Chapter 1
The History of Zhongguancun

Building a Park and Establishing a Benchmark

The Zhongguancun area was formerly an old river way for the Yongding River, which was known to Beijing residents as “Zhong Wan er (or Middle Bay).” As early as the Ming Dynasty, the area’s picturesque scenery attracted palace eunuchs looking for the perfect burial grounds, thus becoming a sought-after eunuch cemetery. As eunuchs were called “Zhong Guan er (or Chinese officials),” the modern-day innovation hub derived its name, dropping the ‘er’ and becoming “Zhong Guan Cun.”

In the era of the Republic of China, two universities—Tsinghua and Yenching—were built at the base of imperial gardens, which are near the western suburbs of Zhongguancun. After the founding of the People’s Republic of China in 1949, Zhongguancun was designated as the capital’s cultural and educational district. Thus, a large number of universities and scientific research institutions converged in the area. At this time, the name “Zhong Guan er,” deemed unsuitable for the area’s academic stature, became “Zhong Guan Cun.” The new name is said to have been proposed by CHEN Yuan, a famous historian and educator, during the construction of the Chinese Academy of Sciences.

Through the years, Zhongguancun has gradually become the largest area with the highest concentration of research centers and universities in Asia. The CPC Central Committee and the State Council attach great importance to its innovation and development, and have made a number of key decisions and arrangements, in order for Zhongguancun to become China’s first national high-tech zone and its first innovation demonstration zone. The area’s development can be divided into four distinct stages.
Zhongguancun Electronics Street (December 1978—April 1988)

In December 1978, China’s Third Plenary Session of the Eleventh Central Committee of CPC announced the new Reform and Opening-up Policy, which is the prologue to China’s modern reform. Based on strong scientific research and human capital, Zhongguancun become one of the first areas to emerge as a response to the reform.

October 1980: Beijing Plasma Society’s Service Department for Advanced Technology Development was founded.

On October 23rd, CHEN Chunxian, a researcher at the CAS Institute of Physics visited Silicon Valley in the United States twice. He later established the Beijing Plasma Society’s Service Department for Advanced Technology Development with six science and technology personnel, thus becoming the first to provide market and business access for scientific and technological personnel.

December 1982: Jinghai Company was established.

On December 22nd, WANG Hongde, an employee at the CAS Institute of Computer Science, resigned from office and established the Beijing Jinghai Computer Room Technology Development Company (abbr. “Jinghai Company”) in Zhongguancun with seven scientific and technical personnel. Jinghai Company’s core business is to provide customers with computer room installation, including the installation of anti-static flooring, wiring, etc.
May 1983: Kehai Company was founded.

On May 4th, Beijing Haidian New Technology Joint Development Center of the Chinese Academy of Sciences (abbr. Kehai) was founded in Sijiqing People’s Commune in Haidian District; CHEN Qingzhen served as the director.

November 1984: New Technology Development Company of the Institute of Computing Technology at CAS (predecessor of Lenovo) was founded.

On November 1st, with the investment of 20,000 RMB from the Institute of Computing Technology of CAS, LIU Chuanzhi with ten other technological personnel founded the New Technology Development Company of the Institute of Computing Technology at CAS, which later became Lenovo.

November 1984: Xintong Company, the first joint-stock science and technology enterprise in Zhongguancun, was founded.

On November 14th, Beijing Xintong Computer Technology Co., Ltd. (abbr. “Xintong”) was established; the company received 1 million RMB investments from the Institute of Computing Technology of CAS, the Scientific Instrument Factory of CAS, and the New-industry Joint Venture of Haidian District, respectively. Xintong is the first joint-stock technology enterprise in Zhongguancun.

August 1985: The first sci-tech intermediary service organization was established.

In August, the State Scientific and Technological Commission set up China New Technologies Development Company, which mainly engaged in organizing the
transfer of scientific and technological achievements; the company has a registered capital of 200,000 RMB. The company was the first sci-tech intermediary service organization on the Electronics Street.

November 1986: The first individual technology enterprise was established.

In November, Beijing Haidian Yongming Power Technology Research Studio was established with the approval of the Haidian Science and Technology Commission. It is the first individual technology enterprise on the Electronics Street and mainly engaged in power source and electronics.

March 1987: The first Sino-Foreign joint sci-tech venture was established.

On March 24th, Beijing Stone Office Automation Equipment Co. Ltd was established by Stone Group and Mitsui & Co., Ltd. This was the first Sino-foreign joint venture technology enterprise on the Electronics Street. It mainly engages in research and development, production, and manufacturing of Stone typewriters.

April 1987: The first invention patent application was submitted.

On April 10th, SUN Qiang from the Beijing Stone Group submitted an application for the invention patent of a Chinese character font generator, which produced multiple fonts, to the State Intellectual Property Office (Patent No.: CN 87102545.0). This is the first invention patent submitted by a Zhongguancun enterprise.

September 1987: China’s first email sent from Zhongguancun.

On September 20th, QIAN Tianbai, who works for the CANet project at the Chinese Academy of Sciences, sent an email to the University of Karlsruhe in Germany from the Beijing Institute of Computer Applied Technology. His email states: “across the Great Wall we can reach every corner in the world.” This is the first e-mail sent from China.

As of the end of 1987, nearly a hundred science and technology enterprises represented by “Two Tongs and Two Seas” (Stone, Xintong, Kehai, and Jinghai) had emerged in Zhongguancun—spread out from Baishi Bridge, along Baiyi Road (Zhongguancun Street at present), north to Chengfu Road, Zhongguancun Road, and Haidian Road, towards the east to Xueyuan Road. These companies formed the “F” zone and the area was called the Electronics Street. At that time, Zhongguancun Electronics Street had around 148 science and technology enterprises, which employed more than 5,000 people and generated a total revenue of more than 900 million RMB, which accounted for 37% of the total social income of Haidian District. The majority of these companies were engaged in research and development, and the application of computer and electronic technology.
Beijing New Technology Industrial Development Trial Zone (May 1988—May 1999)

The development of Zhongguancun Electronics Street promoted the development of new technology industry, accelerated the flow of talents, and accumulated a massive amount of wealth. This series of positive changes attracted attention from the State Council and leaders from the Beijing municipal government. After many investigations and discussions, the State Council formally approved the *Provisional Regulations on Beijing New Technology Industrial Development Trial Zone* on May 10, 1988 and stipulated that Zhongguancun, with an area of about 100 km², would be designated as the Beijing New technology Industrial Development Trial Zone. On May 20th, the Beijing municipal government issued the *Provisional Regulations on Beijing New Technology Industrial Development Trial Zone* and the pilot zone was formally established, thus opening a brand-new development phase for Zhongguancun.

May 1988: Beijing New Technology Industrial Development Trial Zone was officially established.
The Beijing municipal government issued the *Provisional Regulations on Beijing New Technology Industrial Development Trial Zone*, thus signifying the official establishment of the trial zone and opening a brand-new development phase for Zhongguancun.
March 1989: The first technology business incubator in Beijing was established.

In March, Beijing High-tech Business Service Center was established. The center is the first technology business incubator in Beijing.

September 1989: Kingsoft successfully developed the first Chinese word processing software in China.

In September, QIU Bojun, an employee at Kingsoft Corporation, successfully developed the first Chinese word processing software WPS 1.0.

February 1990: Yonyou Electronic Financial Technology Co. Ltd, the first private enterprise in the Beijing New Technology Industrial Development Trial Zone, was established.

In February, Yonyou Financial Software Service Society was registered as the Yonyou Financial Technology Co., Ltd, and became the first privately-owned enterprise in the Beijing New Technology Industrial Development Trial Zone.

November 1990: Beijing New Technology Industrial Development Trial Zone was established as the first liaison branch in the coastal area; the office in Shenzhen was established.

On November 8th, the Beijing New Technology Industrial Development Trial Zone’s Shenzhen office was established. This is the zones’ first liaison branch set up in the coastal area for the development of an export-oriented economy.

1990: The first Lenovo microcomputer was introduced to market.

Lenovo Group’s first computer was introduced to market. Lenovo Group transformed from an importer of computer products to a manufacturer and distributor with its own brand.

1991: China Potevio established China’s first mobile phone production line.

China Potevio introduced communications manufacturing technology from Motorola Mobile, becoming Motorola’s first partner in China. It built China’s first mobile phone production line, filling the gap in the production of mobile communications products in China.

August 1993: Stone Electronics became the first company of Beijing New Technology Industrial Development Trial Zone to be listed on the Hong Kong stock exchange.

On August 16th, Beijing Stone Electronic Technology Co., Ltd. listed on the Hong Kong stock exchange (HK0409 Stone Electronics), becoming the zone’s first listed enterprise on Hong Kong’s stock market.

April 1994: Fengtai Park and Changping Park were included in the policy area of the trial zone.
In April, Fengtai Park and Changping Park were included into Beijing New Technology Industrial Development Trial Zone with the approval of the National Science and Technology Commission.

October 1995: The first Founder computer was produced.

On October 26th, the first Founder computer was born.

August 1996: Chaoyang ZHANG founded the ITC Electronic Technology (Beijing) Co., Ltd (predecessor of Sohu).

In August, Chaoyang ZHANG, an overseas returnee, founded ITC Electronic Technology (Beijing) Co., Ltd, the predecessor of Sohu. The company was supported by venture capital from MIT Media Lab’s Director Nicholas Negroponte and American venture capital expert Edward Roberts. It is China’s first internet company to be founded by venture capital funds.

November 1996: Bit Co., Ltd became the first company of Beijing New Technology Industrial Development Trial Zone to be listed on the Shenzhen Stock Exchange.

On November 5, Bit Co., Ltd. was listed on the Shenzhen Stock Exchange and became the first company of Beijing New Technology Industrial Development Trial Zone to be listed on that exchange.

November 1997: The Administrative Committee of Beijing New Technology Industrial Development Trial Zone was officially established (predecessor of Administrative Committee of Zhongguancun).

On November 11th, the Administrative Committee of Beijing New Technology Industrial Development Trial Zone (predecessor of Administrative Committee of Zhongguancun) was officially established.

February 1998: China’s first large-scale classification search engine, Sohu, was born.

In February, ITC Co., Ltd launched the first Chinese-language online search engine —Sohu (sohu.com). This is China’s first large-scale classification search engine.

September 1998: private capital starts to intervene in the venture capital field.

In September, the first Zhongguancun Science & Technology Investment Co., Ltd., which was founded by private technology enterprises and private capital, was officially established. This marked the beginning of private capital intervention in the field of venture capital.

January 1999: The spatial pattern of “five parks in one district” was formed in Beijing New Technology Industrial Development Trial Zone.
In January, approved by the National Science and Technology Commission, the trial zone made new adjustments; the adjustments included the Electronic Cities and Yizhuang Park into the policy area. Since then, the spatial pattern of “five gardens parks in one district” in a pilot zone was formed.

Under the support of a series of relevant policies, Beijing New Technology Industrial Development Trial Zone made significant progress which relied on independent innovation and the support of technology and capital. As of 1999, the zone consisted of 6,690 high-tech enterprises with the staff of 243,000 people, a total revenue of 104.9 billion RMB, an industrial output value of 76.3 billion RMB, and profit of 6.75 billion RMB.

Zhongguancun Science Park (June 1999—February 2009)

On June 5, 1999, the State Council issued “Replies On the Construction of Zhongguancun Science Park,” and agreed on the “On the Implementation of Rejuvenating the Country through Science and Technology, Speeding up the Construction of Zhongguancun Science Park” development plan, which was proposed by the Beijing municipal government and the Ministry of Science and Technology. The plan aimed to build Zhongguancun Science Park into a comprehensive reform pilot zone to promote the strategy of rejuvenating the country through science and education and realize two fundamental transformations, a national science and technology innovation demonstration base with international competitiveness, a base for incubating and radiating scientific and technological achievements in the nation, and a training base for high-quality creative talents. Thus, Zhongguancun entered the new development period of Zhongguancun Science Park.

June 1999: The State Council issued “Replies on the Construction of Zhongguancun Science Park.”

On June 5th, the State Council issued “Replies On the Construction of Zhongguancun Science Park,” and agreed on the “On the Implementation of Rejuvenating the Country through Science and Technology, Speeding up the Construction of Zhongguancun Science Park” development plan, which was proposed by the Beijing municipal government and the Ministry of Science and Technology.

July 2000: The liaison office of the Zhongguancun Science Park in Silicon Valley opened.
December 2000: The Standing Committee of the Beijing Municipal People’s Congress passed the *Regulations of the Zhongguancun Science Park.*

October 2001: Baidu officially launched an end-user-oriented search engine website.

On October 22nd, Baidu officially launched the end-user-oriented search engine website, [www.baidu.com](http://www.baidu.com), and launched a new business model—bidding rankings in search engine.

December 2002: Domestic-produced network computer entered into a mass production era.

On December 12nd, BOE officially announced that its network computer products has a mass production capacity. BOE Dragon series network computer, which was based on the domestic-produced CPU “Ark No. 1” and its own embedded OS rolled off the production line at the end of November, signified domestic-produced network computers’ entrance into a mass production era.

January 2004: China became the first country in the world to approve a clinical study of SARS vaccine.

On January 19th, Beijing Sinovac Biological Products Co., Ltd. obtained the clinical research document of “SARS virus inactivated vaccine,” which was issued by the State Food and Drug Administration, making China the first country in the world to approve the SARS vaccine into clinical research.
November 2004: Ace Achieve Infocom, the first enterprise in Zhongguancun Park, was listed in Singapore.

On November 18th, Ace Achieve Infocom Co., Ltd was listed on the Singapore Stock Exchange and raised a fund of 6.4 million Singapore dollars. It is the first Zhongguancun enterprise listed in Singapore.

August 2005: Baidu was listed on Nasdaq.

On August 5th, Baidu Online Network Technology Co., Ltd. was listed on NASDAQ in the United States. The stock code is BIDU. It raised a fund of 101.9 million USD.

January 2006: The spatial pattern of “ten parks in one district” was formed in Zhongguancun.

On January 17th, after approved from the State Council, the National Development and Reform Commission announced the fifth batch of twenty state-level development zones (No. 3 of 2006). Adjusted Zhongguancun Science Park covers a total area of 23,252.29 ha, including Haidian Park, Fengtai Park, Changping Park, Desheng Park (including Yonghe Park, E-City (including Jianxiang Park), Yizhuang Park (including Tongzhou Optoelectronics and Mechatronics Park and Tongzhou Environmental Protection Park), Shijingshan Park, Daxing Biomedical Industry Base, etc. Zhongguancun formed a spatial pattern of “ten parks in one district.”

January 2006: The pilot phase for commissioned shares transfer of Zhongguancun non-listed stock company was officially launched.

On January 23rd, the Opening Ceremony for Zhongguancun Non-listed Joint-stock Companies Entering into Commissioned Shares Transfer System was held at the Shenzhen Stock Exchange, thus marking the official launch of commissioned shares transfer of Zhongguancun non-listed stock companies.

November 2007: Baidu becomes Nasdaq’s first Chinese Internet company with a market capitalization of over 100 billion RMB.
On November 5th, China’s largest Internet search company, Baidu, with a single share price over 400 USD becomes Nasdaq’s first Chinese Internet company with a market capitalization exceeding 100 billion RMB.

In 2008, Zhongguancun’s total economic output continued to expand and its total revenue exceeded one trillion RMB, an increase of 13.1% in one year. In addition, Zhongguancun enterprises made a large number of major technological and industrial innovations in areas, such as new energy and environmental protection, biomedicine, software and information services, integrated circuits, communications and computer networks; further, they had markedly enhanced their ability to create patent standards. They also made outstanding contributions to Shenzhou-VII, earthquake relief work, as well as the Beijing Olympics.

Zhongguancun National Innovation Demonstration Zone (from March 2009 till Present)

On March 13, 2009, the State Council’s “Replies on Supporting the Construction of Zhongguancun Science Park to be a National Independent Innovation Demonstration Zone” was released. It clarified that Zhongguancun’s new positioning was a national demonstration area for independent innovation and the goal was for the zone to become a science and technology innovation center with global influence. Zhongguancun’s innovation demonstration status was raised to the national level with an aim for global influence. Zhongguancun has gradually become a banner of China’s innovation and development. In the future, Zhongguancun will increase its strategic efforts to implement innovation-driven development, increase the speed of its efforts to promote science and technology innovation centers with global influence, and play a leading role in implementing innovation-driven development strategies across China.

October 2009: The world’s first permanent free antivirus software was launched.

On October 20th, Qihoo 360 launched the official version of the permanent free 360 antivirus 1.0, which was the world’s first permanent free antivirus software.

October 2009: China’s Chinext opened and five Zhongguancun enterprises were listed.

On October 30th, China’s Chinext opened. Five Zhongguancun enterprises, Ultrapower, Lepu Medical, Lanxum, Dinghan Tech, and BeiLu Pharmaceutical, were listed.
October 2010: Xi Jinping says efforts should be made to build the demonstration area into a center of scientific and technological innovation with global influence.

On July 23rd, Xi Jinping, who at that time was member of the Standing Committee of the Politburo and vice chairman of the state, went to Zhongguancun National Innovation Demonstration Zone to conduct an investigation. He affirmed the positive exploration and bold innovation of the Administrative Committee of Zhongguancun and suggested that it should continue to push forward the reform pilot projects, in order to fully leverage its policy-oriented role and tap the potential of resources in Zhongguancun. Efforts should be made to construct the demonstration zone into a powerful engine for the transformation of economic growth and a scientific and technological innovation center with global influence.

December 2012: The State Council supported the implementation of the “1 + 6” test policy in Zhongguancun.

January 2011: Leyard released the world’s first 108-inch LED TV.

On January 15th, Leyard Photoelectric Co., Ltd. held the “Leyard LED TV World Premiere Ceremony,” and released the first 108-inch LED TV in the world. Leyard has full independent intellectual property rights.

June 2011: BOE constructed China’s first advanced generation TFT-LCD production line.
On June 29th, BOE’s 8.5 generation TFT-LCD production line was officially put into operation in Yizhuang Park. This is China’s first independently built advanced-generation TFT-LCD production line.

July 2012: The 12th Five-Year Plan proposed the building of the Zhongguancun Civil-military Technology Innovation Demonstration Base.

In July, the Zhongguancun Civil-military Technology Innovation Demonstration Base was proposed by the State Council and the Central Military Commission in the 12th Five-year Plan for Overall Economic Development and National Defense Construction.

October 2012: The spatial pattern of “16 parks in one district” was formed in Zhongguancun.

On October 13th, the State Council approved the agreement to adjust the scale and layout of the Zhongguancun National Innovation Demonstration Zone. Zhongguancun increased from a district of ten parks to a district of sixteen parks, including Dongcheng Park, Xicheng Park, Chaoyang Park, Haidian Park, Fengtai Park, Shijingshan Park, Mentougou Park, Fangshan Park, Tongzhou Park, Shunyi Park, Daxing—Yizhuang Park, Changping Park, Pinggu Park, Huairou Park, Miyun Park, Yanqing Park—and other parks.

May 2013: Letv became the first Internet company to officially launch its own TV brand.

On May 7th, Letv launched Letv X60, becoming the world’s first Internet company to officially launch its own TV brand.

May 2014: JD becomes China’s first large-scale, comprehensive electronic business platform listed in the U.S.

In May, JD officially lists on the Nasdaq Stock Exchange in the United States under the ticker symbol JD.O. It was the first large-scale, integrated e-commerce platform successfully listed in the United States and became one of the top ten Internet companies in the world.

February 2015: Zhongguancun A Composite Index and Zhongguancun 50 Index became the first stock index series sampled by Zhongguancun listed companies.

On February 5th, Zhongguancun A Composite Index and Zhongguancun 50 Index, the first stock index series sampled by Zhongguancun listed companies, was released in Beijing. The Cultivation Base for Listing Zhongguancun Innovation and Entrepreneurship companies opened on the same day.

December 2015: Zhongguancun’s first overseas innovation center, Zhongguancun Innovation Center @ Silicon Valley, was established.

On December 11th, the Innovation Center of the Core Area of Zhongguancun Science Park was set up in Zhongguancun Innovation Center @ Silicon Valley, which is the first overseas innovation center of Zhongguancun.
September 2016: The State Council pushed four initiatives to build the Beijing National Center for Science and Technology Innovation.

In accordance with the “Outline of National Innovation-Driven Development Strategy,” issued by the State Council of the CPC Central Committee, promoting the construction of the Beijing National Science and Technology Innovation Center is conducive to deepen the Reform and Opening-up, in order to further break through the obstacles in the system and mechanism, stimulate the community to create greater vitality, enhance national innovation capability, and promote a mid-to-high end economy.

April 2017: Zhongguancun issued the “1 + 4” policy support system.

Zhongguancun’s Administrative Committee issued the “1 + 4” policy support system in order to build an “upgraded version” of Zhongguancun and support the construction of the Beijing National Science and Technology Innovation Center. This policy system aims to build a precise support policy for major frontier projects and innovation platforms, and contains four general profitable service polices: business entrepreneurial services, innovative capacity building services, financial and sci-tech services, and integrated services for “multiple parks in one district.”

As of the end of 2016, Zhongguancun Demonstration Zone has a planning area of 488 km² and more than 20,000 high-tech enterprises, forming a development pattern of “multiple parks in one district.” In 2016, the total revenue of enterprises in the demonstration zone was 4.57 trillion RMB, an increase of 12% over the same period last year; the total profits of enterprises reached 355.48 billion RMB, an increase of 4.4% over the same period of last year; taxes paid amounted to 233.02 billion RMB, an increase of 14.3% over the same period last year. Zhongguancun listed companies reached 302, with a total market capitalization of 4.93 trillion RMB; Zhongguancun New OTC enterprises reached 1,478, of which 170 were selected as New OTC Innovative enterprises; Zhongguancun Unicorn enterprises reached 65. In the meantime, the process of “going global” for Zhongguancun enterprises has been accelerated and their global influence has strengthened. Leading enterprises have accelerated their global footprint, thus, driving an increasing number of Zhongguancun enterprises to establish international R&D centers and incubator and investment funds, as well as carry out overseas mergers and acquisitions. The demonstration zone set up over 600 overseas branches, carried out 52 overseas mergers and acquisition, with a merging value of 68.56 billion RMB.

Conclusion

Zhongguancun has gradually become the starting point of national innovation and a banner of business innovation and individual entrepreneurship, as it has developed from a pilot zone of science and technology reform. This stems from numerous
scientific and technological personnel have made concerted efforts in their work in Zhongguancun. Its development process is a textbook for park development, and many wonder if Zhongguancun can be replicated. We think it is impossible to duplicate abundant resource conditions. However, from its 40-year development track, we can gain a greater understanding from the case studies presented in the book. In the upcoming pages, the book outlines the “ZhongguancunModel” by integrating the “surface” (presentation of data sets over the five years) with the “point” (representative company cases and countermeasure interpretation). The book’s editorial team consists of entrepreneurs, academics, government officials and leaders from non-profit organizations; they have put forward their interpretations of the “ZhongguancunModel” from their own respective perspectives. For example, some academics emphasize systematic analysis; they vividly draw comparisons with the competitiveness of Zhongguancun listed companies, that is, Zhongguancun’s innovation ecosystem, as a “fountain.” In their view, entrepreneurs tend to be more effective when they are concerned with the question of ‘where the water comes from’; this curiosity leads to an endless “spring” of innovative vitality. However, no one can ignore the words “technological innovation” and “capital.” Conclusions are, as the title suggests, the two elements of S&T—innovation and capital drive—are the primary elements of the Zhongguancun Model. They are like two “engines” providing an inexhaustible source of power for the development of Zhongguancun.