
Creating Data by Negotiating: China's Data Barons and Government Control

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Abstract

Chinese hi-tech companies have enormous access to data. Major technology companies in China such as Alibaba, Baidu and Tencent still retain their founders as leaders. These leaders exercise considerable control over and are guiding their companies' data strategies. However, the Chinese government has been perturbed by the unhindered power and reaches of companies and has endeavoured to undertake measures to retake control. This has not deterred Alibaba, Baidu and Tencent who under their founders continue to find new avenues to data acquisition in conjunction with government priorities. The research has attempted to analyse the Chinese government's actions pertaining to data regulations; to explore the sources of data for Alibaba, Tencent and Baidu; and to evaluate the emergence of new technologies and their future ramifications.

Keywords

Alibaba, Tencent, Baidu, Data, Artificial Intelligence, Metaverse

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Introduction

The Chinese authorities' crackdown in late 2020 on Jack Ma (Ma Yun 马云) and Alibaba Group, and Pony Ma's (Ma Huateng 马化腾) Tencent has stoked fears among other companies that might be facing increased scrutiny as well. These developments have emerged in the wake of Robin Li's (Li Yanhong 李彦宏), Baidu being fined by regulators in China.ⁱⁱⁱⁱ Subsequently, the Chinese government has put forth legislation that is focused on curbing anti-competitive behavior from companies including sharing sensitive consumer data and developing coalitions in an effort to get rid of stiff competition.

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Alibaba Group Holding, Baidu and Tencent Holdings (ABT) have all been called out by the Cyberspace Administration of China (CAC), a Chinese cyberspace security and internet content regulation watchdog, for illegal access,

over-collection and excessive authorization of consumer data.^{iv} These allegations prompted Pony Ma, the founder of Tencent Holdings and a parliamentary delegate from the Guangdong province in the National People's Congress (NPC) to meet with antitrust watchdog officials in China and to visit the State Administration of Market Regulation (SAMR) office. Notably, Robin Li, the co-founder of Baidu, has remarked that if the Chinese people are able to "trade privacy for convenience, safety and efficiency, in a lot of cases, they are willing to do that" which accordingly has raised alarms bells.^v

Data Barons and Government Regulations

Moreover, experts propound that increased government scrutiny can be a harbinger of expanded government involvement. At present, according to strategic analysts, all of Baidu's technologies can be utilized for military purposes. Robin Li is credited with encouraging the Chinese military and National Development and Reform Commission (Zhonghua Renmin Gongheguo Guojia Fazhan he Gaige Weiyuanhui 国家发展和改革委员会, NDRC;) to contribute to the China Brain Project. Furthermore, experts posit that cooperation between the Chinese government and its citizens occurs all the way through the Chinese People's Political Consultative Conference (Zhongguo Renmin Zhengzhi

Xieshang Huiyi Quanguo Weiyuanhui 中国人民政治协商会议 CPPCC) which is a political advisory body. The CPPCC consist of supporters who would prefer expanded engagement of the Communist Party of China (CPC) in the development and growth of Artificial Intelligence (ren gong zhi neng 人工智能 AI).^{vi}

Subsequently, Chinese authorities have taken an interest in tech companies involved in AI and have unveiled the Next Generation Artificial Intelligence Development Plan (xin yidai rengong zhineng fazhan guihua 新一代人工智能发展规划 AIDP) which is designed to make China emerge as the “premier global AI innovation center” by 2030. To that end, Robin Li invested USD 1.2 billion of his company’s USD 9 billion revenue over the first three-quarters of 2017 into AI research and development. Baidu is similarly focused on its self-driving car Apollo and AI-driven facial recognition software along with Tencent’s AI Fine Art and its deep learning platform Mariana. This has necessitated the collection of data aimed at improving the development of an algorithm that will give Baidu a competitive edge over its rivals that include Google.

Pony Ma’s Tencent backed “Meituan is leading the way in services” by operating in 2,800 cities with 600,000 delivery personnel that are catering to 400 million clients while being locked in intense competition with Alibaba

which dominates the goods delivery sector. One of the reasons that food delivery has prompted such fierce competition is because of the potential for companies to “deepen customer loyalty, ensure food quality, control the brand experience, reduce costs, and maintain ownership of data”. Furthermore, virtual restaurants are leading the way and are supplemented by autonomous vehicles and robots that additionally require reams of data for functioning and learning but can potentially generate billion in annual revenues as social distancing continues and food delivery services inculcate habits that become deeply entrenched and deep-rooted.^{vii}

However, regulation is one of the foremost obstacles for companies involved in the development of autonomous driving technologies which require tremendous amounts of data to prepare algorithms and AI.^{viii} Founders of companies to get ahead of future regulations impediments have themselves offered solutions and alternatives. Pony Ma also a National People’s Congress (NPC) delegate has presented more than 50 proposals^{ix} that demand stringent government oversight on a multitude of areas including peer-to-peer finance^x that will also impact his company and its subsidiaries. Robin Li, however, has taken a different approach and advocated for more innovative ways for regulators to operate, better public accessibility to government data, and better data protection for underage consumers whilst focusing on

laying the foundation aimed at legal and at-scale commercialization of autonomous driving.^{xi}

ABT's Mining of Foreign Data

To circumvent the rapidly adapting regulatory environment, Tencent is also expanding its Cloud business in West Asia and has revealed its partnership with the Bahrain Economic Development Board (EDB) which includes support for Tencent's swift rise as the Middle East and North Africa (MENA) region's center for the cloud and internet data center (IDC) requirements. This will also provide Tencent with access to large amounts of data from the region as it leverages Bahrain's regional position, and the EDB's linkages with various patrons such as Bahrain's sovereign wealth fund, Mumtalakat.^{xii}

Furthermore, Chinese conglomerates toiled to temper China's draft data localization rules with Alibaba and Tencent releasing studies focusing on the adverse economic and innovation impact of data localization measures. Additionally, their envoys have reasoned at public debates that the regulatory attempts smother the innovation of Chinese companies in contrast to their Western counterparts. To that end, the efforts of these companies led to the generation of some leeway in the first draft which was compiled along with the fortuitous postponement of data localization laws for up to two years.^{xiii} The companies wanted access to even a larger slice

of the pie as China is projected to generate 48.6 trillion zettabytes by 2025 with Alibaba, Baidu and Tencent anticipated processing a significant chunk of it.^{xiv} However, there is a continued proliferation of a misguided sentiment that conveys that the glory days for China's technology giants are over even as they reign in China's domestic market and are expanding across West Asia and Africa. This also provides them with access to copious amounts of data which can be adroitly leveraged to gain modest concessions.^{xv} Even as Alibaba's Ant Group pledges to revert "to its origin" by concentrating on micro-payments and convenience for users.^{xvi}

On the other hand, Pony Ma highlighted a troika of realms to acquire including through traditional industries where companies, particularly Tencent, possibly will deliver big data proficiencies to increase efficiency, the second domain is government units where apps can be utilized to digitize^{xvii} a significant percentage of civil services and the third arena is society, a far-reaching and debatably obtruse classification to seek an astutely calculated stratagem that exploits ambiguity. Nevertheless, it then has been applied in endeavours vital to finding missing children by tapping into Tencent's face recognition solutions.^{xviii} Notably, during the COVID-19 pandemic, Alibaba and Tencent assisted local governments in Hangzhou and Shenzhen to develop the "health code".^{xix} However, Tencent has been under the scanner of the Chinese

government with claims pertaining to its mobile game Honour of Kings (Wangzhe Rongyao 王者荣耀)^{xx} and gaming addiction which resulted in Tencent taking action and constricting play time for its younger demographic. Simultaneously, Tencent launched the game in Europe, North and South America under the newfangled moniker of Arena of Valor that not only provided the company with more profits but with more data as well.^{xxi}

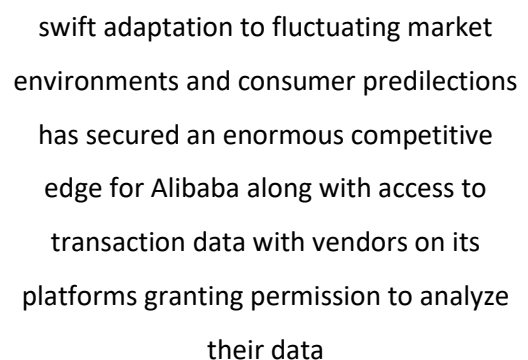
New Technologies and Future Ramifications

On a similar note, Alibaba has been building an ecosystem through innovative capabilities in network coordination and data intelligence. Furthermore, swift adaptation to fluctuating market environments and consumer predilections has secured an enormous competitive edge for Alibaba along with access to transaction data with vendors on its platforms granting permission to analyze their data. Alibaba also appears to be increasingly gathering and optimizing live data. To that end, a four-step process has been institutionalized by the company wherein the very first step is “Datafy” every customer exchange^{xxii} for maximizing machine learning and the algorithm decides the relevance of the data. Taobao, Taobao Mall, Taobao Travel, Weibo, Youku Tudou, ChinaVision Media Group, Laiwang, Tango, Ant Financial, Kuaide Dache, AutoNavi, Xiami, TutorGroup, Qyer, 117go,

ByeCity, Haier, Alicloud, KanBox, 11 Main, 1stdibs, ShopRunner, Quixey and Fanatics are all part^{xxiii} of Alibaba’s ecosystem. Alibaba has also opened its first data centers in South Korea and Thailand and has plans to open more in the Philippines and Indonesia thereby casting an extremely large net for data capture.^{xxiv}

Business Specialization

Furthermore, Alibaba, Baidu and Tencent are emerging as pivotal and massively ‘significant social media intermediaries’^{xxv} through their super apps including Alipay, WeChat Baidu App and referred to as “one app to rule them all”,^{xxvi} while perpetuating their ecosystems. However, there remains a keen awareness of the fact that these corporations are not too big^{xxvii} to fall from grace in Zhongnanhai. These companies are also faced with the emergence of data silos that may limit their effectiveness in the ruthless dynamic technology arena.^{xxviii}



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Concurrently, a dilemma has been inundating these companies wherein intense relations with the government in Beijing are essential to thrive in the Chinese domestic sphere and gathering data create significant overseas regulatory risks. One such example was the ban by the Indian government on multiple Chinese apps including Tencent's gaming apps. Nevertheless, as an ecosystem develops, the expense of storage and processing enormous amounts of data decreases and physical surroundings are digitized, the future will be for those with a readily available continuous supply of data.^{xxix} Furthermore, according to experts government regulations in China are likely to become "stricter and stricter"^{xxx} as well with Beijing focused on implementing the "China 2025" initiative and the affirmation of a "dual-circulation" economy is likely to require reconsideration of company policies and operational priorities by the data barons.^{xxxi}

Concomitantly, the Chinese government led by Xi Jinping is likely aiming to seize the data initiative^{xxxii} and have tasked Alibaba and Tencent to move to a government-run cloud, *guoziyun*.^{xxxiii} Companies have also been asked to overhaul privacy disclosures to be more user-friendly. Furthermore, to show the strength of its resolve, the government barred Tencent from issuing novel mobile applications and updating current applications without regulators' ^{xxxiv} authorization following assertions that a number of Tencent

commodities breached consumer interests. This action was part of a larger movement that has included the introduction of Data Protection Law for better compliance regarding personal information by companies.

Surveillance and ABT

Alibaba has also become embroiled in "content security service" that is intended to provide "facial recognition of sensitive people."^{xxxv} Likewise, Tencent has been involved in surveillance of foreign users' content on WeChat wherein the data generated is utilized for the refinement of its censorship services on its platform in China.^{xxxvi} Baidu amongst other companies has employed a system called "one file one person" that utilises AI to conduct surveillance in China. The innovative system seeks to analyse data with the help of algorithms and machine learning to generate "customised files for individuals."^{xxxvii}

These developments appear to be part of the Chinese government's plan for "opting Chinese companies' data-processing capabilities" in its quest to better surveil its citizens and to retain control.^{xxxviii} However, during the COVID-19 pandemic technology to trace the outbreak was extremely useful to stem the spread of the disease. An algorithm was designed that focused on risk scoring allocation to people based on a color code. The color code was subsequently utilized to assess people and to determine their access to transportation in the country.^{xxxix}

Notably, Baidu has withdrawn from the Partnership on AI (PAI) that is a US-led effort aimed to nurture cooperation on the ethical questions put forth by AI advancement. Baidu has also been reported to have provided equipment for surveillance in Xinjiang.^{xi} Similarly in the Tibet Autonomous Region, applications related to AI and big data has seen the involvement of Baidu and Tencent with Alibaba setting a Lhasa investment unit that highlights its long-term commitment in the sensitive region.^{xli} In addition, the Tibet surveillance program was indefinitely extended by the Chinese government.^{xlii} Alibaba has also been made a deal with the Malaysian government for a smart city that will be called Malaysia City Brain initiative and is likely to provide immense data and could emerge as a template for other countries. To provide services for the smart city project in Malaysia, Alibaba has cooperated with SenseTime, an AI company, on “smart transportation, urban management, and intelligent surveillance.” Baidu likewise has launched an AI assistant Aladdin in Japan that is a steppingstone for “more international partnerships, investments, and acquisitions.”^{xliii}

Strategies

Companies in China have also been relentlessly pursuing convergences with the government to further their interests at a time when regulations have inhabited their profit generating potential. One such convergence is

seen in the semi-conductor sector that has been largely held by Taiwan. Alibaba is trying to break into the niche sector with the launch of a new chip called Yitian 710^{xliv} that will not be made^{xlv} accessible for commercial usage outside the company. This is in addition to the new proprietary servers labeled Panjiu that the Yitian 710 chips will run on. Baidu has been investing in chip development as well. These new developments are likely going to make up the backbone of technologies for Tencent, Baidu and Alibaba from what Xi Jinping has deliberately phrased as “stranglehold” vulnerabilities that the US can take advantage of and encompass “semiconductors, new energy and other advanced technologies” that simultaneously will also create huge quantities of data.^{xlvi}

Another area that has the potential to generate an unfathomable amount of data without current comprehensive government regulation is metaverse. Notably, the Beijing Institute of Electronic Engineering has been tasked with performing “research on virtual twin and metaverse collaborative modeling and simulation”.^{xlvii} Alibaba has invested in the metaverse with a wholly owned subsidiary called “Yuanjing Shengsheng” focused on metaverse-based gaming and has registered amongst others, the trademark “Ali Metaverse”. Baidu has also launched a metaverse application, XiRang that requires a Baidu service account for the creation of an avatar which in turn necessitates the

registration of personal data.^{xlvi} Tencent likewise has focused on metaverse, launching TMELAND, the very first virtual music carnival in China.

Conclusion

To survive and thrive in what appears to be an era of unprecedented regulations, the country's biggest data generating and using conglomerates are attempting to discover convergences with the objectives of the government that might offer more latitude to operate and breathing space concerning data to the aforementioned companies.

China is also looking at supplementary functions pertaining to data availability such as a development plan to boost the country's infrastructure that supports data processing, storage, and computing capacity.^{xlix} Thereby, highlighting a continued commitment to data and its uses in new emerging technologies that are in adoption phase across China.

Furthermore, it is likely that the "BAT" companies' new strategy aimed at finding convergences with the interests of Chinese governments while maintaining their competitive edge may allow the data barons to survive relatively unencumbered for the time being or at least until the next crackdown¹ in a bid to achieve techno-nationalism.

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