  - Tencent cloud: establish overseas service nodes & data centers to provide cloud services abroad

- **Didi**
  - Globalization of car hailing app: mainly through investment and strategic alliances
  - Exploration around international tourism (e.g. overseas car rental)
  - International collaboration on emerging technology R&D (e.g. AI, big data)
  - Set up Globalization Business Unit to roll out Didi’s products, technologies and services globally

1. The domestic market of Amazon includes North America; and revenue from software is not included in operating revenue (<10%)

Sources: Company reports, Literature research, BCG analysis.

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China Internet report-EN-FINAL.pptx

**The Boston Consulting Group**

Draft—for discussion only
The unique characteristics of the Chinese Internet market will indirectly influence how Chinese companies expand overseas

**Unique characteristics of Chinese Internet market**

- "Leapfrogging", developing rapidly in an immature market, filling market voids
- Application-driven, highly dynamic and volatile market environment

**Impact on Chinese Internet company characteristics**

- **Role and value prop:** Proficient at addressing pain points of traditional industries in an immature market
- **Business logic:** Emphasis on staying close to the market, quick response, and immediate results

**As reflected in behaviors of overseas expansion**

- More active in helping shape market environment, e.g. investing in infrastructure (logistics, warehousing, etc.), working with governments to solve social problems
- Attach equal importance to online and offline business development
- Prefer to enter markets similar to China (featured by large scale, strong local demand, immaturity in traditional industries), replicate China success, and build up ecosystems
- More willing to work with partners to strike a balance between control and responsiveness, and create win-win results
- Tend to keep local partner brands and teams, to ensure market recognition and responsiveness to local market demand
- Open up various resources (customers, businesses, etc.) on its own platform to the local partner

Chinese Internet players have tended to approach overseas expansion with a more flexible model in recent years, e.g. strategic investment, shareholding, alliances to quickly adapt to local markets

Source: BCG analysis.
Alibaba case study: actively investing in local mobile payment providers in India and SE Asia and coaching them into local market leaders

Shareholding & investment
- Invested in Paytm, a payment platform under Indian company One97 in 2015, and became the biggest shareholder

Technology transfer
- Paytm became the first Indian company to adopt QR code payment
- Ant Financial helped Paytm to build up risk management system

People training
- Established Ant Technical University to provide training courses tailored to local partners
- Set up personnel certification standards to facilitate the formation of industry standards and practices for mobile payment

Acquired 74% market share, 220m mobile payment users\(^1\), and more than 2m merchants in India

\(^1\) Data as of H1 2017
Sources: TechCrunch, People’s Daily, BCG analysis.

In November 2016, Ant Financial signed a strategic partnership agreement with Ascend Money, a Thai payment player, to replicate the inclusive financial services model to Thailand

In February 2017, Ant Financial invested in Mynt, the largest fintech company in Philippines, which owns GCash, the nation’s largest e-wallet with over 3 million users

On April 12, 2017, Ant Financial announced a JV with Indonesia’s Emtek Group to co-develop mobile payment products

\textit{Ant Financial: a pioneer in QR code payment}
- Alibaba has been pushing forward “Mashangtao” strategy (a QR code based shopping experience) since 2014
- Ant Financial was the first to launch the concept of “QR code Payment”, which has now become a mainstream payment method in China

\textit{Helped Paytm to become the world’s 3rd largest mobile payment platform}

\textit{Technology transfer}
- Paytm became the first Indian company to adopt QR code payment
- Ant Financial helped Paytm to build up risk management system

\textit{People training}
- Established Ant Technical University to provide training courses tailored to local partners
- Set up personnel certification standards to facilitate the formation of industry standards and practices for mobile payment

\textit{Acquired 74% market share, 220m mobile payment users, and more than 2m merchants in India}
# Impact of the overseas expansion of Chinese Internet companies on the global Internet market

## Impact on local Internet companies

**Adopt an open attitude to consider win-win opportunities, faced with Chinese entrants**

- **Capital:** can we obtain strategic capital (for marketing, customer acquisition, subsidy) or make jointly investment in infrastructure (e.g. logistics, warehouses, etc.)?

- **Key technology/growth experience:** can we acquire key technologies, talents with well-rounded online/offline expertise, and company growth experience?

- **Platform resources:** can we persuade the Chinese partner to open up resources including customers and merchants on their own platforms?

**Must be prepared for the potential impact of new Chinese entrants, such as massive subsidies, ecosystem restructuring, and develop solutions in advance.**

## Impact on global Internet giants

**Consider how to partner with Chinese Internet companies in emerging markets**

- Tencent, Microsoft and eBay jointly invested in the Indian e-commerce player Flipkart in 2017. Besides financial investment, Tencent will also be involved in strategies to create synergies between social media and e-commerce.

- Didi became an investor and partner of global top 7 leading ride-sharing players including Uber, Lyft, Grab, Ola, 99, Taxify, and Careem.

**Learn from the different business logic of Chinese players, especially in emerging markets—how to adapt flexibly to local conditions, and better overcome challenges of immature markets**

- Cooperate with local brands and ecosystems

- Operate offline teams and invest in improving infrastructure

Source: BCG analysis.
# Authors and steering committee

## Authors

<table>
<thead>
<tr>
<th>Author</th>
<th>Organization</th>
<th>Title</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shu Li</td>
<td>Boston Consulting Group</td>
<td>Partner and Managing Director</td>
<td><a href="mailto:li.shu@bcg.com">li.shu@bcg.com</a></td>
</tr>
<tr>
<td>Francois Candelon</td>
<td>Boston Consulting Group</td>
<td>Senior Partner and Managing Director</td>
<td><a href="mailto:candelon.francois@bcg.com">candelon.francois@bcg.com</a></td>
</tr>
<tr>
<td>Daniel Wu</td>
<td>Boston Consulting Group</td>
<td>Principal</td>
<td></td>
</tr>
<tr>
<td>Jeffrey Wu</td>
<td>Boston Consulting Group</td>
<td>Project Leader</td>
<td></td>
</tr>
<tr>
<td>Cynthia Hu</td>
<td>Boston Consulting Group</td>
<td>Consultant</td>
<td></td>
</tr>
<tr>
<td>Alex Ho</td>
<td>Boston Consulting Group</td>
<td>Consultant</td>
<td></td>
</tr>
<tr>
<td>Xin Cheng</td>
<td>AliResearch</td>
<td>Senior Expert</td>
<td><a href="mailto:longhai.cx@alibaba-inc.com">longhai.cx@alibaba-inc.com</a></td>
</tr>
<tr>
<td>Fei Song</td>
<td>AliResearch</td>
<td>Senior Expert</td>
<td><a href="mailto:fei.song@alibaba-inc.com">fei.song@alibaba-inc.com</a></td>
</tr>
<tr>
<td>Zhoupei Xie</td>
<td>AliResearch</td>
<td>Senior Expert</td>
<td><a href="mailto:zhoupei.xiezp@alibaba-inc.com">zhoupei.xiezp@alibaba-inc.com</a></td>
</tr>
<tr>
<td>Linli Huang</td>
<td>Baidu Development Research Center</td>
<td>Director</td>
<td><a href="mailto:huanglinli@baidu.com">huanglinli@baidu.com</a></td>
</tr>
<tr>
<td>Qiang Wang</td>
<td>Baidu Development Research Center</td>
<td>Senior Researcher</td>
<td><a href="mailto:wangqiang23@baidu.com">wangqiang23@baidu.com</a></td>
</tr>
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## Steering Committee

<table>
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<td>Boston Consulting Group</td>
<td>Partner and Managing Director</td>
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</tr>
<tr>
<td>Derek Kennedy</td>
<td>Boston Consulting Group</td>
<td>Senior Partner and Managing Director</td>
<td></td>
</tr>
<tr>
<td>Jean-Francois Van Kerckhove</td>
<td>Boston Consulting Group</td>
<td>Partner and Managing Director</td>
<td></td>
</tr>
<tr>
<td>Hongbing Gao</td>
<td>Alibaba Group</td>
<td>VP, Director of AliResearch</td>
<td></td>
</tr>
<tr>
<td>Cheng Zhao</td>
<td>Baidu</td>
<td>Chief Editor, GM of Public Affairs</td>
<td></td>
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