

The rise of China's silicon dragon

China's internet players are shifting the centre of gravity in the global digital economy and forcing multinationals to rethink fundamental assumptions about the sources of innovation-led growth



Executive Summary

When it comes to China the numbers are usually big and digital is no exception. Alibaba holds the world record for the largest opening day IPO, and Tencent's WeChat achieved more mobile transactions over Chinese New Year than PayPal did in all of 2015. But it's not just the internet giants that are breaking records: PwC's analysis shows that Venture Capital (VC) investment value in China-based internet businesses was worth USD 20bn in 2015, exceeding VC investment in United States-based internet business (USD 16bn) for the very first time. China's internet players are shifting the centre of gravity in the global digital economy and are too important to be considered as known-unknowns.

Having a huge domestic market is an obvious factor in making China's internet companies so valuable, however there are other significant variables at play. Where Chinese businesses were once derided as copycat innovators, the leading digital players have now developed into world-class trendsetters at the intersection of eCommerce, mobile and social technologies. The biggest players – Baidu, Alibaba and Tencent (collectively known as BAT) – are digital leviathans with broad ecosystems, disruptive business models, and unique services, and they have permanently changed customer expectations and industry dynamics.

China's leading digital players now rival their Western counterparts in terms of overall scale, value and innovation capability. And while impact outside of the domestic market has been limited, we expect this to change. Internet players will increasingly become more established and visible on the global landscape through direct expansion into Emerging Market eCommerce, social and mobile services; cross-border M&A of high-tech firms; exporting disruptive business models; and attracting international digital talent. To best prepare, we recommend international business leaders start proactively understanding and more importantly engaging with China's digital ecosystem.

Most multi-nationals (MNCs) now recognise the need to adopt an "in China for China" strategy to be successful in a market

that is characterised by intense competition and demanding customer expectations. However, with China as a leading digital innovator, we are seeing the emergence of a "China for the World" strategy. Here we see MNCs ideate, test and scale leading-edge digital solutions within China that can then be exported to other international markets. To do this effectively MNCs must confront a range of challenges that include: talent acquisition and retention; establishing and maintaining productive academic and business partnerships; protecting intellectual property; and choosing the best location for their innovation hubs. Those that can have the opportunity to embed themselves within the world's emergent digital innovation centre, creating a step-change advantage on their more conservative competitors.



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On 19 September 2014, the secret was well and truly out. Before then, awareness of China's internet landscape by outsiders was typically focused on cyber security, the Great Firewall or generalisations of Chinese internet companies as simply "equivalents" to well-known Western ones. But Alibaba's record-breaking opening day IPO changed everything, raising USD 25bn in the largest IPO ever and propelling Chinese internet into the mainstream. International business leaders are beginning to realise China's digital ecosystem and the major players at its forefront are

quickly shaping the future of digital commerce and innovation – now a force to be taken seriously.

China's reputation as an innovator is sometimes met with scepticism; but the same was also once true of Japan. In the context of China's "new normal", where the economy is entering a period of medium-to-high growth, the emphasis will be on innovation-led growth instead of input and investment¹. Chinese internet companies have been at the forefront of this trend and have been innovating at the intersection of mobile, social and commerce to

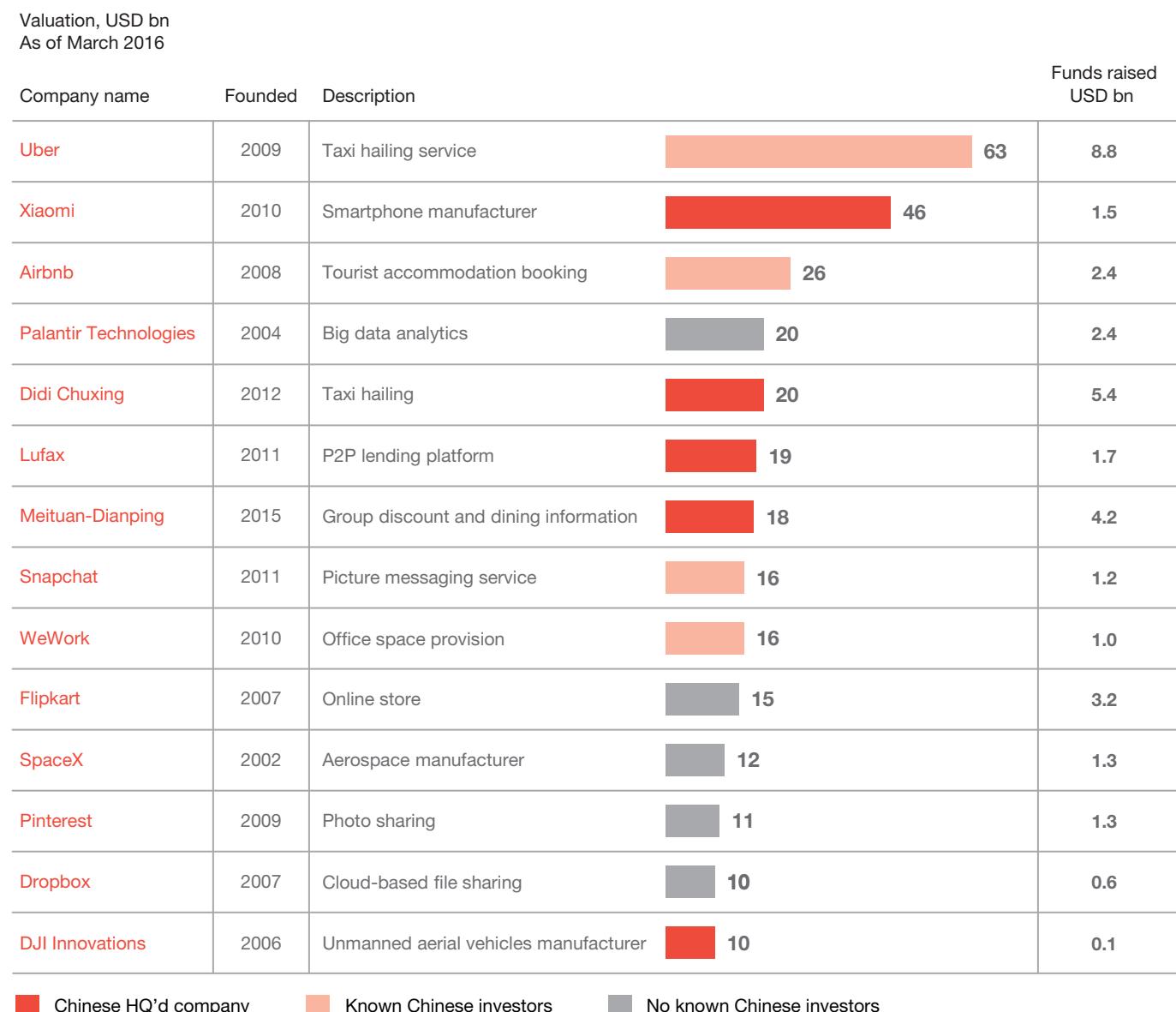
create some of the most valuable businesses on the planet. This is true for both the large cap companies – where Baidu, Alibaba and Tencent (collectively known as BAT) represent a combined market capitalisation of over USD 400bn – and also early stage businesses. Five of the world's fourteen privately-owned companies valued at more than USD 10bn are Chinese-headquartered; and after the United States, China also represents the largest collection of "unicorns", companies valued at USD 1bn or higher based on fundraising.



¹ PwC "Dealing with disruptions Thriving in China's 'new normal'" (2015)

Five of the world's fourteen privately-owned businesses valued at more than USD 10bn are Chinese-headquartered

Figure 1 Privately owned technology companies with valuations in excess of USD 10bn. As of March 2016

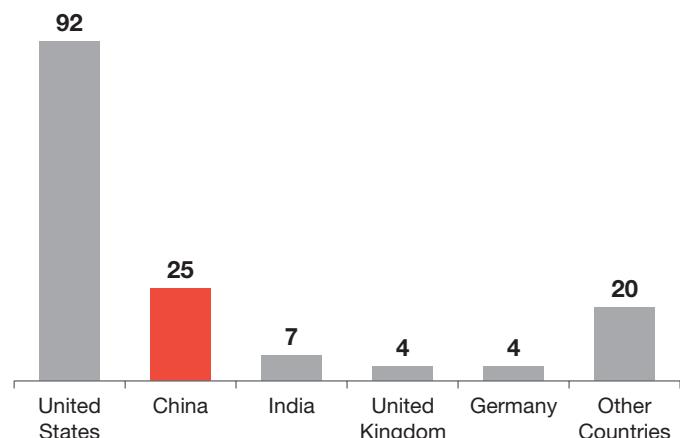


Note: Ant Financial Services Group is an affiliate company of the Alibaba Group and although private, is excluded from this list.

Source: CB Insights, PwC analysis

China's overall share of Unicorn companies is expected to rapidly increase in the next few years

Figure 2 Country of origin for “Unicorn companies”. As of February 2016

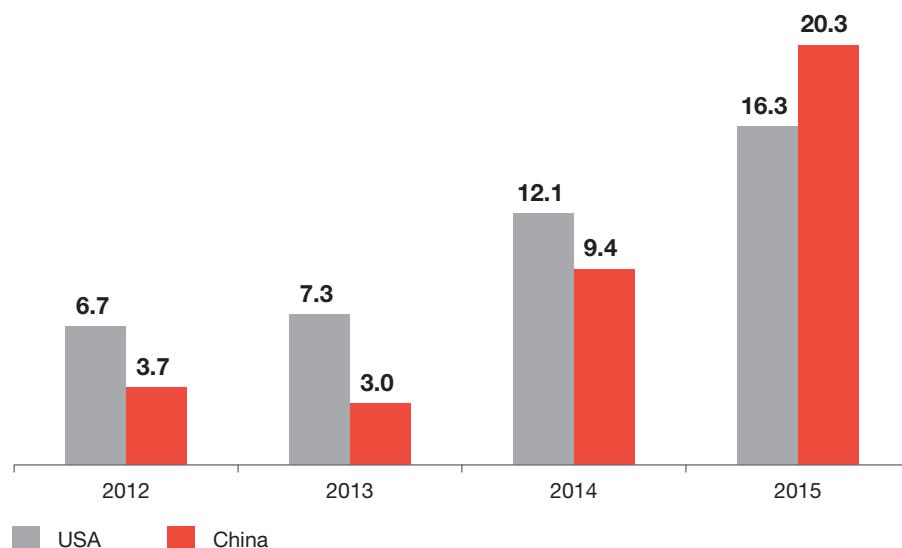


Source: CB Insights, PwC analysis

In many respects China's share of unicorn companies may actually be underweight. Over the last 24 months, Venture Capital investment in China-based internet companies has skyrocketed. In 2012 VC investment value of China-based businesses was just 55% that of US-based companies; however, in 2015 China became the premier location for early-stage internet investment with USD 20bn of deals (compared to USD 16bn in the US). This growth is largely due to an increase in internet-related deal volume; while the total volume of VC investments in the US has remained flat since 2013 (around 1,050 per year), China's deal volume exploded from 509 to 1,726 in 2015. This rapid increase in start-up activity has created a highly competitive environment characterised by intense price competition and costly customer acquisition tactics. We therefore expect the emphasis to now shift to consolidation and profitability as has already been demonstrated by the 2015 merger between Didi Dache and Kuaidi Dache (leading taxi hailing companies) and the acquisition of Mogujie.com by Meilishuo.com (fashion eCommerce retailers).

For the first time China eclipsed the US as the premier location for Venture Capital investment in internet businesses in 2015

Figure 3 Value of Venture Capital (VC) investment in Internet businesses. 2012-2015, USD billions

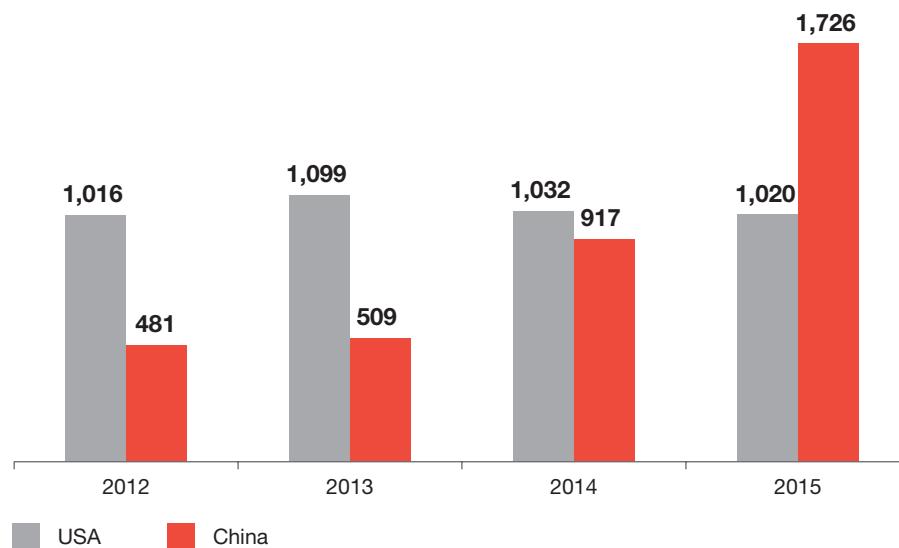


Note: Internet sector is discrete classification assigned to a company whose business model is fundamentally dependent on the internet, regardless of the company's primary industry category, namely: E-commerce, Internet marketing, online education, entertainment, Social Media etc

Source: PwC MoneyTree™ (2015), PwC analysis

Explosive growth in internet deal volume between 2013 and 2015 was the primary driver behind Chinese investment value surpassing the US

Figure 4 Volume of Venture Capital (VC) activity in Internet businesses. 2012-2015, number of deals



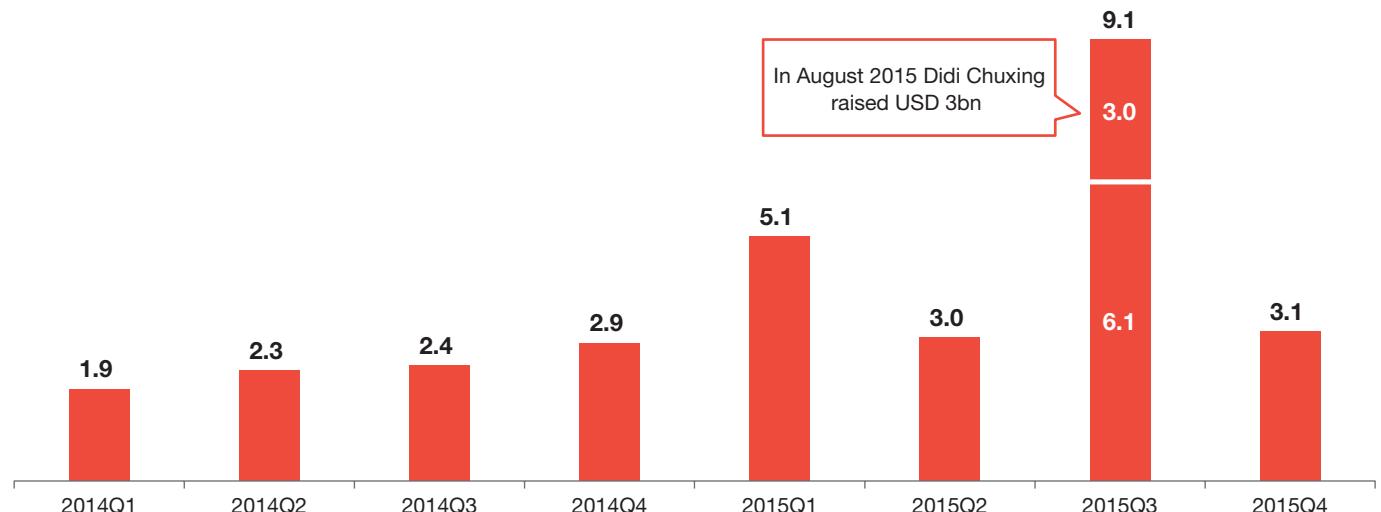
Note: Internet sector is discrete classification assigned to a company whose business model is fundamentally dependent on the internet, regardless of the company's primary industry category, namely: E-commerce, Internet marketing, online education, entertainment, Social Media etc

Source: PwC MoneyTree™ (2015), PwC analysis

Whether China manages to retain or even extend this number one position in 2016 remains uncertain. Internet related deal value in China declined by 59% in the final quarter of 2015, and deal volumes by 54%. This data indicates that Chinese VC's will likely cool investment appetite for internet businesses in 2016 as has already been experienced in the US and elsewhere. However, in our opinion, the medium-to-long-term outlook for China as the premier location for early stage digital start-ups is highly positive. The combination of a massive domestic market, a consumer base of early-adopters, and an entrepreneurial private sector focused on exploiting inefficiencies in China's economy mean that there will likely be more billion-dollar unicorns in China than the United States in the future.

Internet-related deal value declined by 59% between 2015Q3 – Q4 indicating a cooling of investment appetite

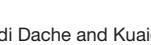
Figure 5 China Internet Venture Capital deal value, 2014 - 2015



Note: Didi Chuxing, formerly known as Didi Kuaidi, is the merger between Didi Dache and Kuaidi Dache
Source: PwC MoneyTree™ (2015), PwC analysis

Didi Chuxing's USD 3.6bn funding during 2015 far eclipsed other internet business in China

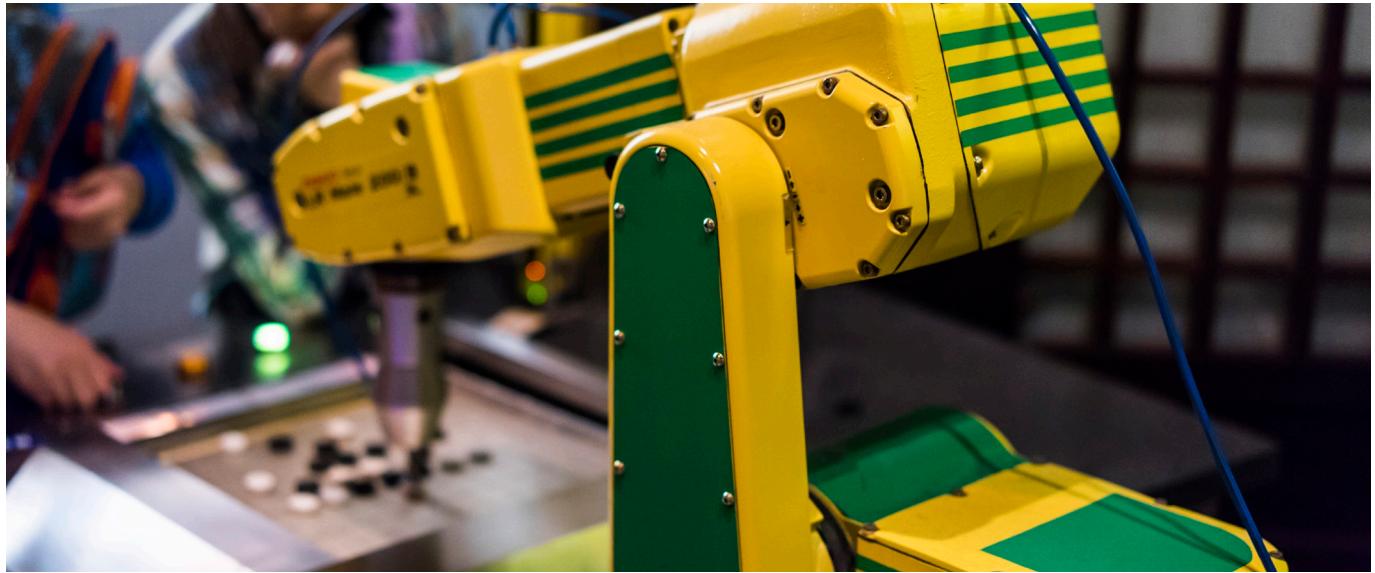
Figure 6 Funding raised by the Top 10 Chinese Internet companies during 2015

Company name	Type of business	Funds raised, USD millions
Didi Chuxing	Taxi-hailing firm	 3,600
Meituan	Group buying website	 700
Ctrip	Online travel agency	 500
Qunar	Travel information provider	 500
Shanghai Solute Technology	Mobile gaming	 499
Soufun	Real estate Internet portal	 467
Zhubajie	Accommodation booking	 425
Ly	Search engine	 396
Baixing	Online notice board	 359
Daojia	O2O home service provider	 300

Note: Didi Chuxing, formerly known as Didi Kuaidi, is the merger between Didi Dache and Kuaidi Dache

Source: PwC China TMT Money Tree (2015)

What makes China's digital ecosystem so innovative?



Some observers attribute the success of China's internet players to the blocking of many Western services in the country, thus creating a closed digital economy. But in South Korea and Japan where Google and Facebook aren't blocked, there are a range of local solutions that far outperform Western alternatives (LINE and KakaoTalk messaging apps or Rakuten in eCommerce). The factors that have seen China emerge as a breeding ground for digital innovation are multiple and complex; but scale, market dynamism and entrepreneurialism stand as three of the most important.

1. Scale and diversity

China is arguably the only country today where a business could become a global leader without ever having to sell outside its domestic market. With over 720m mobile internet subscribers², the sheer size of China's consumer market means many domestic business leaders already command considerable global market share. China is also not a single market, considering the profound differences between regions and from Tier 1 to Tier 4 cities. For example, Alibaba has over 1,000 country-level operation centers with 100,000 village-level services stations bringing its eCommerce services to rural China³.

2. Competitiveness and market dynamism

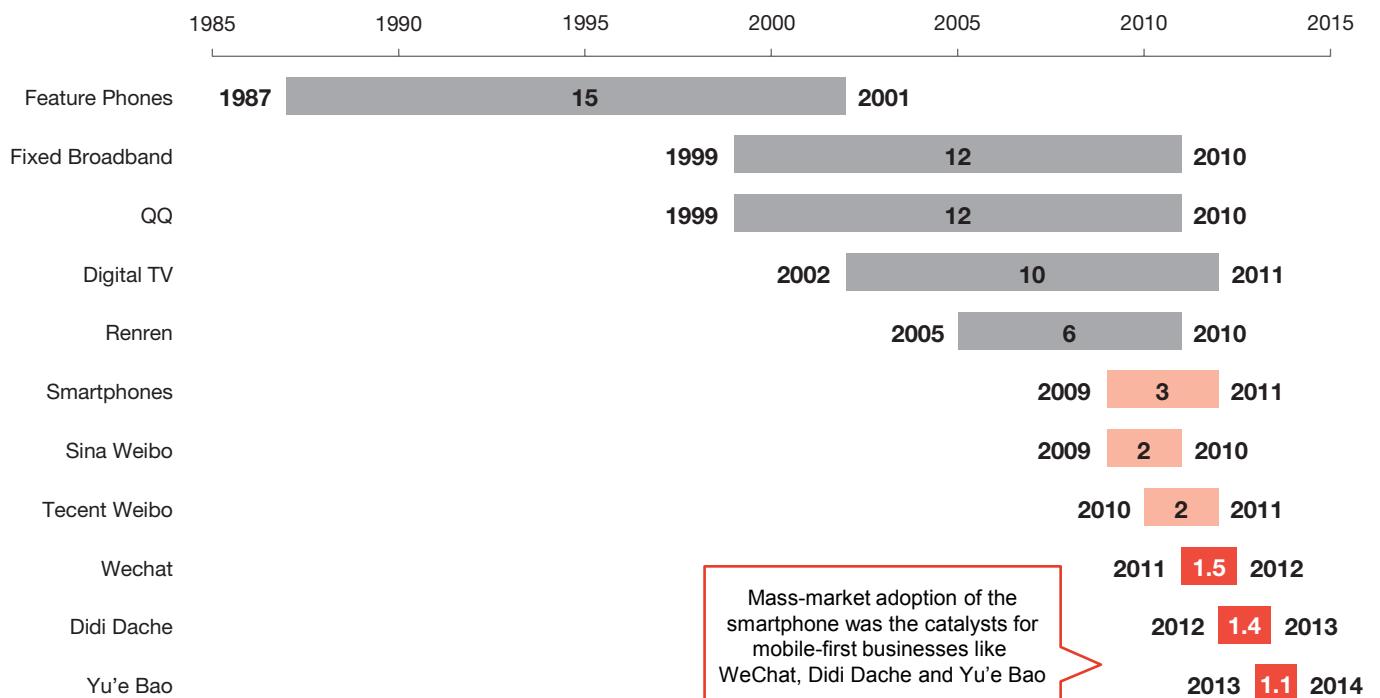
The level of competitiveness and speed of change within China's internet ecosystem would astound most Western business executives. Here, new features or services from one company are replicated and often enhanced within weeks – not months. Chinese consumers are also early adopters of technologies, willing to tolerate 'beta' products and actively providing feedback on performance. Here, the emphasis is on a razor-sharp focus on meeting specific customer demands, being ultra-flexible in how you go to market and adopting a test-and-learn mentality during execution.

² PwC "Entertainment and Media Outlook", (2015)

³ Alibaba "Alibaba defined", (2015)

Mass-market adoption of the smartphone was the catalyst for the success of mobile-first services like WeChat, Didi Dache and Yu'e Bao

Figure 7 Time taken in years to reach 100m users from launch in China



Source: PwC analysis

3. Entrepreneurialism

For the last 30 years, entrepreneurship has been the catalyst behind the dynamic growth in China's private sector. More recently, China is at the centre of a global shift towards a new generation of self-made billionaires – in Q1 2015 a new billionaire was created almost every week in China⁴. Many of the personalities and success stories behind these entrepreneurs are from China's leading internet and technology players: those leaders

who have paved the way for a new range of firms founded in the late 2000's like Meituan (group-buying website), DJI (drone manufacturer), and YY (video-based social network). The Chinese government also explicitly encourages this start-up mentality, with Prime Minister Li Keqiang calling for “mass entrepreneurship” and supporting the pledge with USD 6.5bn in grants, tax breaks and subsidised technology parks⁵.

⁴ PwC and UBS “Billionaires: Master architects of great wealth and lasting legacies” (2015)

⁵ China's new wave of angel investors

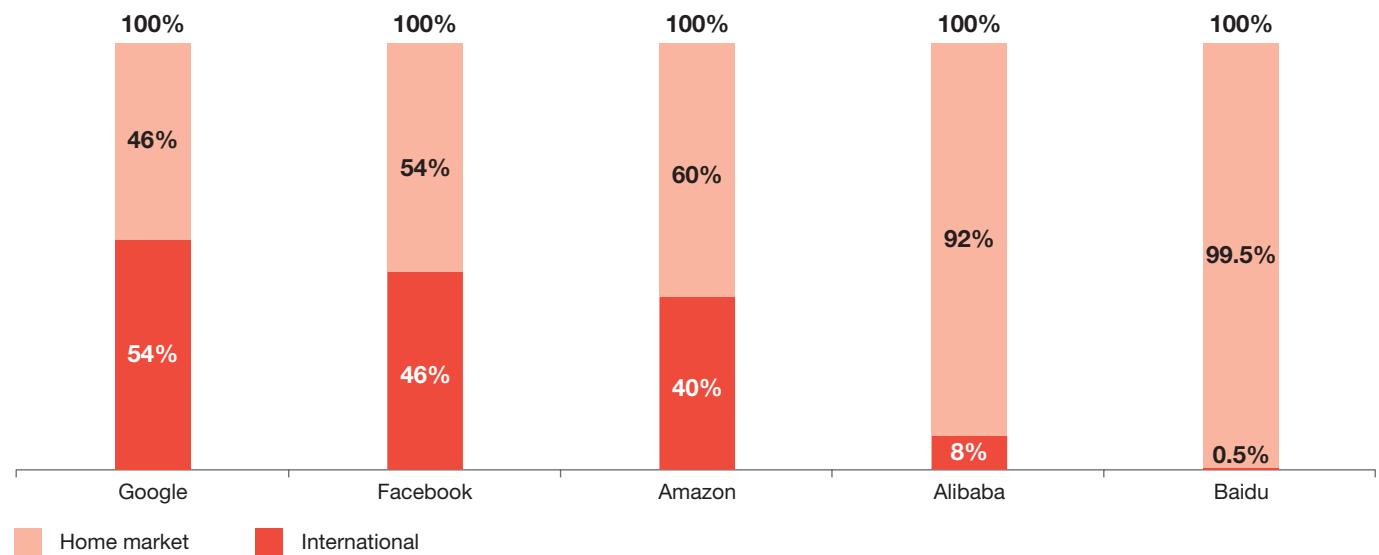
⁶ Alibaba “Alibaba defined” (2015)

What will be the global impact of China's internet and technology giants?

While China's leading digital players now rival their Western counterparts in terms of overall scale, value and innovation capability, their impact outside of China has been relatively limited. Alibaba leads, yet the company still generates less than 10% of revenue outside China mostly through its wholesale cross-border eCommerce services.

Chinese internet businesses are still heavily reliant on their domestic markets compared to Western players

Figure 8 Contribution of domestic and international markets to overall revenue



Note: Tencent does not disclose international revenues.

Source: PwC analysis based on latest annual reports

The sheer scale of China's digital market means it will always remain core to the leading local firms – far more so than Google, Facebook and Amazon's dependence on the United States. For example, of the USD 14bn gross merchandise value generated by Alibaba on Singles Day in November 2015 only USD 45m came from rural areas⁶, indicating large upside potential in the domestic market. That said, Chinese technology firms

like Lenovo and Huawei each generate 60%–70% of their revenue internationally. Likewise, Chinese internet players will increasingly become more established and visible on the global landscape, particularly through direct expansion into Emerging Market eCommerce, social and mobile services; cross-border M&A of high-tech firms; exporting disruptive business models; and attracting international digital talent.

⁶ Wired, Alibaba is training people in rural China to shop online, (February 2016)

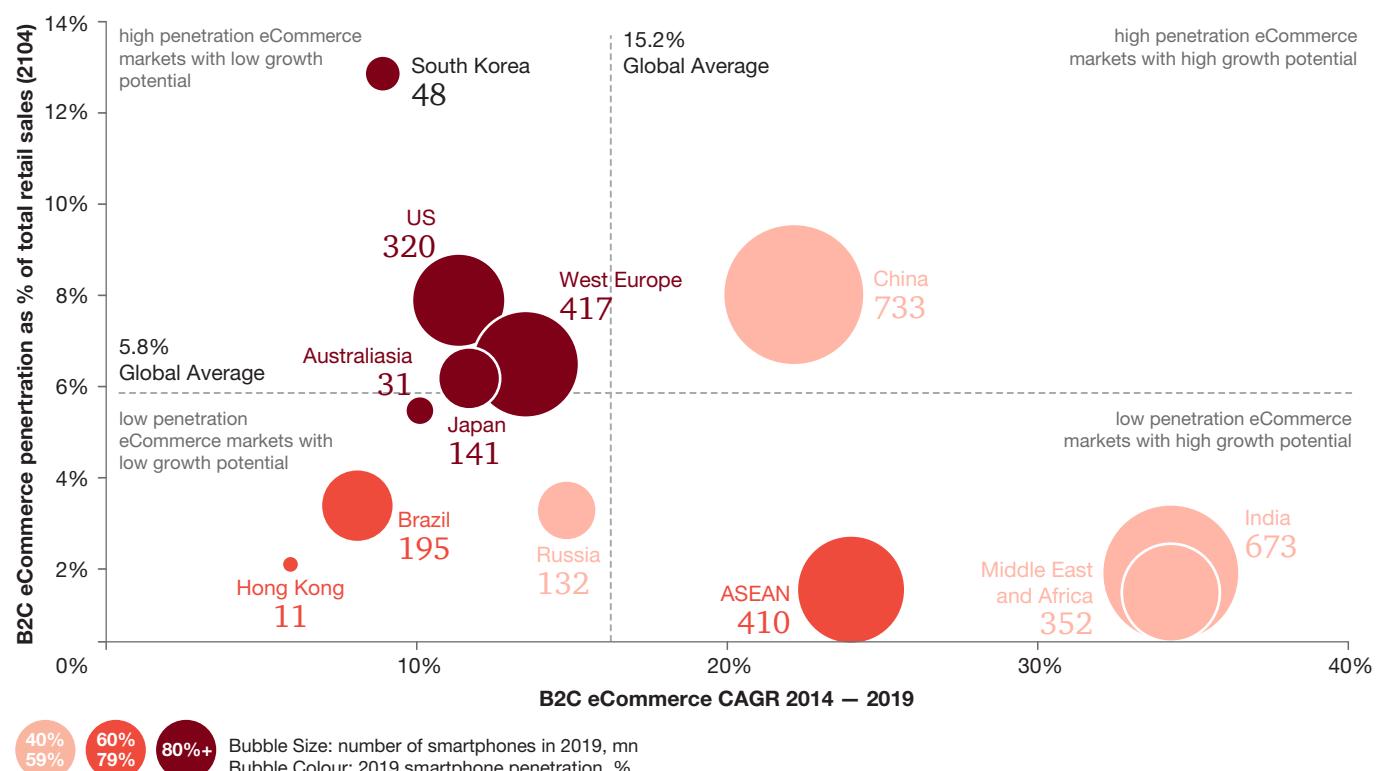
1. Direct expansion into Emerging Markets

In the near-term, China's internet players are likely to target Emerging Markets for international expansion, particularly in Emerging Asia, Brazil and parts of Africa. Within Emerging Asia, eCommerce is a particularly attractive sector as it remains underdeveloped and fragmented yet poised for explosive growth. Unsurprisingly, Alibaba has already made strategic investments in these markets including Singapore Post (a logistics and B2B eCommerce solution provider) and Lazada (a B2C eCommerce site) to exploit opportunities in South East Asia, and Snapdeal (an eCommerce marketplace) and Paytm (a mobile payments provider) in India. In India Alibaba is going head-to-head with

Amazon to compete in what is widely considered to be the next big global eCommerce opportunity. In addition to deep experience serving mobile-first Emerging Market consumers it is natural to assume Alibaba will look to replicate its model of combining an integrated eCommerce platform with a trusted payment solution, small-medium-business financing, and end-to-end logistics network that has proved so successful in China. Whether Alibaba or Amazon proves to be successful in India could provide an indication of whether it is Chinese or US-centric retailing models that will characterise the next wave of developing eCommerce markets.

South East Asia, India and MENA represent huge online retailing opportunities particularly for mobile commerce

Figure 9 B2C online and mobile commerce opportunity



Source: Euromonitor (2014) and PwC Entertainment and Media Outlook (2015)

Tencent has also invested over USD 200m in marketing to expand their WeChat platform internationally. There are now approximately 100m WeChat users outside China, mostly in South East Asia and Hong Kong. Tencent's business model is predominately built on mobile gaming revenues, and while individual markets in South East Asia may be small, cumulatively the region is forecast to represent a USD 2bn+ social gaming opportunity by 2019.

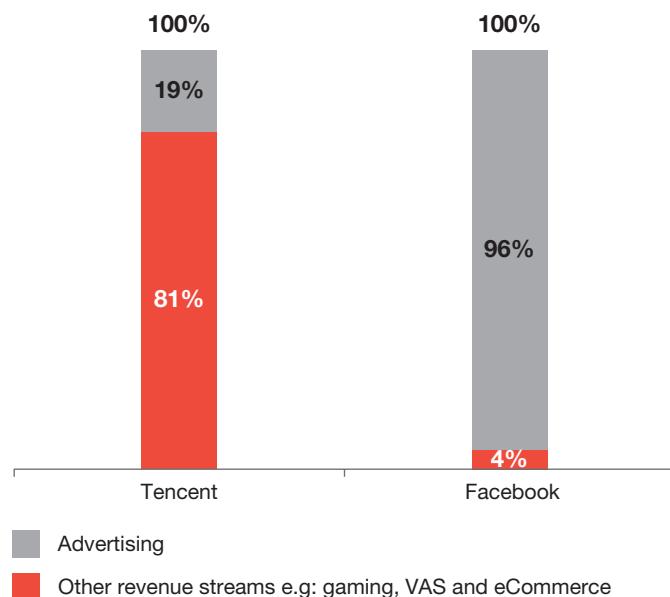
Baidu's approach to international expansion is to develop market-specific solutions in emerging economies similar to China, targeting large populations in the early stages of mobile internet. Brazil is one

of Baidu's strategic international markets, where it operates a local language search engine in addition to recent acquisitions and plans to invest USD 50 million over the next few years.

China's internet players have built a strong heritage building products for the mobile-first Emerging Market consumer and acting fast to iterate features and services for the needs of diverse user groups (e.g., Tier 1 vs. rural markets). While go-to-market strategies might differ, this supreme focus on agile execution and localisation is likely to prove highly effective expanding overseas.

Tencent has developed a radically different business model to Facebook

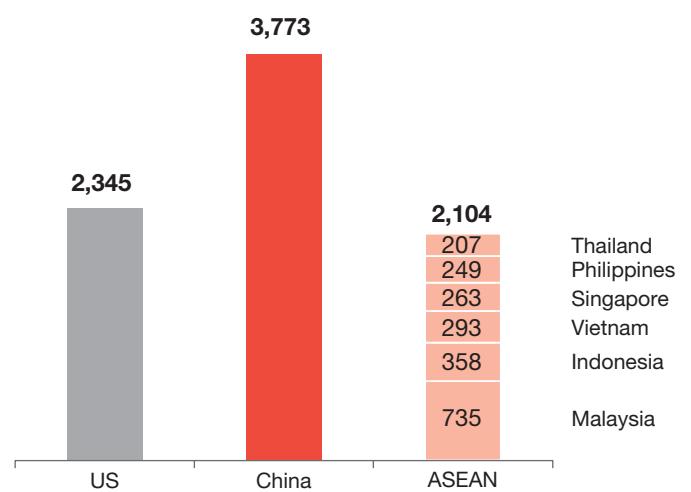
Figure 10 Revenue contribution by service, 2015 Q3



Source: Company announcements, 2015 Q3

In many South East Asian markets social gaming represents over 50% of the overall gaming opportunity

Figure 11 Social gaming market opportunity, 2019 USDm



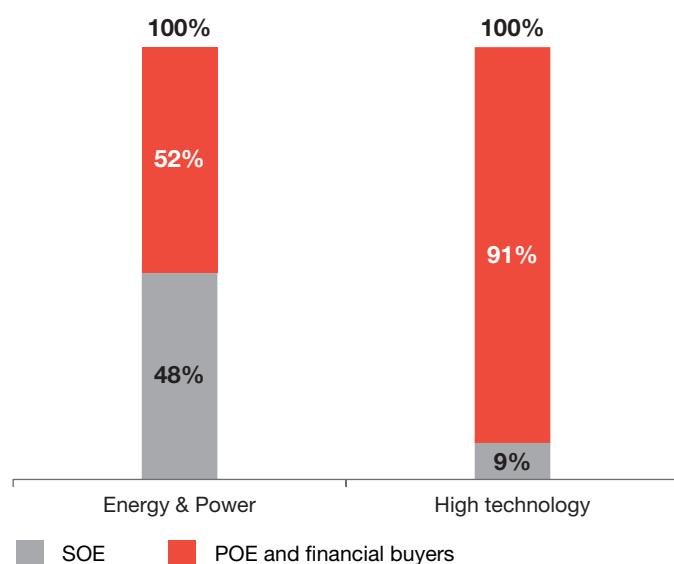
Note: No data available for Myanmar, Cambodia, Laos and Brunei
Source: PwC Entertainment and Media Outlook (2015)

2. Outbound investment and M&A

Since 2011 the share of outbound M&A investment by Private Owned Enterprises (POEs) in China has increased from 19% in 2010 to 57% in 2015. POEs overwhelmingly looking to high technology and consumer sectors in Developed Markets where advanced technologies and brands can be brought back to China. For example, Tencent acquired popular US social gaming companies Epic Games and Riot Games to improve their core gaming portfolio. Alibaba also invested in Tango, a US chat app, in a move to bolster its mobile messaging capabilities in China. We are also witnessing a new period where BAT are competing for early stage investment in some of the most high-profile Silicon Valley start-ups, having participated in funding rounds for both Uber (Baidu) and Snapchat (Alibaba and Tencent). We anticipate that along with Chinese VCs they will increasingly become major rivals for financial investment in the most highly valued internet and technology start-ups.

Private buyers in China are increasingly looking to outbound M&A in to bring back technology-related intellectual property and experience

Figure 12 Breakdown of outbound M&A deals by sector, by deal volume (2015)



Source: PwC China M&A 2015 Review and 2016 Outlook (2015)

⁷ PwC "Banking and finance in China: The Outlook for 2015" (2015)

3. Exporting disruptive business models

Chinese-inspired business model innovation has the potential to be one of China's most impactful exports. Many business leaders coming to China quickly find that while being "social and mobile-first" might be considered a relatively new priority for MNCs, China has been operating with this mind-set for at least 3 years. It is at the intersection of mobile, social and commerce that we see the most likely impact of Chinese business model innovation; particularly as it relates to creating disruptive direct-to-consumer distribution channels.

In under 5 years, Xiaomi has taken the smartphone industry by storm to become the largest smartphone vendor in China and the 4th largest globally (by unit shipments in 2015). One of Xiaomi's competitive advantages is its disruptive direct-to-consumer sales model. Instead of selling through telecoms carriers as is typical in the industry, Xiaomi sells 70% of its handsets online. Xiaomi uses a variety of tactics including online shopping festivals or "hunger marketing" for new product launches, cultivating social engagement among a core group of "Mi-fans" through special events, contests and beta testing of new products and services. In addition to building customer engagement, these strategies enable Xiaomi to minimise distribution and marketing costs, allowing the company to sell high-quality devices that heavily undercut manufacturers like Apple and Samsung. Xiaomi has also been adopting this sales model to expand overseas in Emerging Asia and Brazil.

China's financial services sector has also been at the centre of the most intense business model disruption over the last 24 months. Leveraging competitive advantages that include a large and engaged base of users, marginal distribution costs, and rich customer insights, BAT have disintermediated traditional financial services players with a range of internet-based products. The most well known is Alibaba financial affiliate Ant Financial's Yu'e Bao online wealth management product, which attracted 124m buyers within 12 months of launch. In the process, Tianhong asset management firm that manages Yu'e Bao (and in which Alibaba owns a majority stake) became China's largest mutual fund by assets⁷. The success of Yu'e Bao, and the consumer expectations it influenced, were the start of a methodical and aggressive expansion into multiple financial services adjacencies by all of BAT which now include insurance, P2P lending and most recently social credit scoring.

China's internet companies have permanently changed consumer expectations for Financial Services

Figure 13 Financial services solutions offered by Tencent, Ant Financial (an Alibaba affiliate), and Baidu

Typical expansion into Financial Services

									
	3rd Party Payment	Money Market Fund	Mobile Wallet	Non-Life insurance	Lending Arm	P2P Lending	Digital-only Bank	Life Insurance	Social Credit Scoring
Tencent	Tenpay (Apr 2005)	Licaitong (Jan 2014)	Wechat / QQ Wallet (Jul 2014)		Weilidai (May 2015)	Weilidai (May 2015)	WeBank (Jul 2015)	Hetai Renshou (Not launched)	Tencent Credit Bureau (Jan 2015)
Ant Financial	Alipay (Dec 2004)	Yu'e Bao (Jun 2013) / Ant Fortune (Aug 2015)	Alipay Wallet (Nov 2013)	Zhong An (Nov 2013)	Ant Credit (Jan 2015)	Zhao Cai Bao (Apr 2014)	Mybank (Sep 2014)	Yu'E Bao Universal Life (2014 Feb)	Sesame Credit (Oct 2015)
Baidu	Baifubao (Sep 2008)	Bai Fa (Dec 2013) / Baidu Finance (Oct 2013)	Baidu Wallet (Apr 2014)	Bai An (Dec 2015)	Baidu Finance (Oct 2013)	Bixin Bank (Nov 2015)	Bixin Bank (Nov 2015)	Bai An (Dec 2015)	N / A

Source: PwC analysis based on company announcements. As of January 2016

4. New talent battlegrounds

Competition for in-demand tech-based skills, such as cloud computing, mobile technology and data analytics is nothing new to many business leaders in the West.

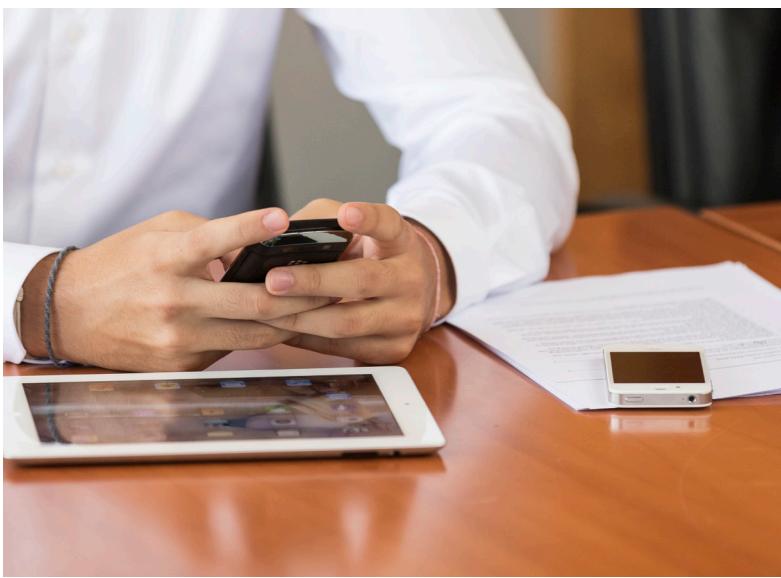
The first wave of this trend is likely to come from Chinese businesses prioritising the hiring of senior foreign talent to help lead their globalisation efforts. The first high-profile example is Hugo Barra leaving Google in 2013, where he was a key member of the Android division, to join Xiaomi and lead its international business. More recently, Alibaba hired veteran Goldman Sachs banker Michael Evans to lead its international business, and there have been similar moves to Tencent and Baidu.

In the medium-to-long term however we believe the impact on global talent flows could be far greater. Despite the recent end to the one-child policy, China still faces major demographic challenges: within two generations the country will have lost 150 million workers⁸. During this period, the continued growth of China's internet economy will place greater demand for already scarce digital talent, and the domestic supply of talent is shifting at a time when demand is increasing. Within this macro context, we believe China's technology giants will make securing an international pipeline of talent a top priority.

And while Silicon Valley currently enjoys the strongest draw for tech-savvy talent, working for a Chinese tech company in the world's largest digital market may soon become the more exciting career move for ambitious talent.

⁸ PwC "The talent challenge, adapting to growth" (2014)

How should global business leaders respond to the rise of China's digital players?



China's internet players can no longer be considered as known-unknowns. In the last 3 years they have developed into world-class digital innovators, and in the next 3 years we predict they will exert their impact on the global stage. To best prepare for this outcome, we recommend international business leaders take a proactive approach to better understanding and more importantly engaging with China's digital ecosystem.

Most multi-nationals now recognise they need to adopt an "in China for China" strategy to be successful in a market that is characterised by intense competition and demanding customer expectations. However, the emergence of China as a leading digital innovator means that we now see the emergence of a "China for the World" strategy. Here, businesses ideate, test and scale leading-edge eCommerce, social and mobile solutions in China that can then be exported into other markets. Below are four effective ways to approach this strategy:

1. Collaborate with China's leading technology players to leverage their unique capabilities, ecosystem strength and access to consumers

Despite the slowing growth in China's domestic economy, the country remains a top strategic priority for international companies. To exploit this growth potential, many multi-nationals are looking to form strategic partnerships with leading internet players in order to take advantage of their unique access to consumers, and broad assets across China's digital ecosystem. This model had originally been applied by Chinese local leaders PingAn who has formed a JV with both Alibaba and Tencent to sell financial services products online. We are now seeing similar collaborations between international companies and BAT as they look to leverage the digital capabilities of their partners to better serve a more demanding Chinese consumer. For example, Unilever has a strategic partnership with Alibaba where the two companies jointly innovate in the application of data analytics, cross-border eCommerce and supply chain management. By working closely with Alibaba, Unilever aims to expand their channel distribution in rural China and improve the effectiveness of digital advertising strategies.⁹

Partnerships and JV's between foreign companies and Chinese businesses are nothing new, but we believe the new capability-led business partnerships will pose new challenges to both foreign and Chinese businesses. A recent PwC report found that while Sino-foreign partnerships in China historically emphasised the local business, political and social networks of the Chinese partner, objectives are now increasingly leveraging the local partner's competencies and capabilities. Chinese and foreign businesses will then need greater levels of strategic and cultural alignment to succeed, with the trust and openness that is required to share data and integrate business processes.¹⁰

⁹ Businesswire (July, 2015)

¹⁰ PwC "Courting China Inc: Expectations, pitfalls and success factors of Sino-foreign business partnerships in China" (2015)

2. Consider establishing global innovation hubs in China to develop, test and scale leading-edge eCommerce, social and mobile solutions

Just 15 years ago, China was home to 200 foreign-run R&D centers. Today, multinationals operate more than 1,500 innovation facilities throughout the country – and this number is poised to increase 20% by 2018¹¹. This trend is significant not only by the numbers but also how the motivations of MNCs to establish innovation hubs in China have changed. Many MNCs started using R&D operations in China for cost advantages before shifting their focus towards adapting technologies to cater for the local market. Now, as many MNCs recognise that China is the global leader for areas like eCommerce, social and mobile, these companies are establishing bases in China as their international hubs. For example, Siemens is opening a Digital Innovation Centre in China in 2016 that will concentrate on developing solutions for both Chinese consumers and international markets where the “Chinese way to new technology” opens up new options¹². PwC are also working with a global beverage company that recognises China as the pioneer eCommerce market from which to test new products and distribution models that can be applied to the rest of the world.

While MNC companies look to China as the petri dish of their global digital innovation efforts, they will need to confront several key challenges. These challenges include deciding where to locate innovation centres, establishing the right academic and business partnerships, protecting IP, and attracting quality talent. In fact, a recent survey by Strategy& (PwC's Strategy Consulting practice) found that talent acquisition and retention were the top two challenges for MNCs conducting innovation in China¹³. Many MNCs find the talent pool for post-graduates with Masters or PhDs is fiercely competitive, particularly for those with the prior international exposure that leads to smoother interactions with expatriates and teams in the company's headquarters. Moreover, retaining people is perhaps even more challenging than finding them: churn is high in China's labour market with the

annual turnover rate at currently more than 10% in the innovation sector. And with China's domestic internet players growing so rapidly, MNCs are no longer the most favoured places for young engineers to work. MNCs will need to develop creative means of stabilizing their workforce, depending less on salaries (competitive pay is a given) and more on inspired leadership and opportunities for challenging work or overseas assignments.

3. Simulate the disruptive impact of BAT entering your markets and your competitive response with business war-gaming exercises

Disruption is now firmly on the radar of business leaders across nearly every sector. PwC's 19th Annual Global CEO Survey (2016) found 58% of global CEOs are concerned by the threat of new market entrants; however, the issue is even more important in China where 90% of leaders report the same concerns¹⁴. These concerns are due to Chinese businesses having spent the last few years battling with the expansion of the BAT into their core markets, with Financial Services, Retail and Healthcare sectors some of the most intensely impacted.



¹¹ Strategy+business, a PwC publication, “The Next Innovation Opportunity in China” (2015)

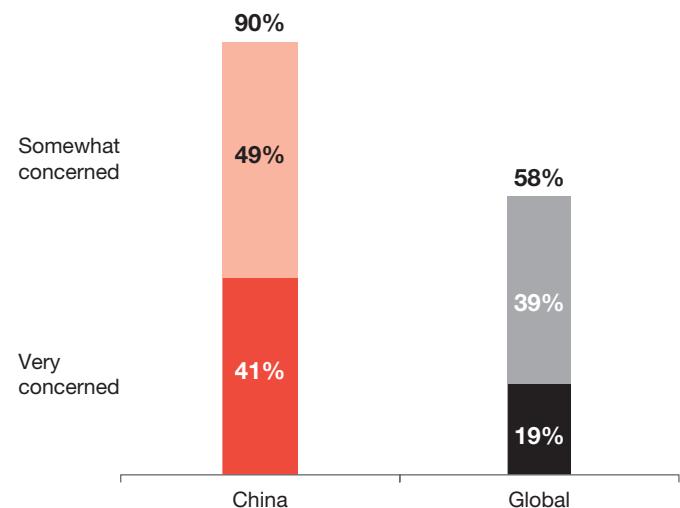
¹² Siemens “A finger on the pulse of innovative – worldwide”

¹³ Strategy& “2014 China innovation survey: China's innovation is going global” (2014)

¹⁴ PwC “19th Annual Global CEO Survey (2016)

Digital disruption is the number one item on CEO agendas in China

Figure 14 Percentage of CEOs that consider New Market Entrants a threat to future growth prospects



Source: PwC "Global CEO Survey" (2016)

While Chinese executives regularly keep up-to-date with developments in global digital centres like Silicon Valley, anecdotal evidence suggests this isn't reciprocal. We believe that international business leaders must begin planning for the impact BAT could have in their core markets. Likewise, an equally disruptive scenario could be that domestic digital players or start-ups begin applying some of the same disruptive business models pioneered in China. Instead of commissioning research studies or traditional analysis-driven strategy creation, we recommend executives conduct business war-gaming scenarios. These sessions simulate real world conditions (e.g., BAT entering your core market) with teams of senior managers representing different players (e.g., the incumbent, a China internet player, and consumer groups) and then responding to each other's actions and changing market conditions. War-gaming works well in helping plan for disruptive scenarios like these as it is forward thinking, dynamic and most importantly a holistic activity. In contrast, traditional strategic planning is often ineffective when preparing for highly competitive, unpredictable, interdependent and time-dependent scenarios. PwC recently conducted a "Fiercest Competitor" war-gaming workshop with

a global asset manager to simulate the competitive response to a large Internet company launching a high yield, direct-to-consumer, and online-only investment product targeted at the client's mass-affluent target market. The session enabled cross-functional stakeholders to rethink key assumptions throughout front-to-back office operations and begin designing new product development and distribution strategies that were appropriated from their fiercest competitor.

4. Assess strategic outbound investments in China's start-up ecosystem to enhance capabilities for execution of innovative digital solutions at home

Industry incumbents are increasingly turning to start-ups as a mechanism for kick-starting their digital innovation programmes. As described previously, China is now competing head-to-head with the US to create valuable internet-based start-ups and will continue to be a hotbed of innovation. Traditionally, large businesses would prioritise strategic financial investments in early-stage targets with corporate venture capital (CVC); however, we are seeing a growing trend of companies using accelerator and incubator programmes as vehicles for their corporate venturing activity.

Accelerator programmes are characterised by an open and competitive application process followed by a cohort-based curriculum for successful start-ups. These accelerators are most valuable for incumbents looking to access the widest possible pool of talent, ideas and solutions. Incubators offer early-stage businesses a "one-stop-shop" for both physical space and supporting services that enable new ventures to be nurtured until they reach the expansion stage of their maturity. Incubators are beneficial for incumbents who are looking to protect potentially disruptive new businesses and/or rapidly develop new services that can be spun-out into the core. For example, PwC recently collaborated with Citi on their Mobile Challenge, a digital accelerator programme that aimed to identify and support innovative Fintech solutions from across Asia Pacific, including China. While Citi's Mobile Challenge was a global programme, the focus on Asia Pacific is typical of an emerging recognition by global businesses that Asia – and particularly China – is an important innovation hub for acquiring intellectual property and know-how that can be applied across multiple markets.

The rise of China's silicon dragon – what's next...

In this report we explained how China's internet players will increasingly shape the future of global digital innovation. For this reason we think its important that business leaders, both in China and abroad, stay on top of what is happening in this diverse and fast moving market, and our aim is to help.

In future series we will dig deeper into the impact of Chinese digital innovation at a sector level and explore issues such as:



Who are the innovators:

BAT, start-ups, industry outsiders, or incumbents



What impact are they having:

blurring sector boundaries, redefining customer expectations, or deploying new technologies



Where is value being created:

revenue growth, customer acquisition, or cost efficiency



Where is innovation coming from:

localising global standards, incremental improvements, or breakout innovation



Where in the value chain is innovation happening:

business model, channel, product or operations

China's disruption radar



Retail

eCommerce, Omni channel and connected stores
Digital advertising and Online-to-offline



Mobile payments and loyalty



Financial Services

Direct to consumer distribution models
Product personalisation and customer experience
Fintech



Health

mHealth and remote monitoring
Personalised medication and treatments
Cloud Hospital and big data analytics



Automotive

Connected cars: safety, entertainment and well-being
Autonomous vehicles
Vehicle and mobility management

China's mega trends

Economic new normal

China's economy shifting from investment to services and innovation driven growth

Technological breakthroughs

Time from breakthrough to mass-market adoption is collapsing and disrupting business models

Demographic shifts

Millennials' expectations of what is possible, setting a new level of expected experiences

Rapid urbanisation

Services, marketing and distribution shaped by greater population density

Environment & sustainability

Demand for natural resources forcing businesses to address sustainability

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End notes

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