



Development strategies of high-tech companies in China: Huawei and Tencent

Estrategias de desarrollo de empresas de alta tecnología en China: Huawei y Tencent

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ABSTRACT

Currently, China is the second largest economy in the world and a rapidly developing innovative country. The improving position of China is evident not only from the rankings of the largest innovative companies but also from the reaction of major Western nations (once technological leaders) to China's achievements in high-tech industries. Their biggest concerns refer to increased control over foreign direct investment from China, the cancellation of major investment deals, the refusal of the services of Chinese companies due to a threat to national security, the trade war between the United States and China, etc. This article aims at identifying and analyzing the development strategies of high-tech companies in China as exemplified by its largest national companies: Huawei and Tencent. The authors used such methods as document analysis, analysis of quantitative data, comparative analysis, and synthesis. While studying the development strategies of the most prominent high-tech companies in China, Huawei and Tencent, the authors confirmed the general trends of their innovative development, including active investment in new technologies (artificial intelligence, cloud services, blockchain, big data, Internet of things, digital platforms), expanding the network of users and deepening connections between them, as well as personalizing services.

Keywords: digital economy, innovative development, national innovative system, high-tech ecosystem, digital platforms.

RESUMEN

Actualmente, China es la segunda economía más grande del mundo y un país innovador en rápido desarrollo. La posición de mejora de China es evidente no solo por las clasificaciones de las empresas innovadoras más grandes, sino también por la reacción de las principales naciones occidentales (que alguna vez fueron líderes tecnológicos) ante los logros de China en las industrias de alta tecnología. Sus mayores preocupaciones se refieren al mayor control sobre la inversión extranjera directa de China, la cancelación de grandes acuerdos de inversión, la negativa de los servicios de empresas chinas por una amenaza a la seguridad nacional, la guerra comercial entre Estados Unidos y China, etc. El artículo tiene como objetivo identificar y analizar las estrategias de desarrollo de las empresas de alta tecnología en China, como lo ejemplifican sus empresas nacionales más grandes: Huawei y Tencent. Los autores utilizaron métodos tales como análisis de documentos, análisis de datos cuantitativos, análisis comparativo y síntesis. Al estudiar las estrategias de desarrollo de las empresas de alta tecnología más destacadas de China, Huawei y Tencent, los autores

confirmaron las tendencias generales de su desarrollo innovador, incluida la inversión activa en nuevas tecnologías (inteligencia artificial, servicios en la nube, blockchain, big data, Internet de las cosas, plataformas digitales), ampliando la red de usuarios y profundizando las conexiones entre ellos, así como personalizando los servicios.

Palabras claves: economía digital, desarrollo innovador, sistema innovador nacional, ecosistema de alta tecnología, plataformas digitales.

1. INTRODUCTION

Currently, the most competitive companies in the world are digital ecosystems, many of which are high-tech transnational corporations (Lipovenko et al., 2022). High-tech transnational corporations accumulating the knowledge of developed countries and innovative ideas and technological innovations from all over the world and distributing their own technologies on a global scale symbolically reflect all the stages and processes that have taken place and continue to this day in the innovative development of China (Dmitrienko, 2022).

To study high-tech industries in China, we need to consider the classification of high-tech industries by the National Bureau of Statistics of China (The classification of high-tech branches (production), 2018). In conformity with the current definition in China, high-tech industries are understood as knowledge-intensive industries that are characterized by a high level of investment in R&D, a high value-added product, and, importantly, high prospects for development in the global market. The industries are innovative, smart, low resource-intensive, and strategic in their development (What is a high-tech industry?..., 2021).

According to the classification adopted in China in 2017 (The classification of high-tech branches (production), 2018), high-tech industries can be divided into six categories:

- 1) Pharmaceuticals;
- 2) Aviation, production of space vehicles and equipment;
- 3) Production of electronic and communication equipment;
- 4) Production of computers and office equipment;
- 5) Production of medical equipment;
- 6) Branch of electronic chemistry.

The largest companies in China's high-tech industry: Tencent, Huawei, Legend, Alibaba, Midea, Haier, HNA Technology, Geely, Xiaomi, BYD, JD.com , Baidu – all of them are private public companies traded on the stock exchange. The purpose of this study is to analyze and identify the features of the development strategies of high-tech companies in China on the example of Huawei and Tencent. The study of the practical activities of corporations will demonstrate the features of the business segments in which they operate, as well as the methods that companies use to overcome external and internal difficulties, including US sanctions and restrictions of the Chinese Government related to the activities of the country's largest technology companies.

2. LITERATURE REVIEW

The national innovation system (NIS) of China is based on the triple helix model. Yuzhuo Cai expressed the idea (Cai, 2014) that the triple helix model was based on the path followed by the NIS of Western countries. In accordance with the model, the state plays a decisive role at the initial stage of building a NIS, which creates and implements an appropriate strategy and provides financial support for R&D in high-growth industries with high potential, where, presumably, it will be possible to recoup the costs due to the rapid economic growth of business, taking advantage of new technologies. At the second stage of the formation of a NIS, universities are involved in business processes, companies improve their work in the field of R&D, and the state provides venture capital, hoping to accelerate economic growth through new innovative companies. The third stage of building a NIS is associated with a closer interaction and increased mutual influence of participants through hybrid organizations such as business incubators, joint research centers, science and technology parks, etc.

In general, the evolution of the Chinese economy and NIS throughout the existence of the People's Republic of China was determined by government programs and political initiatives. The main documents that governed the development of innovations include the National Medium- and Long-Term Development Program for Science and Technology (2006-2020), the Made in China 2025 Initiative, and the 13th Five-Year Plan for the National Economic and Social Development of the People's Republic of China (2016-2020).

Being a catch-up country, China strives to build a digital economy (Lapidus, 2021) based on high-tech industries. It also adopts the theoretical basis of developed countries with several specific features:

1. The classification of China's high-tech industries is based on international standards but has specific features, the most important of which is a clear emphasis on the international orientation of technology development to achieve self-sufficiency and make the country a world technology leader.
2. When analyzing the NIS of China from the viewpoint of the triple helix model, we revealed several specific features that distinguish the NIS of China from the classical Western models, namely the dominant role of the state in the management of the innovation system, insufficient communication between business and research institutions in the creation and implementation of innovations, the low level of society's involvement in the development of innovations through dialogue, the lack of fundamental research, the prevalent desire for rapid commercialization of technologies, which questions the impact of innovations on long-term development.
3. The regulation of China's high-tech environment has been evolving since the country announced openness and reform. The leitmotif of high-tech development programs remains the desire for China's independence from the outside world in the high-tech sphere, the use of technology to increase the country's influence and power on the world stage, and the use of technology as the basis and driver for the development of the national economy to improve the quality of life of the population.

China's largest high-tech companies include Tencent, Huawei, Legend, Alibaba, Midea, Haier, HNA Technology, Geely, Xiaomi, BYD, JD.com, and Baidu. All these are privately-held and publicly-traded companies.

The study aims at identifying and analyzing the development strategies of high-tech companies in China as exemplified by Huawei and Tencent. The study of the practical activities of corporations demonstrates the specifics of business segments in which they operate, as well as the methods that companies use to overcome internal and external difficulties, including US sanctions and Chinese government restrictions related to the activities of the country's largest technology companies.

2. METHODS

We used the methods of generalization, comparative analysis, deduction and induction, general logical and special research methods, systemic and structural-functional approaches, desk research, and analysis of sources and statistical information on this issue. The information base consists of data published in relevant publications. The annual reports of Chinese technology companies, relevant electronic resources (Statista, etc.), official Internet resources of Chinese and international development institutions, etc. were used as data sources.

3. RESULTS AND DISCUSSION

Features of Huawei's strategy

Huawei was founded in 1987 and has almost 200,000 employees in more than 170 countries (About Huawei, n.d.).

By the form of ownership, Huawei is a private (joint-stock) company. The shares are owned by the Huawei Shareholders' Union and the company's founder, Ren Zhengfei, with the latter holding only 0.9% of the company's share capital. As of 2020, the shareholders are more than 121,200 employees of the company, without any external organizations. This is emphasized in the company's annual report (Huawei Investment & Holding Co., Ltd. 2020 Annual Report, 2021).

According to Statista (Leading telecom infrastructure companies by brand value, 2022), as of the end of 2021 Huawei remained the largest supplier of telecommunications equipment in the world in terms of brand value, significantly breaking away from other companies in the top five: Huawei (\$55.4 billion), Cisco (\$20.12 billion), Nokia (\$9.38 billion), Qualcomm (\$5.82 billion), and ZTE (\$3.85 billion).

In general, Huawei is divided into three segments: a business group for working with private clients, telecom operators, and corporate clients. According to the data of 2021 (Huawei Investment & Holding Co., Ltd. 2021 Annual Report, 2022), almost half of the company's income comes from private consumers (49.6%), with telecom operators ranking second (44.2%) and corporate clients third (16.1%). The segment of corporate clients is rapidly growing. This segment shows an annual increase of 2.1% in 2021 and 23% in 2020 (Huawei Investment & Holding Co., Ltd. 2020 Annual Report, 2021) if compared with negative growth rates for retail clients (-49.6%) and telecom operators (-7%). Growth in the enterprise segment is primarily driven by the 5G rollout, digital business transformations accelerated by the pandemic, and the advancement of cloud solutions to speed up data processing and storage.

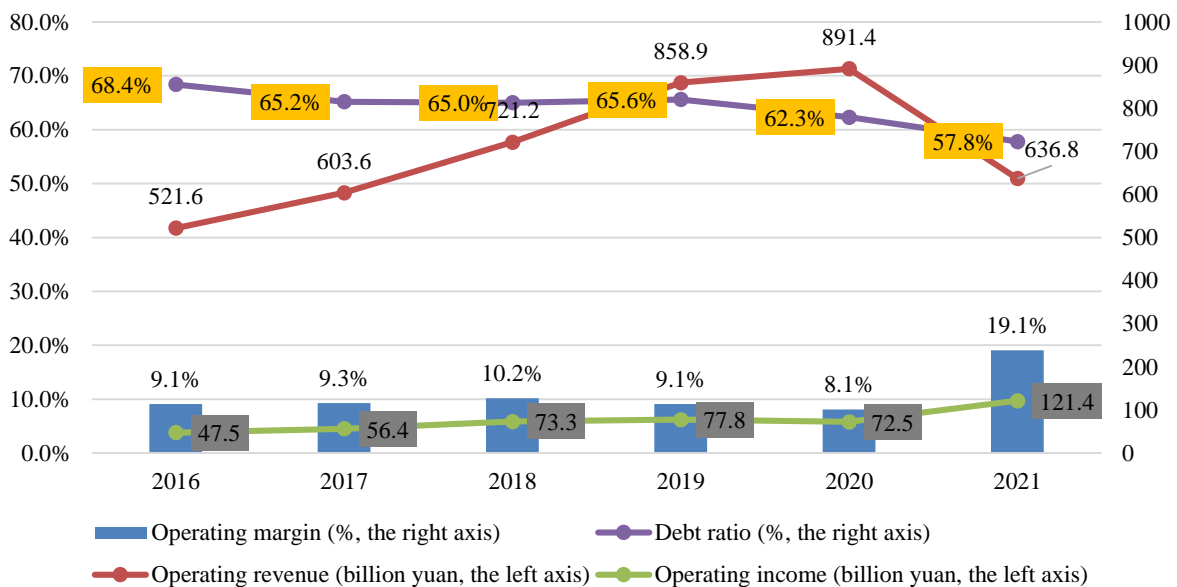
In relation to the regional distribution of revenue, most income (64.9%) falls on China, 1/5 on the countries of Europe, the Middle East, and Africa, 8.4% on the Pacific region, and only 4.6% on the Americas (Huawei Investment & Holding Co., Ltd. 2021 Annual Report, 2022). Thus, the restriction of Huawei's activities in the US is not critical in terms of the company's income.

If we evaluate the dynamics of the company's financial indicators in the period 2016-2020, the overall revenue, net profit, and the amount of assets showed stable growth. Between 2016 and 2020, annual growth was 14%, while the cumulative annual growth rate of operating income showed a negative trend (-8%). According to the financial report, the company also received government subsidies which significantly increased in 2020 (2.8 billion yuan in 2020 compared to 1.7 billion yuan in 2019).

In 2021, the impact of such a powerful external factor as US sanctions turned out to be more significant. First of all, there is a 29% drop in revenue in 2021 (Huawei Investment & Holding Co., Ltd. 2021 Annual Report, 2022) compared to the previous year (Sanction-hit Huawei says revenues down 29% this year,

2021). The corporation had to restructure its business by selling the low-end Honor line, switching from the Android platform to custom HarmonyOS, starting to look for new suppliers, and organizing its own production of semiconductors and microcircuits. In relation to the business segment of telecommunications equipment, Huawei has lost contracts in European and American countries. The company also had to reorient the active expansion of both the smartphone market and telecommunications equipment toward Asian countries.

It is worth mentioning the positive dynamics of an important financial indicator, i.e. an increase in operating margin from 8.1% in 2020 to 19.1% in 2021. This is not only due to a decrease in revenue, but also a simultaneous increase in profit. This indicates an increase in the efficiency of the company. As shown in Figure 1, Huawei’s financial performance is healthy, especially considering the challenges of the external environment in which the company operates.



Source: Huawei Investment & Holding Co., Ltd. 2021 Annual Report (2022)

Figure 1. The dynamics of Huawei financial indicators

Next, we should consider the main features of the corporation that seem important to highlight when analyzing its activities. Huawei positions itself as one of the most innovative companies in the market. Thus, Huawei invests more than 20% of its revenue in R&D. In 2021, such expenses amounted to 142.7 billion yuan, which is equal to 22.4% of the company’s total revenue. This is 0.6% more than the value of 2020. The share of R&D revenue also increased (15.9% in 2020) (Huawei Investment & Holding Co., Ltd. 2021 Annual Report, 2022).

In addition, the company is among the largest patent holders. As of the end of 2021, Huawei had more than 110,000 patents from 45,000 patent families (Huawei Investment & Holding Co., Ltd. 2020 Annual Report, 2021). The corporation has the largest volume of patents in the field of 5G, which accounts for more than 20% of such patents worldwide (Huawei Investment & Holding Co., Ltd. 2021 Annual Report, 2022). In addition to be a leader in 5G, the corporation is at the forefront of developing Wi-Fi 6 next-generation technologies and H.266 universal video coding technologies. According to 2021 data, more than half of the company’s employees (54.8%) (Huawei Investment & Holding Co., Ltd. 2021 Annual Report, 2022) were engaged in R&D as part of their work tasks, and this share was growing (53% in 2020). Thus, the company is developing new technologies that are currently in demand in the world.

As part of the idea of open innovation and inclusive development, Huawei creates joint innovation centers and open innovation platforms such as Wireless X Labs and OpenLab (Zhang, 2019). Ecosystem innovation centers are being established in China, 16 of which have already been put into operation. More than 10 research centers are functioning over the world, including in the USA, Germany, Sweden, Russia, and India. The global innovation centers include six centers for cybersecurity, transparency, and protection of private information in the USA, Canada, Germany, South Africa, Belgium, and China. The innovation centers established by the company are a common tool for implementing a learning strategy when a transnational corporation enters foreign markets. One of the reasons for Huawei's success is highly qualified personnel and talented scientists, in particular, working on innovative developments in laboratories and design offices organized by Huawei around the world.

Huawei is increasing cooperation with businesses from a variety of fields: industrial manufacturers, mining, oil and gas companies, power plants, financial institutions, education and health institutions, various modes of transport (airports, subways) and logistics companies, data centers, etc. This is also necessary for the implementation of more efficient solutions for the Internet of things. For example, the HiLink platform, which offers smart home solutions, cooperates with a large number of home appliance manufacturers.

Speaking about the trend of expanding into additional segments, the Huawei group includes several subsidiaries. Huawei Technologies is engaged in the development, production, and sale of telecommunications products and services. It has companies in various locations within China and abroad, including Germany, Japan, and the Netherlands. Huawei Device develops, manufactures, and sells mobile communication products and accessories. Huawei International distributes telecommunications products. Huawei Software Technologies is responsible for the development and distribution of software and cloud solutions. HiSilicon Technologies is engaged in the development and distribution of semiconductors. HiSilicon Optoelectronics is responsible for optoelectronic products.

Huawei is an active investor, i.e. its investment strategy and investment intensity have increased in recent years. Since 2019, the main focus of investment has been semiconductor companies of various cycles within China. In 2020, 34 out of 37 companies (Weissberger, 2021) in which Huawei Investment Holdings Co., Ltd. invested were associated with semiconductors at various stages of the production chain: from chip design and software development to materials and production equipment. The focus of investments has consistently changed from R&D in the field of semiconductors to the production of optoelectronic chips, then to software development and advanced production equipment (i.e. increasing science intensity). Huawei plans to begin manufacturing its own chips at its first in-house factory built in Wuhan by the end of 2022. Thus, the investments made at different stages of the semiconductor production chain allowed a transition to in-house production. Moreover, most of the companies that absorb Huawei investments are in the early stages of development, so the investor has the opportunity to best fit them into their own supply chains to achieve their strategic goals.

Like companies in other industries, Huawei is working on following the ESG agenda, namely, promoting sustainable development and environmental protection and improving its activities in the direction of reducing carbon emissions and resource- and energy-saving technologies. As part of the Powerstar solution, a system has been developed to reduce energy consumption in the operation of wireless telecommunications networks.

The TECH4ALL project has a social focus, in which Huawei promotes infrastructure for inclusive technology-based education in developing countries, environmental support, and biodiversity conservation through big data collection and the use of artificial intelligence.

In terms of the management system, Huawei sets goals for development with a focus on customers, innovations, compliance with regulatory requirements, and risk control, maintaining a high level of product

and service quality and conducting business activities in accordance with corporate social responsibility initiatives. Emphasizing compliance with regulatory requirements is specific to Chinese companies due to the significant level of state involvement in economic management and the ever-changing legislation in the country. The other goals are on the agenda of any modern corporation that operates in accordance with the principles of the development of the world economy at present.

Features of Tencent's strategy

Tencent is a holding company registered in the Cayman Islands. The company was established in 1998 and is headquartered in Shenzhen. The shares are listed on the Hong Kong Stock Exchange, where the company has been present since 2004.

At the end of 2021, Tencent ranked second in terms of capitalization among the largest video game companies, first in the field of e-sports, fourth in the list of Internet companies, and ninth among the largest technology companies in the world (Market capitalization of Tencent, 2023).

The main feature of the company is its permanent expansion through the introduction of related services, the growth of geographical coverage, and an increase in other segments besides the original business.

The corporation began its development with the launch of mobile mail and instant messaging service QQ. Then it expanded the business by introducing additional mobile Internet services, including game portals, a streaming music platform, the Qzone social network, and a video platform.

The key idea behind Tencent's activities is to create an ecosystem that connects people, services, businesses, and innovative technologies. For individual customers, Tencent offers communication channels such as Weixin/WeChat instant messaging apps, QQ instant messaging platform, and Qzone media sharing and live streaming platform. The second sphere of business related to retail users is associated with the provision of digital entertainment content, including online games, videos, streaming services, news, music, and literature. Subsidiaries in this area include Tencent Games, Tencent Video, Tencent Pictures, WeiShi, Tencent News, Tencent Sports, China Literature Limited, Tencent Esports, Tencent Kandian, etc. Another crucial business area is fintech services, including not only Weixin Pay/WeChat Pay to make payments using mobile devices in 17 currencies and more than 16 countries, but also personal wealth management services (LiCaiTong), loan services (Credit Card Repayment), services for buying/selling securities (Tencent Portfolio), services for using blockchain technologies (Tencent Blockchain), and a universal e-commerce platform for business participants (Business Tenpay). In addition, Tencent offers a range of services to effectively manage and secure the use of personal electronic devices (Tencent Mobile Manager, Tencent PC Manager, QQ Browser, YingYongBao).

For enterprise customers, Tencent provides ecosystem-integrated marketing solutions (Tencent Marketing Solution), cloud services (Tencent Cloud), and audio and video communication services (WeCom, Tencent Meeting & VooV Meeting), as well as comprehensive assistance in digital business transformation through the use of big data analytics, artificial intelligence, cloud technologies, and other services.

In the company's reporting, the corporation's business is divided into the following segments:

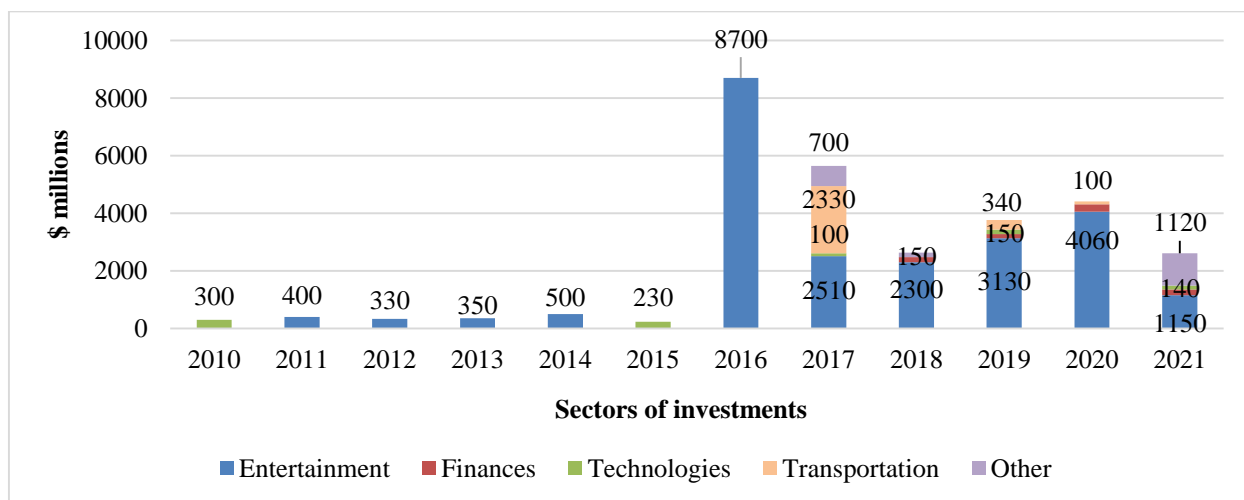
- 1) value-added services (1a. games; 1b. social networks);
- 2) online advertising;
- 3) fintech and business services;

4) other segments. In 2021, the revenue leaders were the games segment (31% of the group’s total revenue) and fintech paired with other business services (30.7%). The social networks segment amounts to 20.9%, while the online advertising segment holds 15.8%. Moreover, the two largest business segments are not only leaders in terms of share, but also in terms of annual revenue growth, which showed double-digit values in 2020-2021. The gaming segment increased by 12%, and the fintech sector and other business services grew by 34%, with total revenue growth of 16% in 2021. According to Tencent’s financial performance, there is no dramatic rise or fall in any of the indicators. Revenue is growing faster than profit; the company’s margin is slightly declining; the debt ratio increased in 2021, but fell short of the 2018 maximum (51%).

An important development trend of Tencent is to constantly improve its core business services (video games and social applications) in line with rapidly changing user preferences and segmentation. For example, the QQ service has been improved with video recording and video chat features (popular among young people, i.e. an important segment of users). In addition, Tencent has invited Lazy Audio, a developer of long audio recording services, which is an important niche in the entertainment segment.

A significant trend is the natural desire of a high-tech company to introduce and develop new technologies. For example, the corporation is developing multimedia innovations within the Tencent Media Lab, in the field of a wider and more accessible application of artificial intelligence both in Tencent’s business spheres and in other industries, robotics, quantum computing, and technologies aimed at solving global ecological, medical, and social challenges.

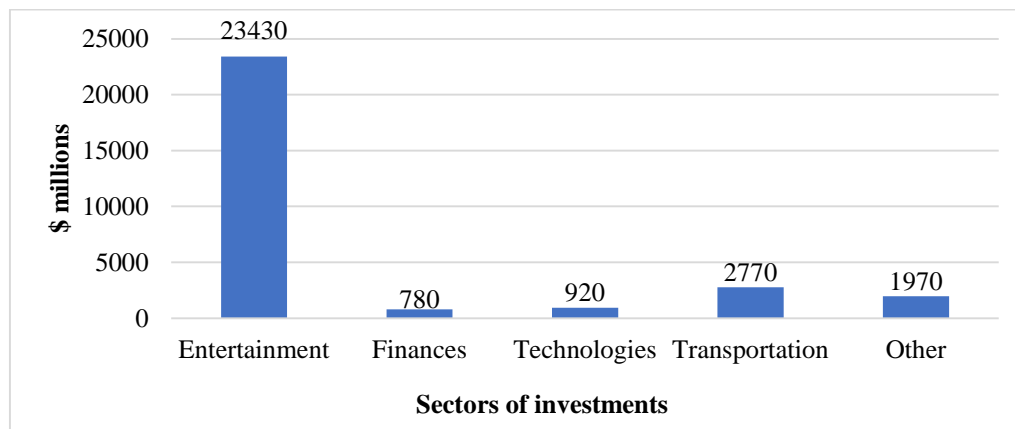
Tencent is actively investing. According to the corporation’s 2021 annual report, the investment portfolio amounted to almost 879 billion yuan, which is 27% more than in 2020 (Tencent Holdings Limited 2021 Annual Report, 2022). In conformity with its investment strategy, Tencent is consolidating its leadership in the core business and pursuing a strategy of connectedness to other industries. According to Beijing-based IT research center Juzi, Tencent invested \$20 billion in 2021 (compared to \$17 billion in 2020), which stands for 1/4 of the corporation’s annual revenue. Investments covered 265 companies (compared to investments in 168 companies in 2020) in China and abroad (Wei, 2021; Li, 2022) (Figure 2).



Source: compiled by the authors according to (China Global Investment Tracker, n.d.)
 Figure 2. The dynamics of Tencent investment projects and sector distribution (\$ millions)

Previously corporate investment had been dominated by domestic investment within China, 56 out of 77 investments were in Chinese companies in the first 8 months of 2020. However, after the announcement of restrictions on video games for children and teenagers in China, Tencent’s investments shifted to foreign markets, and the company’s financial investments abroad increased by a factor of 7 (Tencent boosts global

investments as Beijing cracks down on gaming, 2021)]. In July 2021, investment in domestic companies slowed down. In the first half of 2021, 16 out of 34 M&A deals were made by the Tencent group in Europe (including the UK, Germany, the Netherlands, and Romania), according to a Financial Times article on the data of Niko Partners, the leader in Asian Games Market Intelligence (Tencent’s silent pursuit of global gaming domination, 2021). Moreover, the gaming industry was the most popular in terms of Tencent mergers and acquisitions (Figure 3). This is not surprising as Tencent is the world’s fourth largest video game developer by the number of deals in 2021, with \$13.9 billion in video game revenue. The importance of internationalizing the company’s gaming business was demonstrated for the first time in Tencent’s 2021 Annual Report by dividing the financial performance for the video game segment into two sub-segments: domestic and international. It highlights the advantage of owning several game studios around the world, and the export of capital abroad is a key success factor in the video game segment (Top 10 Biggest Video Game Companies in the World, 2021).



Source: compiled by the authors according to (China Global Investment Tracker, n.d.)

Figure 3. The sector-based distribution of Tencent’s investment projects for 2010-21 (\$ million)

Investments also help Tencent expand into new business segments. On the one hand, these are new segments to the Tencent group of companies. On the other hand, these are segments that are just emerging and are being commercialized on the market.

In high-tech areas, Tencent often invests in start-ups. The corporation has actively financed start-ups in Asia and Oceania, including in Singapore, India, Japan, South Korea, and Australia. Tencent’s online-to-offline business segments are another rapidly growing area of investment, with a 1,000% increase in 2021 that amounted to \$11 billion. One of the largest deals is investments in the famous Chinese beauty brand Xiaohongshu which amounted to \$500 million in November 2021 (Li, 2022).

The pandemic has shown the investment attractiveness of distance education. Thus, Tencent made major investments in such Chinese companies as Yuanfudao (\$1.2 billion) and Dami Wangxiao (\$80 million). A new segment of investments is the metaverse business. For example, Tencent is about to acquire Black Shark (VR device developer) for \$2.7 billion.

The imposed restrictions have also redirected Tencent’s investments towards segments that regulators declared a priority for development, including semiconductor manufacturing (Astatine Semiconductor), the Internet of things and autonomous control solutions, other integrated services for business optimization, wealth management, and digitalization of business processes. For example, investments were made in Liangrui Technology, a developer of artificial intelligence and big data services. Medical equipment (Weitai Medical, Yimaitong) has also become a new strategic investment area.

Thus, it is clear that the direction of investment reflects Tencent's strategy to diversify its business and develop other growing market segments in addition to its core business, primarily due to the high risks of further regulatory pressure. Thus, the income from the non-core business amounted to more than 50% according to the third quarter of 2021 (Li, 2022).

The analyst L.D. Wei (2021) claimed that there was a drastic change in Tencent's investment strategy: the corporation drifts towards a venture-based approach, which implies greater risks and a greater chance of losing the invested capital. Tencent's M&A Investment Department was established in 2008, and the Venture Investment Fund was established in 2011 with a start-up of 5 trillion yuan. There is evidence of Tencent's extensive cooperation with such Chinese venture funds as Sequoia China, China Media Capital, Hillhouse Capital, JD.com, and Baidu in their venture programs (Creek, 2021). In 2021, 31 investment deals were made in startups at the angel stage. Major deals include capital investments in the Yuanxiang Weisi metaverse developer, the Cloud Leopard Intelligence cloud computing and data analytics chip developer, and the T3 Travel cloud-based smart travel services provider.

Thus, Tencent's practice confirms the general development trends of Chinese high-tech companies related to the introduction of new technologies, the expansion of investments, the desire for globalization, and the ecosystem-based approach to expanding business. In addition, it demonstrates certain features related to the industry in which the corporation operates, including adjustments to the investment and business development strategy and obligations to strictly follow the changing legislation.

4. CONCLUSION

Thus, the development strategies of high-tech companies in China have the following features:

1. China's high-tech companies have a special development trend due to their catching up with core technologies on the one hand, and becoming leaders in new industries on the other hand. Many companies have reached a level where they follow the general trends that are typical of the largest technology companies around the world.
2. The trends of high-tech companies are specific due to China's regulatory framework, which demonstrates significant volatility in government decisions and strict adherence to regulations without the possibility of dialogue to continue business activities in the Chinese market.
3. The internal and external sanctions and restrictions imposed on China's high-tech giants have become a significant impetus for the transformation of their business activities. Although during the transition period, there is mainly a negative impact on the functioning of business entities, these measures will likely be beneficial for the long-term development of companies in this segment of the economy.
4. Huawei is one of the most innovative companies in China, topping several global rankings in R&D and patenting. However, the company has suffered significant losses due to the US sanctions, which demonstrates the high dependence of China's high-tech sector on foreign technologies and the global economy.
5. Tencent is the leader of the video game industry not only in China but also globally and is actively expanding into other non-core business segments. It has shown resistance to restrictive measures in China's technology industry, with a successful reorientation to foreign markets and safer business spheres in China. Nevertheless, the analysis of Tencent's activities reveals the negative impact of a sharp change in the policy of the Chinese Government towards tightening and strengthening control on the corporate environment and, most importantly, demonstrates a typical feature of doing business in China, i.e. a high level of uncertainty associated with the volatility of its regulatory and legal environment.

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