

FAN HAITAO



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Xiaomi:
FROM
TEN TO
INFINITY

From Ten to Infinity

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Xiaomi:
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EPIGRAM

To the fearless

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Foreword

The Past Is All Preface: Restarting Xiaomi after Ten Years

Lei Jun

Founder, Chairman and CEO of Xiaomi

On 6 April 2020, as Xiaomi celebrated its 10th birthday, I retraced my entrepreneurial journey with the rest of the Xiaomi executives. We started off at the Yinggu Building at Baofusi Bridge in Beijing's Zhongguancun, then Juanshi World in Wangjing, moving on to Dreamport in Qinghe, and finally settling at the Xiaomi Science and Technology Park, which we had built ourselves. Since we launched, we have only travelled a distance of 6.9 kilometres from Zhongguancun, as the crow flies, but it has taken us 10 years.

“We'll make the best smartphone in the world and sell it at half the market price, and it will be popular all around the world.” This was our founding motto.

Ten years ago, starting out in that small office with around a dozen people, we were the perfect combination of naivety and fearlessness. Even with no experience and with nothing to hold on to, it was amazing that so many people believed in us and wanted to work with us.

This was the most exciting part of entrepreneurship.

We were truly fearless back then. Even though we were facing off with the world's biggest tech giants, and even though we were rejected by supply chains multiple times and doubted by countless people, we weren't afraid of stepping onto the most competitive stage in the world.

We were full of vitality in those days, hoping to use the internet mindset to transform China's manufacturing industry and help Chinese brands rise across the world. Based on China's manufacturing strength, we believed that Chinese

brands could do very well.

We were both daring and energetic. We aimed to establish friendly relationships between merchants and users, so that everyone in the world can enjoy the benefits of technology. We were convinced that as long as we continued to make quality products at accessible pricings, we could become real friends to our users.

Ten years have passed; we are still around, and we are still growing. Our dream is slowly becoming a reality. Of the top six smartphone brands in the world today, four are from China. There are many Xiaomi fans all over the world, and many people have become aware of products made and designed in China because of us. Using an ecosystem model, we and many like-minded entrepreneurs have changed industries and lives.

But what we care about most is that “small restaurant” dream we had right at the start. A restaurant doesn’t have to be big; it just has to have a line of people waiting outside. Almost all the diners inside are old friends. They like the food, and they enjoy the hearty ingredients. Xiaomi wants to be a loved and trusted brand like that.

What is Xiaomi? That’s the most common question I’ve been asked—and also asked myself—over the past 10 years.

Xiaomi is an engineer’s dream. It uses technology and products to personally change the world, so that every serious investment can have a fair return.

Xiaomi represents trust in engineering. It is proof that the best products can be had for the best prices, meaning that users can practically buy with their eyes closed.

We believe that everyone wants better things at more accessible prices. After all, people appreciate sincerity and wish for a fair world.

For 10 years, Xiaomi has been made up of a group of hardworking engineers who have the simplest, purest ideas and seek the most focused way to gain trust. Because of this simplicity and honesty, we have nothing to fear, and because we have nothing to fear, there are no obstacles to our progress.

Over this past decade, there have been many wonderful times, and even more tribulations. This book marks our 10th anniversary, and is a tribute to

the entrepreneurs who have been a part of Xiaomi’s founding. It provides a complete summary of Xiaomi’s beginnings for the people currently with us, and for those who will work with us in the future. It also provides a model for budding entrepreneurs—a sampling of our gains and losses that will serve as a reference. Moreover, it is a candid confession to everyone who has cared about, followed, supported or doubted Xiaomi over the past 10 years.

Those are our hopes for this book. We would like to express our appreciation to author Fan Haitao for her hard work, and for taking the simplest perspective to objectively record the growth of our little company and the preface to our long journey.

Xiaomi’s 10-year-long preface is just one wave in the surging tide of mobile internet entrepreneurship, but we hope that it will reverberate and help create a better future for people all over the world.

We look forward to the future, and we will continue to explore. No matter whether we’re on Zhichun Road in Beijing or Zhongguan Village’s Chuangye Avenue, in Caohejing or Zhangjiang in Shanghai, Binjiang or Wen’er Road in Hangzhou, Shennan Avenue or Huaqiang North in Shenzhen, Silicon Valley in the US, or Bangalore in India, we all have the same excitement in our eyes and the same confidence in our hearts as we move forward.

Our goal is beautiful. It belongs to everyone, so it is worth striving for. It enables everyone—no matter their skin colour, religion, place of origin or education—to relax and enjoy quality technology at accessible prices. That is the journey we are on together.

Everything that is in the past is a preface. Deeper seas, wilder waves and roaring tides are ahead of us. We believe in ourselves and our future direction. Whether the sky is clear or gloomy, we are destined to move forward.

Preface

A Decade of Xiaomi: A Journey That Began at the Right Time

With exploration comes even more possibilities for the future.

It's 2pm on 24 September 2019. The launch of a new product is to be held on the basketball court in the basement of Building D at the Xiaomi Science and Technology Park on Anningzhuang North Road in Beijing's Haidian District. The court lights dim on cue, as if a drama is about to start. The spotlight hits the centre of the stage, and the main character is about to appear.

Thirty seconds later the music recedes, and Lei Jun, founder of Xiaomi Group, walks onto the stage at a leisurely pace, yellow lights following him. He is wearing a clean white shirt, dark blue jeans paired with a blazer of a similar colour, and a pair of white loafers. His black hair has been carefully coiffed, neat and sleek.

Since he was young, Lei has been working his way up in the world of Chinese tech start-ups, navigating almost all the fluctuations of China's internet era, like Pi Patel in *Life of Pi*. From the software era to the age of the PC (personal computer) and then the internet, Lei has participated in every technological change, and therefore is familiar with the weight of past events. Like many first-generation entrepreneurs, he has made great achievements and has been treated very kindly. Like many pioneers, he has also been through the darkest, lowest, rock-bottom moments, feeling real pain of epic proportions. In establishing his own business, Lei has learnt about himself and the ways of the world.

Ten years ago, another iteration of the industrial cycle was quietly taking place, and the rise of the mobile internet was to set off a huge wave. China's

phone market was flooded with knockoffs. Lei Jun was determined to end the chaos and transform the nation's manufacturing industry. In a café at the seven-star Pangu Hotel, Lei and his friends wrote "hardware + software + internet" on a napkin, expressing a deeply held vision. Thereafter, Lei Jun gathered a team around him to create a company called Xiaomi.

As the years have passed, Xiaomi has grown from a vague concept on a napkin to an international corporation with annual sales of more than RMB 200 billion, and with market share in over 90 countries and regions. The distinctive orange "MI" logo has become a beacon of technology for many people around the world. Hundreds of millions of products that combine innovative technology and industrial design have found their way into countless households, enhancing daily life with a series of new experiences. In many overseas markets, people are surprised to find that Chinese-produced tech products carrying the "MI" logo are so meticulously designed and on point.

The company's 10-year transformation is both fascinating and thought-provoking. Analysing how Xiaomi developed over a decade can help to chart the changing power position of an emerging Chinese tech company in the global market. It is a portrayal of the decade-long mobile internet wave. At the advent of a new industrial wave, some emerging companies will always stand out.

One compelling example is that in just nine years, Xiaomi was the youngest company on the Fortune Global 500 list. In 2018, the number of Chinese companies and American companies in the internet services sector were evenly matched—Alibaba, Tencent and Jingdong versus Amazon, Google and Facebook. However, in 2019, China overtook the US in internet innovation for the first time when Xiaomi joined the game.

Between 2010 and 2020, high-value Chinese companies like Xiaomi were springing up constantly. The huge base of internet users, multifarious application scenarios, iterative new technologies, and ever-increasing network bandwidth laid the foundation for the birth of China's internet giants. Against this backdrop, companies, such as Meituan, DiDi, ByteDance, Kuaishou and Ant Financial Services Group, and communication tools such as WeChat were born, revolutionising daily life. China's unicorn enterprises already accounted

for up to 30 per cent of the world's companies, and their market value accounted for up to 40 per cent of the global market. Among the top 10 internet companies in the world by market value, five are Chinese.

Moreover, with globalisation, Chinese companies such as Haier, Hisense, Wanxiang and Shougang have long been going overseas, while cases such as Lenovo's acquisition of IBM's personal computer business, Geely's acquisition of Volvo cars, and TCL's acquisition of Schneider signalled that Chinese companies were allocating resources beyond their former scope.¹ Plus, Xiaomi has been opening stores with brand licencing around the world. Arguably, Chinese companies see no limit on doing business across borders.

If 2009 to 2019 was the decade in which China's mobile internet companies stood out, the years ahead will witness even more epic stories of entrepreneurship in the growing space of the new economy. In this process, Xiaomi was a classic example of a company stamping a "Chinese mark" on the global economy.

Currently, Xiaomi's silver glass-clad office building buzzes with over 20,000 busy employees, with heated debates on the cutting-edge issues of Chinese technology going on in many meeting rooms. Downstairs, an important launch is taking place. Its theme is "exploring the impossible to gain one more future possibility". Across the quietness of the park, the news is spreading: a jaw-dropping product based on the same world-leading technology will be launched today.

On stage, a relaxed Lei Jun is introducing Xiaomi's products to the general public: the Xiaomi-Qualcomm flagship 5G smartphone, the newest version of the ever-improving MIUI (mobile operating system), bezel-less and full-view internet smart TV, the leading technology of reverse wireless charging technology, Xiao Ai smart speaker, combined with artificial intelligence features, is attempting to seize new frontiers. Introducing the smart speaker, Lei jokes about Gree, saying, "The Xiao Ai smart speaker can easily handle Gree's air conditioners," putting big knowing smiles on the faces of everyone in the room.

¹ Wang Depei, *China's Economy 2020* [M] (Beijing: China Friendship Publishing Company, 2020), 17.

The warmth, concentration and brilliance of Xiaomi are represented by Lei Jun on stage. However, off-stage, Xiaomi is an everyday company with a low-key public image, running on pure passion. The past 10 years have been a decade of phenomenal growth for the company, a decade of transformation for Lei Jun as an entrepreneur, and a golden decade for the people who have walked with Xiaomi along the way.

It's 23 September. While Lei Jun is rehearsing for the product launch, Zhang Jianhui, vice president of Xiaomi China, has been as busy as a bee the whole day. As the head of Xiaomi's offline business in China, her main task now is to straighten out and expand offline distribution channels.

Twenty-third September is known as "Crazy Monday" by Xiaomi's staff, and Zhang Jianhui has a lot of regular meetings to attend. This small, round-faced, narrow-eyed, ponytailed woman from Henan wears a pair of white running shoes for the convenience of dashing between floors. Although young, Zhang oversees a team of 5,000 people, and many of those who form the backbone of Xiaomi are her contemporaries. This is particularly impressive given that Zhang started out as an after-sales supervisor at Xiaomi nine years ago.

That night, she attends the most important business conference of the day, as Xiaomi's 23 regional agents descend on the Xiaomi Science and Technology Park to report on their duties. These regional representatives, dubbed as "provincial governors", are the key executors of Xiaomi's offline strategy. In the large conference room on the eighth floor of Building H, the provincial governors come dressed in white shirts, as required. They take turns on the stage, nervously reviewing sales during the 2019 Mid-Autumn Festival.

Wang Xiang, Xiaomi's senior vice president and overseas business executive, is also extremely busy today. In the morning, a team of eight executives sent by GFK, the world's most renowned data company for smartphone research, comes to communicate with Xiaomi's international business team. When GFK's team talks about the fragmented Eastern European market, Wang Xiang is keenly aware of the problems; the market opportunity in Eastern Europe is bigger than his team imagined. He immediately leaves his office to call the person responsible for the Eastern European market. Wang Xiang was formerly

Qualcomm's global vice president and president of operations in the Greater China region. He left the well-known foreign company in July 2015 to join Xiaomi.

This evening, Chew Shou Zi, Xiaomi's forty-something executive and chief financial officer, has just flown back to Beijing from Shenzhen. He is sitting on the sofa in his office with a cup of Starbucks coffee, saying he is a little sleepy because he was talking about investment until 3am the night before. The Singaporean was recruited by Lei Jun from leading international investment firm DST in 2015, and was later responsible for Xiaomi's going public in Hong Kong.

He has just returned from an important meeting with TCL's chairman Li Dongsheng. Xiaomi's investment layout for the time being has begun to quietly move up in the industrial chain. The billion-dollar fund it set up, stemming from Lei Jun's long-held dream of advancing China's manufacturing sector, is now seeking deeper involvement in the sector. Thanks to this strategy, Xiaomi's upstream ecosystem is slowly taking shape.

Great changes happen off-camera, unseen by the public, and they are all typical of Xiaomi on a regular day. In the brightly-lit offices of the Xiaomi Park at dawn, engineers are trying for technological breakthroughs; employees are making leaps from familiar fields to unfamiliar ones; someone's life is changing because of Xiaomi. These are the stories that happen every day. These people and their destinies are products of the times and opportunities, and they are the testament to what Xiaomi as a company brings.

Let's go back to the basketball court at the Xiaomi Science and Technology Park on 24 September 2019.

At last, the product has been announced. Lei Jun is still on stage, lighting up its screen again and again. It is the Mi MIX Alpha with a 100-megapixel camera—the world's first 5G smartphone with a wrap-around display. It looks transparent, and glows with a dazzling sapphire light. People are holding up their own smartphones and taking photos. The room turns into a sea of flashlights accompanied by yells and screams as the crowd marvels at yet another unexpected coup from the world of technology. The MIX Alpha exceeds the

hardware limits of the screen and is the most disruptive tech product Xiaomi has ever made.

Amidst the buzz of emotions, a video starts playing. It describes the odyssey that Xiaomi's engineers went through while developing the product. The engineers talk about the hardships encountered in its development, how they overcame barriers to develop the technologies with the most perplexing names—wrap-around layered lamination, embedded assembly, screen sound, ultrasonic distance sensing, dual-sided pressure-sensitive screens, flexible under-screen fingerprint... and share the conviction they held in solving problems along the way.

No one knows the process better than the engineers. When the development of this product was initiated two years ago, the flexible screen technology was just taking off and no one could guarantee that their explorations would be successful. Without the founders' approval of a bold experiment and their commitment to financing the innovation, the release of this product would have been impossible.

In fact, Xiaomi has always held this approach to innovation and new technology over the past 10 years. Whether in good times or bad, no matter how the outside world changes, a group of people in Xiaomi's world will be exploring the most incredible technologies.

In the last 10 years, Xiaomi has frequently adjusted its organisational structure to cope with uncertain external pressures and brutal competition in the industry. There is a formidable sense of vitality in the constant birth of new products, which can be felt from talking to Xiaomi staff. They say that they still have faith in the ideas laid out at the very beginning—the pursuit of things that make you feel alive, passionate, enthusiastic and invincible. These things align with what Xiaomi people aspire to achieve, for example, making quality technology accessible to everyone and always believing that something wonderful is about to happen.

In the second half of 2019, the trade friction between the US and China led to dramatic changes in the industry. With the whole industry under pressure, Lei Jun talked about the challenges facing Xiaomi China at its thousand-member

cadre meeting. He also mentioned that huge challenges came with enormous opportunities. With the 5G era on its way, Xiaomi would see a 30 to 40 per cent growth in 2020, with the rise of unit prices of smartphones and the expansion of market scale. With the market pressure and a small wave of anxiety at Xiaomi China, Lei told the management team that there were no shortcuts to the future, and that the only way ahead for Xiaomi was to refine its business with technology at the core.

The release of the MIX Alpha seemed to be a response to this.

If Xiaomi's first 10 years are a movie, the lens is moving backwards and upwards. Over the course of this book, we will see the story of the company in China's context, in the global context and in the business context. We will also see its story in the continuous improvement and iteration of technology. Ultimately, what kind of a story will it be?

It is not only a simple 10-year journey, but a story of personal growth. The protagonists go into the unknown and deal with new things, growing from groping in the dark to seeing the whole landscape, and from being inexplicably scared to overcoming their fears.

It is not only a story of exploring technologies, of engineers pushing the boundaries of product thinking, and being undefeatable in "no man's land". It is also a story of the evolution of technology, depicting tech followers who are finally being rewarded, leading the change after prolonged and low-profile development.

It is not only a story of a company that dared to perform trial and error, adjusting its strategy in response to changes in the market, and rationalising its pace. It is a story of a company's growth that was full of fluctuations. A company that stood firmly by its beliefs in the hardest times and is now flying high, and may be able to turn the tide of global power in the future.

It is not only a story of a man and a company, but a story of China's rejuvenation—of how a country and an era made innovators together as the venture capital system matured, the mobile internet took off, the industry played catch-up on the number of pixels, and the era of improved consumption arrived.

This is another beginning.

The moment the MIX Alpha was unveiled, Xiaomi once again replicated the story of its success against the odds. Many people felt as if they were travelling back to the time when the MIX was released in 2016. Some even had tears in their eyes, thinking of 16 August 2011 when the Xiaomi Phone 1 was launched in Beijing's 798 Art Zone.

A video of an interview with Lei Jun continues to play on the big screen. He is saying, "Exploration means entering an uncharted area and walking untrodden paths. Chinese technology companies should have a sense of mission. We just want to make something cool and transformative to meet the expectations of Mi fans and our desire for technological exploration."

PART 1

The Birth and Rise of Xiaomi

2010-2014

Chapter 1

A New Journey for Lei Jun

The Mercedes-Benz that stopped outside a ramen house

One afternoon in June 2009, a loud “swoosh” could be heard as a dazzling Mercedes-Benz pulled up outside the Malan Ramen Noodle House, where two young men alighted. Their encounter was not by chance.

Half an hour earlier, a young investment manager at Morningside Venture Capital (now known as 5Y Capital) was walking in the shade of the trees on South Street in Beijing’s Jiaodaokou subdistrict. The sun was scorching as he made his way to No. 35 Qinlao Hutong, the office of Ceyuan Ventures. There, he would attend the board meeting of one of Morningside’s portfolio companies—UCWeb, the same company that developed the UC Browser.

Just like all of the old hutongs in Beijing, Qinlao Hutong was narrow, making it slightly difficult for vehicles to enter. Cars had to slow down when turning in from the main road, often causing a jam at the entrance of the alley. The young investment manager, who was travelling by foot, surveyed the traffic conditions to gauge how slowly the cars were moving through the alley. Suddenly, a black Mercedes pulled up beside him and rolled down the window. The voice that greeted him was a little husky.

“Had lunch?”

“No, not yet.”

“Let’s eat together then.”

It had been a long time since the man in the car made a public appearance

in the industry. He was one of the earliest generation of entrepreneurs in Zhongguancun, a technology hub in Beijing. He was also one of UC Browser's first investors. All of this made him a "young predecessor" in the industry. With an hour to go until the meeting, the two had just enough time to catch up over a meal.

These board meetings brought together investors who would otherwise usually be occupied with their own work. Other than portfolio companies, their discussions also covered the future of the industry, upcoming opportunities and any ideas that suddenly struck them. After China's reform and opening-up in the 1980s, international investment giants came into the country. China's venture capitalists gained prominence over the years and had their share of successes and failures. Those who had the foresight to make investing arrangements in the early days reaped huge profits in the Web 1.0 era. For the time being, it was the mobile internet industry that was up and coming. The mobile browser sector, including UCWeb, was exactly what venture capitalists set their sights on.

The young investment manager knew that the man before his eyes, whom he had just met, had plenty of experience. His entrepreneurial journey had long been hailed as legendary. A couple of years earlier, he had become an angel investor, and was currently looking for opportunities in the new field.

That day, he was dressed just like he used to. His sleek black hair was parted, and he was wearing a smooth white shirt with dark blue jeans. He had a plain black nylon shoulder bag slung over his shoulder. At a glance, he still had the look of an engineer. Standing at around five feet ten in height, he was lean with smiling eyes. When he spoke, a faint dimple was visible on his right cheek. His slightly hoarse voice sounded cheery and relaxed, probably because he was under no pressure to forge ahead as a leader.

"How does this shirt look? Guess how much it cost," the man asked the young investor with a grin.

"No more than twenty dollars, I reckon."

"How did you guess? It's from VANCL, 80s yarn size, wrinkle-free."

In the car, the "young predecessor" started an animated chat on topics ranging from the craft of shirt-making to e-commerce, tailoring, spinning

fineness, as well as logistics and delivery. His ability to quickly become an expert in whatever new business he invested in was impressive even back then.

His name was Lei Jun, and he was one of China's first-generation Zhongguancun entrepreneurs—a talented programmer and businessman who shot to fame at an early age. He started working at Kingsoft in the 1990s and experienced the prime years of the office software word processing system (WPS).

Later, Kingsoft's WPS and the multinational giant Microsoft had a fierce battle over desktop word processing software, to which a stronger nationalist colour was attached than ordinary corporate warfare. Kingsoft's word processing software had a deep impact on the first group of Chinese computer users, while Microsoft was a computer giant from the Western world.

In 1996, Microsoft and Kingsoft signed an agreement. Both sides would read the other's files in RTF—the middle-tier file format of their own software. This turned out to be a fatal mistake for Kingsoft, as it "amicably" allowed Microsoft access to its naturally monopolistic WPS format. After the release of Microsoft Windows 95, WPS users transferred to Microsoft Word through open formats. Thus, Kingsoft was defeated, and Microsoft saw 1996 as a landmark year in acquiring the Chinese market.

Lei Jun was a witness to this, and it was the darkest moment in his entrepreneurial life. He was only 27 years old. At that time, Robin Li was studying in the United States, Pony Ma was running here and there to raise money and figure out how to create his first company, and Jack Ma was still working with his partners to found the "Chinese Yellow Pages".

The story afterwards was like a war movie. In this battle between David and Goliath, Lei Jun was a front-line commander, taking on the key role in the critical moment for Kingsoft. Microsoft was formidable, and Kingsoft couldn't always fight it off. Lei Jun's tactics for Kingsoft were to insist on optimising the WPS user experience without rushing to win, and also to work in the niche markets where Microsoft had not set foot. This led to the birth of "Kingsoft PowerWord" and "Kingsoft Anti-Virus", which later proved to be crucial lifelines for Kingsoft.

In this protracted, slightly bitter war, the Chinese computer industry suddenly ushered in an all-around transformation from desktop software to the internet. The internet start-ups that had worked silently in the dark began to rise. The billboard that Zhang Shuxin put up on Zhongguancun South Street in 1995, which read, “How far are the Chinese people from the information highway? 1,500 metres to the north,” was just a prelude to the development of China’s internet. After 1997, the internet boom really gathered pace. The establishment of Sina, NetEase and Sohu augured changes to the way Chinese netizens acquired information.

In 2000, Sina, NetEase and Sohu were listed on the Nasdaq, and personal computers with Pentium III and Pentium IV processors became more accessible to millions of households. The year 2000 saw 8.9 million internet users in China—an increase of up to 14 times over three years previously.

During the battle between Kingsoft and Microsoft, Robin Li, who had worked on Wall Street and in Silicon Valley, returned to China and founded Baidu, which was mainly a search engine business. Pony Ma, who almost sold his product for RMB 500,000, founded Tencent. The “Chinese Yellow Pages” founded by Jack Ma had finally become an e-commerce company called Alibaba.

In the era of rising stars, the problems Lei Jun faced were how to lead Kingsoft, a software enterprise, to break through in the new industrial cycle, and what a traditional software enterprise should do to survive the changing market. In the changing tides of the industrial cycle, Kingsoft found itself embroiled in a typical innovator’s dilemma.

“Truly disruptive innovations may be selectively ignored by the original giants. Thereafter, these innovations will suddenly explode at some point and change the entire industry landscape.” So wrote Clayton Christensen, a professor at Harvard Business School, in his book *The Innovator’s Dilemma*. A company that originally dominates the market is, instead, in a vulnerable position when it comes to disruptive innovations. This was the precise dilemma facing Kingsoft.

In fact, when he noticed the trend in the industry in 1999, Lei Jun had set up a separate department at Kingsoft to prepare for entry into the internet

sector. The initial attempt involved setting up websites to download software, but it was not a success. The increasing cost of bandwidth didn’t bring about commercial monetisation and consumer value. Lei Jun, therefore, spun off the internet division from Kingsoft to set up a separate e-commerce website in 2000, which was the earliest version of Joyo.com. The idea for this business, in which Lei and other shareholders invested a total of RMB 20 million, originated from the US e-commerce site Amazon, a company that sold drinks, books and other goods to consumers via the internet.

The obsession Lei had with the internet was no less than his fixation with software. Every day, he spent half an hour checking every site link on Joyo.com to see whether the advertisements were correct. He even went through the books sold on the site to see if they were indeed worth recommending. After a busy day, he and other executives would have a conference call at 12am every night to review the day’s operations.

As orders increased, the pressure on inventory mounted. It took at least US\$10 million to fill the shelves with goods and build a complete assembly line. Lei Jun realised that Joyo.com was a daily cash-burning machine that would need at least RMB 1 billion to achieve solid profits. This was because the level of China’s information technology was relatively low, and it would take at least five to ten years to mature. Amazon (the greatest e-commerce company in Lei’s opinion) also went through a period of low-profile preparations for the new era. It was founded in 1994 and only started making profits in 2002.

However, due to an extreme lack of financing, Joyo.com didn’t last so long. The times didn’t treat it kindly. It was established in May 2000, on the eve of the bursting of the global internet bubble. The growth of Joyo.com was almost synchronised with the pace of global venture capitalists withdrawing from the internet industry. Until it was considered for sale in September 2004, the industry was still at a low point, which meant that it was impossible for Joyo.com to copy the success stories of earlier internet companies and sustain itself with large amounts of financing.

After much deliberation around selling the site or not, Lei finally decided to sell it to Amazon for US\$75 million. The sale hurt him deeply, and he didn’t visit

Joyo.com or see his old colleagues there for six months. In those days, Chinese entrepreneurs saw selling a company as unacceptable. For Lei Jun, Joyo.com was like a child, and selling it broke his heart.

In the second half of 2004, Lei Jun continued to encourage Kingsoft to redirect its business towards online games, a sector of greater risk and difficulty. Lei called this transition “X-Mission”—a phrase that meant “an impossible task”, borrowed from the action movie *Mission: Impossible*, starring Tom Cruise.

While domestic software was having a rough time, Kingsoft eventually found a new way of transformation by exploring the online gaming sector. With new online games coming out all the time, Kingsoft became a money-making machine. It was finally able to break the curse, and achieved its own way of existing and operating.

In October 2007, Kingsoft went public on the Hong Kong Stock Exchange, realising its dream of landing on the capital market. It was an extremely difficult process, and it had failed three times before. Before the IPO, Lei Jun went to Hong Kong, Singapore, London and New York to participate in roadshows. The high density of the schedule, coupled with sharp questions from investors, wore the participants out, and Lei Jun had to meet with many investors almost every night. The thirty-something IT executive was on the verge of tears as he travelled through foreign countries—hardships that are difficult to understand without knowing the details of his 16-year journey.

The same year that Kingsoft went public in Hong Kong, Alibaba’s B2B business led by Jack Ma was listed there as well. The market values of Tencent, Baidu and Alibaba all exceeded US\$10 billion, while that of Sina was US\$2.683 billion, Sohu US\$1.454 billion, and NetEase US\$2.113 billion (6 October). The combined market value of the three major web portals was less than US\$10 billion. Three new giants—Tencent, Baidu and Alibaba—were being formed against the backdrop of these three web portals. The total market value of China’s listed internet companies reached US\$70 billion.

Lei Jun internalised all of those experiences—the fluctuations and head-on confrontations of the business war, the difficulty of searching for a new path, and the gruelling breakout. He was no longer the young man who exclaimed

in a speech at Wuhan University, “I’m going to take a huge gamble against Microsoft in the next ten years.” Knowing that ambitions alone couldn’t provide a business solution, Lei began to perceive the business world more rationally.

With his ten-plus years of experience, he proved that entrepreneurs were not a combination of Superman and the Knights of the Round Table. Of course, a true entrepreneur must always have rigorous and systematic approaches and must work hard, but most importantly, he or she must be able to analyse things thoroughly. A key factor in winning a business war is the ability to swim with the tide rather than working around the clock and expecting your diligence to pay off. Lei Jun finally realised that, as an entrepreneur, he had to find the tide. Pushing a stone up a mountain is hard. On the road to entrepreneurship, the best idea is to climb the mountain and then kick a stone down.

For Lei Jun, leaving Kingsoft was both painful and complicated. His love for the company was deep and strong, but for many reasons, he chose to quit when it went public in Hong Kong. He struggled with the decision a lot, and it was 10 times more painful than selling Joyo.com. However, in the end, he chose to leave and follow the trend, even though Qiu Bojun and Zhang Xuanlong, tried everything to persuade him to stay. But Lei thought that if he left Kingsoft and went on to angel investment, he wouldn’t need to invest too many personal feelings into a company again.

Staying at the forefront of a changing era and several years of front-line work had given Lei Jun the instinct to discern business opportunities. He knew that the continual development of new technologies was ushering in a revolution. Like everyone who was working at the coalface in those days, he began to prepare to embrace the arrival of another industry cycle—the mobile internet era.

In fact, Lei Jun’s career as an angel investor started before he left Kingsoft. He had always been immersed in a world that was transitioning from old to new, feeling the ebb and flow of the industry. In 2003, he saw people starting to discuss 3G, and in 2004, he sensed the gradual return of the internet market from a slump. Since then, he had been thinking day and night about new industry opportunities and where the “next round” was heading. Whenever he

saw a spark of hope, he would make some investments, and his angel investment portfolio slowly took shape. His investments were mainly focused on the mobile internet, e-commerce and social networks, including the UCWeb browser, a product that Lei Jun was particularly proud of.

Lei Jun's gearhead dream

In early 2007 before Kingsoft went public, Lei Jun and some of his friends invested a total of RMB 4 million into UCWeb, whose finances were already extremely strained. Lei alone contributed RMB 2 million, which accounted for 10 per cent of the company's shares. Mobile internet access, which is so common today, was still quite new at the time when internet access through cell phones was very slow. However, the UCWeb browser could reduce traffic consumption when converting PC web pages onto cell phones, enabling faster mobile internet access. It was therefore hailed as the most cost-saving browser by internet users. In addition, UCWeb could keep multiple web pages open at the same time on a phone, cutting wait times.

Lei Jun didn't hesitate to invest in UCWeb. He believed that the arrival of the 3G era would lead more people to use smartphones to access the internet. If entrepreneurs could build a mobile network for internet access for all people, i.e. browsers, then in the future countless business models would be born. Lei Jun saw UCWeb as the future Google of cell phones. In fact, since 2007, he had avoided using computers in the office and at home, and tried to process all the information with just cell phones. In this process, he was experiencing every bit of the evolution of the mobile era.

In 2007, when the UC Browser received its second round of investment, a change that would have a far-reaching impact on the industry occurred across the ocean: at the Macworld Conference on 9 January, Apple unveiled its iOS mobile operating system and iPhone. A few months later, the iPhone was officially launched. It had taken Apple about two and a half years to develop it, and it hadn't been an easy ride. It was Steve Jobs's most aggressive move since

returning to Apple, and put the company firmly back on the road to prosperity.

Jonathan Ive, Apple's chief designer, recounted in his biography,

Everything was new, and nothing worked properly. The touch screen was new, the accelerator was new, and we struggled with every step we took, every single step, for every second of the last two and a half years.

Despite these hardships, the iPhone took the world by storm. As described in *Becoming Steve Jobs*,

The multi-touch user interface seemed almost magical as Steve showed off the little nips and tucks that made it truly engaging. Scrolling through lists had an almost liquid smoothness. A double tap on a website column would make it fill the screen. Every time upon opening, the Apple store turned into a chaotic, buzzy place, like a carnival.

By the end of 2007, in just six months, 3.7 million iPhones had been sold. By the first quarter of 2008, iPhone sales exceeded those of all the Mac models combined; by the end of that year, quarterly iPhone sales were three times higher than those of the Mac. It brought Apple soaring revenues and profits. Four months after the iPhone's launch, Apple introduced a package for anyone who wanted to develop software for the iPhone. Instantly, the news spread across Silicon Valley and among investors, with hundreds of small companies scrambling for funding to enter Apple's development platform. It was obvious to those with a discerning eye that the iPhone had changed the mobile industry forever.

Just six months after the global "Apple whirlwind", on 5 November 2007, Google officially announced its Android smart operating system. It wasn't too long before the little green robot took the world by storm, gaining even more momentum than Apple's iOS. Andy Rubin, known as the "father of Android", was an engineer with a true passion for technology, and a representative of computer science culture, who had worked for both Apple and Microsoft. In 2003,

Rubin founded Android Inc., a company dedicated to his dream of developing a new generation of smartphones and a mobile platform that would be open to all software designers.

With the help of his friends, Andy Rubin's Android project was acquired by Google in March 2005. For the next two years, it was a low-profile project for Google—just a small team of 10 people led by Rubin, working in a small section of Google's headquarters. Google didn't even set a clear target for them, let alone a launch date. However, when Apple released its own operating system, the Android project suddenly started to attract attention.

On 5 November 2007, just four months after Apple released the first-generation iPhone, Google officially announced the Linux-based Android OS and the formation of the Open Handset Alliance (OHA) with 34 mobile manufacturers and carriers. Linux, the underlying operating system, is free and easy to access and can be modified at will with its source code. This wouldn't have been possible without the painstaking efforts of countless computer programmers worldwide. The open-source Android model put an end to the licensing model of previous operating systems. For manufacturers, it could reduce the cost and give them more free room to perform, making it instantly popular and fast-growing.²

Apple's iOS and Google's Android were both released in the US in 2007—a watershed year that brought a new look and opportunities to the global technology community. Marc Andreessen, co-founder of Netscape and later a Silicon Valley venture capitalist, saw these changes and said with mixed emotions that the introduction of the new technologies “flipped the poles of Silicon Valley over”. In the past, technological development had been driven by large corporations, and only well-funded entities could afford parts. However, the situation had changed, and technology started to be driven by ordinary consumers.

By then, the Palm Treo from Palm Inc had been on the market for a few years, and the BlackBerry RIM (Research in Motion) was doing reasonably

well. These phones had keyboards, so the screens were relatively small, but users had no problem checking their emails, viewing calendars or finding contacts. However, sales of these phones were declining.

What impact did the release of the iPhone and Android have on UCWeb, an average start-up that had just received an investment of US\$10 million on the other side of the ocean? And what did this have to do with a conversation between two Chinese venture capitalists in a humble ramen shop on an ordinary summer afternoon in June 2009?

Going into the humble, slightly dinghy ramen shop, Lei Jun sat down at a table near the window. “What do you think about UCWeb?” he asked. The young investment manager sitting across from him knew exactly what he was driving at. He was aware that the question was much deeper than it seemed, and that it was closely related to the technological revolution that had taken place two years earlier on the other side of the world. Discerning Chinese frontier tech workers were observing how this revolution would change the mobile internet landscape. It involved a group of companies that were mobile enterprises themselves, like UCWeb. They needed to make their choices as new technology systems arrived. It was clear that Lei Jun saw a huge opportunity in Android.

Lei Jun had been an idol for the investment manager, but at this point the investment manager himself was already successful, having previously been an experienced entrepreneur. Despite his young age, he had worked his way up from the GPRS (General Packet Radio Services) era to the 3G era, and could talk about the original sins of service providers (SPs), Apple's innovation and the wonders of open-source Android based on his own experiences. At that moment, he was already capable of having an in-depth dialogue with Lei Jun. Before UCWeb, he and Lei had also invested in Lakala Payment Co Ltd together.

“I have the same idea as you do,” he replied in the ramen shop that day. “Android stands a chance.”

The UC Browser was initially rooted in Symbian OS, which was also the mobile operating system used by Nokia, the world's number one cell phone manufacturer before Apple's iOS and Android were launched. By 2009, iOS and Android had already been around for two years. As in the PC era, the two major

² Wang Yanen, “The New Smartphone ‘Engine’ Explains the Development of Android” [in Chinese], ZOL, 28 September 2011, http://zdc.zol.com.cn/251/2511825.html?_t=t.

mobile operating systems in the world (except Microsoft's Windows Mobile system, which was completely for inside use) formed two camps. Lei Jun's primary concern about the UC Browser was whether it would be transferred from Symbian to Android, which had been released a while ago, and whether it would be compatible with Android phones in the future. Lei also wondered if Android would eventually account for a greater share of the mobile internet market than iOS, Symbian, and Windows Mobile.

For computer experts scrutinising the industry's frontier, the successive releases of Apple and Android seemed to be a replay of a familiar cycle of the technology industry. Careful observers couldn't help but think of the rise of the PC in the 1980s, and Lei wondered if this would be another extraordinary repetition of history.

People are all too familiar with that history, and many biographies of Steve Jobs and books on the history of Silicon Valley rave about it. It is also documented in *Becoming Steve Jobs*:

Steve had opposed adding those expansion slots, for example, because he thought a perfect consumer computer should be so easy to use that no one would ever want to add to the hardware's capabilities by opening it up...Bill's end run around IBM hinged on the fact that he had understood something IBM had not: that the software IBM was looking for—that is, an operating system—held the potential to be a cornerstone of the entire computer industry. An operating system manages the flow of data within a computer, and gives programmers access to its hardwired information—processing capabilities. It is the crucial intermediary between the programmer who has a task he wants to accomplish and the semiconductor chips and circuitry that can make that happen. What Bill realised, and no one else saw, was that a standardised operating system could ultimately have enormous benefit for the industry.

In the early days of the PC industry, Apple chose not to make its system open

source, while Microsoft did. Eventually, the Wintel model took the lead in the market thanks to its compatibility and openness.

Lei Jun had read *Fire in the Valley* in his freshman year, and had long been familiar with the stories of Steve Jobs and Bill Gates, Apple and Microsoft, and Macintosh and Windows, so to him the problem that the UC Browser faced was not just a matter of choosing a path for a company. In the ramen shop, after a short talk about the browser, Lei Jun pushed the bowls aside, turned around, opened the black nylon duffel bag that was hanging on the back of his chair, and took out several smartphones. One by one, he laid them side by side on the table. "This is the iPhone... This is the Google G1..." he said. "Let's see what Android's chances are." He picked up each of the phones to fiddle with them. With the mindset of a gearhead, he was well-versed in the parameters of those phones, expanding on the design of their interfaces one by one. He seemed to be immersed in the future world.

In fact, Lei Jun had been carrying the phones around for many days. Since the emergence of the iPhone and Android, he had been studying smartphones in detail. He bought dozens of iPhones for friends, and many Google G1s. He had a feeling that although the Symbian OS was doing well, its stability would soon be broken. Although Apple had also created a developer platform, Lei's intuition and knowledge of history told him that its openness would be finite. Android was not very promising at the time, but with it being open source, it was likely to bring extraordinary changes to the industry.

In 2009, the industry was still on the eve of a revolution. The old pattern had not yet been broken, and a new one had not yet taken shape. But having witnessed 16 years of fierce business battles and the full-cycle transformation of the software industry to the internet industry, Lei was very sensitive to the opportunities and prospects of entrepreneurship at this point, on an almost instinctual level.

In the ramen restaurant, Lei Jun talked about the future of the UC browser, as well as what lay ahead for Android and Apple. He spoke with the young investment manager about whether the future market would be mostly shared by two or three players. They discussed which phone had a more user-friendly

interface and which one was doing poorly. Both men were excited.

After a two-year hiatus, Lei Jun once again had the itch to try. During that period, his nylon shoulder bag was always with him, and the same scene played out many times: he would line up the phones and explain them one by one with great enthusiasm. In those days, some of those who were familiar with Lei Jun had the vague feeling that he would soon be back in the playground and would be entering the mobile industry.

An efficiency revolution in the business sector

The first edition of *Fire in the Valley* was released in 1984, telling the stories of the individuals who were thus far “the only group of people who legally accumulated the largest fortune of the twentieth century”, including the early entrepreneurial sagas of Bill Gates and Steve Jobs. It also recorded how Apple completed its first business deal: one day, Jobs met Paul Terrell, who owned a small electronics store that would become the Byte Shop, the first computer retail chain in the United States. Looking at Apple’s first product, the Apple I, Terrell politely said to Jobs, “Keep in touch.” The next day, Jobs came to Terrell’s store wearing flip-flops and said, “I’d like to stay in touch with you.”

Jobs offered to sell his product, and his persistence made Terrell place a US\$500 order for 50 units, to be delivered within 30 days. Jobs and his partner, Steve Wozniak, then began a busy assembly process. Short on manpower, Jobs roped in his sister to help. They delivered the goods the day before the contract was due, and earned Apple’s first bucket-load of money.

These stories became engraved in 17-year-old Lei Jun’s mind. In 1987, he was in his first year of university at the Computer Science Department of Wuhan University. He read *Fire in the Valley* in the university library, and was enthralled. Immersed in the stories of Silicon Valley, he was deeply inspired, and a window slowly opened in his heart. He walked two laps around the university’s playground, excited, as if a fire was burning inside him. For the first time, he had a clear and strong desire to start a world-class company like Steve Jobs in

China, to create great products and to change people’s lives.

That was one of the most important sources of Lei’s self-drive. During his university days, his classmates witnessed the birth of a great programmer. He was the best programming student in the class. By his third year at university, he had a good understanding of technologies like Assembly, DOS kernel, encryption and decryption, and self-contagion of viruses, to which most of his college classmates were exposed only after they graduated. One day in his sophomore year, Lei Jun and his roommate Cui Baoqiu were on their way to the dining hall. Walking down a slope, Lei surprised Cui by telling him that he could already use hacking technologies to create viruses. Lei was ahead of his classmates by at least a year, maybe more.

All of the software students in the class enjoyed the course titled “Assembly Languages” by Professor Cao Jiaheng, who taught both basic and advanced knowledge with vivid language in a well-organised way. He compiled his own teaching materials, which was why his students dubbed him “Assembly Cao”. Lei Jun did particularly well on this course and got full marks. In his second year, his after-school homework was included in Professor Cao’s new teaching materials. That happened more than a few times. Later, in the textbook on the programming language Pascal written by Professor Xing Fusheng, Lei Jun’s name also appeared in several places.

Lei Jun was completely obsessed with his major. Back then, computers were still very rare, so to polish his typing skills, he made a paper keyboard and practised blind typing every day. Later, it became a popular practice in his college, and very often in a lecture, the whole class would be tapping away on their desks.

In Lei’s third year, when other students were still busy with their courses, he had already obtained the credits he needed, and started to hang out in a street of electronics shops in Wuhan. He helped some of the computer companies with their problems and would often return to his dorm with a box full of five-inch disks loaded with software he had copied. Collecting software was a major hobby for computer science students in those days, and Lei Jun and his classmates were no exception.

In the late '80s, there was a tradition of night chats in the dormitories of male students who studied science and engineering. In Lei Jun's dorm, the most popular topic was the black technology of the time. Once, Cui Baoqiu had a disagreement with Lei Jun over an issue. Cui believed that computers were far from being able to process natural language, and thus writing was an impossible task for them. Lei Jun, however, was relatively optimistic about this. He believed that computers could compile articles with enough corpus. They made a bet on it.

There was no internet in those days, but people were arguing about the chance of eventually achieving artificial intelligence. Cui Baoqiu threw a question to Lei Jun: "Can you make a computer write an essay entitled 'A Grandfather and Soccer'?" To Cui, the words "grandfather" and "soccer" had nothing to do with each other, and it was not possible to compose a story with real emotion by piling up material.

Still in his third year, Lei built his own expert-level systematic knowledge base, putting in virus features to provide the basis for virus diagnosis and anti-virus actions. He wrote a paper on his research and submitted it to an academic institution. It was selected, giving him an opportunity to speak at the National Conference for Young Computer Scientists in Chengdu. Lei Jun prepared some films for his presentation. When he returned to school, he said self-deprecatingly, "It was supposed to be a 40-minute presentation. I didn't know I would finish it in 15 minutes. I didn't know what to do with the rest of the time, so I repeated it!" His dorm-mates burst into laughter.

To many of his classmates, Lei had always been a geek in his own little world. He was a gearhead and a programmer who liked to play Go. He looked like a good student, but in fact, he had a wild side deep down. Later, he left the organisation to which he was assigned by the university and started his own business for a period of time before he went to work at Kingsoft. At the age of 27, he became the general manager of Kingsoft where he led the creation of WPS, the war with Microsoft, the founding of Joyo.com, the company's transition to online games and the listing in Hong Kong. Lei had been emulating Silicon Valley in an entrepreneurial way, inspired by the book he had read as a youth.

Over time, he grew from an active university student to a figure in the news, where university students often saw him and heard stories about the birth of WPS and the failure of the PanGu software, as well as a host of other news like the "Red Storm of Authorisation" and the government's purchase of Kingsoft.

In some ways, the students' night chats continued after graduation. Some went to the United States to study for a doctorate, and they stayed in touch by email after 1998, discussing all of the interesting things that were happening in the internet world, both in China and the US. Lei Jun's fellow alumni always said to him, "I hope to see your good news in the paper." Now, they can find out what Lei Jun is up to at the click of a mouse.

Whenever Lei Jun went to the States, he would immediately get in touch with his classmates. Sometimes they would go and pick him up from the airport, and they would often talk all night long. His former classmates were witnesses to the important moments in his life. In 2007, when Kingsoft went public, Lei talked with Cui Baoqiu late into the night in the lobby of a hotel called DoubleTree in Los Angeles during a roadshow in the United States. The conversation ranged widely and freely, from the development of the internet in China and how some up-and-comers were growing rapidly there, to how enormous the internet community still was and how many more dreams Lei had. In addition, Lei talked about the fact that Kingsoft had come a long way, but that the market value achieved at the final listing was unfortunately not the highest. For him, the listing itself served as an explanation to everyone but himself. He was unreconciled about how it had ended.

Also that year, Cui heard the news about Lei Jun quitting Kingsoft and becoming an angel investor. He had mixed feelings. His first reaction was that it was impossible, because it was not Lei Jun's style. For Lei to stop there was not consistent with what he had impressed upon Cui since their university days. However, he also felt sorry for Lei Jun. Although being an investor was one of the ways to realise his entrepreneurial dream, it was no different from starting a business to accomplish it. Cui recalled the times at Wuhan University when Lei Jun and his classmates played Go together. They would always spread a blue plastic board on the dormitory table before starting the game. In those days, Lei Jun was sparkle-eyed and indomitable.

In fact, Lei had never rested. During his time at Kingsoft, he had been partially engaged in venture capital. In the two years after he quit, he delved deeper into the field and formed a unique investment portfolio of enterprises. He invested RMB 2 million in a smartphone forum called Lexun, which was generally considered too small a project and not useful. But Lei Jun insisted on making this investment, believing that through this platform he could observe the development of the smartphone industry up close and understand the mobile internet.

It was through his investments that Lei Jun was able to closely observe and ponder new opportunities in the industry and watch for the tide of the next era. His friends around him had the same feeling at this point—Lei would never be content to be an outsider. Coincidentally, they all agreed that Lei Jun was planning something huge. They were convinced that one day he would announce something so big that it would shock them all.

Since the 90s, Lei Jun had gone frequently to the United States, sometimes for meetings, sometimes for roadshows and sometimes for vacations. As someone who had been deeply inspired by Silicon Valley, he finally had the chance to visit.

In 2007, Apple launched its smartphone, and gearhead Lei Jun immediately bought one. The iPhone changed the general appearance of smartphones. While appreciating its industrial design, the line printed on the back of the smartphone captured Lei's attention: *Designed by Apple in California, Assembled in China*. This small line of words made him emotional. The world's impression of China's manufacturing was still about assembly work. The best industrial design was from the US, and most world-class brands were from the Western world. This made him think not only about the smartphone itself, but also about the power of brands and the gap between China's manufacturing and that of the Western countries.

Jack Trout, co-author of *Positioning*, investigated what China meant to brands, and the result was that "Made in China" was synonymous with poor quality and low price. It occurred to Lei Jun that China still had no real world-class brands and was still the world's factory. The smartphone industry, which he was most interested in, was an example. In 2009, Nokia was still the most popular cell phone brand in China, with 53.1 per cent of consumer interest,

followed by Samsung, who gained popularity by quickly releasing products for consumers at all ends of China's cell phone market. At the same time, as a partner with China's 3G operators to customise terminals, Samsung did fairly well in the 3G market. Sony Ericsson ranked third in the market, gaining 7.2 per cent of consumer interest, followed by Motorola and LG. Phones made by domestic brands received little attention, yet counterfeit handsets were prevalent in the market, with shipments reaching 101 million. In 2009, the number was 145 million.

While working at Kingsoft, Lei Jun had collaborated with Google on the Kingsoft PowerWord on the mobile end, trying to adapt it to smartphones. During his time as an angel investor, Lei had invested in UCWeb and experienced the fluency of various mobile operating systems. He was familiar with all the smartphone models on the market in those days and was well aware of the damage knockoffs caused to the market.³

Despite the fact that he seemed to be "resting" in the investment world, Lei Jun had given a lot of thought to such situations in the market. For example, how would Apple and Android perform in the mobile market in the future? Could the cheap image of China's manufacturing be turned around? To which area should he dedicate himself if he went into the industry again?

As well as the lack of domestic phone brands in the international market, Lei Jun often thought about the problems that existed outside the mobile industry. For example, he began to study efficiency issues in the whole manufacturing chain. In those days, he often felt that the products sold in shopping malls were unreasonably expensive. For example, a shirt that cost US\$15 was often sold for US\$150 in stores in China, an increase by a factor of 10, while a pair of shoes was often priced at five to ten times the cost. The list went on.

Seeing this phenomenon, Lei Jun contemplated the reason why low production efficiency and circulation in the manufacturing industry had persisted for so long. Why should consumers pay for the huge losses incurred by business operations? Why should the operational costs be buried in the final

³ Jing Wenjing, "The Decline of the Counterfeit Phone" [in Chinese], AI Financial News, 5 October 2018, https://baijiahao.baidu.com/s?id=16134426_53685182047&wfr=spider&for=pc.

price of the products? All efforts to cut costs were focused on the production cost, which accounted for 10 per cent of the total cost, while the other 90 per cent of operational and trading costs were left untouched. “The business sector needs a profound efficiency revolution,” Lei Jun concluded.

A series of ideas that would have widespread influence in addressing the key problems emerged, and the answer to where to continue his entrepreneurship started to become clear: founding a mobile internet company with Android as the basic operating system, producing both hardware and software, with mobile hardware as the core business. It would manufacture the best mobile hardware and mobile operating system in China. In addition, applying an efficient method to solve the core problems behind “Made in China” would put an end to inefficient operation across society. Using a better way (such as e-commerce) to cut all the links in the middle between manufacturers and consumers would make products more economical. Thus, starting with smartphones, Lei Jun would change China’s manufacturing industry, and more influential Chinese brands would be established.

With all this in mind, Lei Jun was certain of his future direction. Just like the young people described in *Fire in the Valley*, he was very clear about his desires. He placed a great store in a description from the book:

It was a time when cranks and dreamers saw the power they dreamed of drop into their hands and used it to change the world.

Moving forward steadily

One night in early 2010, Liu Qin, managing director of Morningside Venture Capital, was resting at home when his Nokia N97 rang. He looked at the caller ID—Lei Jun. He picked up the call and walked into his study, knowing that it would be a long one. Since they became friends in 2003, Liu and Lei had invested in more than a dozen projects together, including Lakala, UCWeb, YY Voice and Duokan. Although they frequently met at different board meetings,

they still often needed to discuss details in private.

Liu Qin knew that one day Lei Jun would talk to him about his “re-emergence” in the industry. Lei had once told him half-jokingly that it wouldn’t be a billion-dollar business anymore, but a business of tens of billions of dollars. Liu had long sensed Lei’s eagerness to try. When they first met in 2003, Liu Qin was a 29-year-old investment manager who had been in the investment industry for fewer than three years.

Baby-faced Liu Qin looked younger than his actual age. In Liu’s words, he was a young kid running projects at the front desk, while Lei Jun was already a young, haloed entrepreneur in Zhongguancun, often appearing in the news. The first time Liu went to meet Lei Jun, he felt the pressure of meeting his “idol”, but was surprised to find Lei Jun very easygoing with his long hair and ordinary tee-shirt. He came out to meet Liu and talked to him like an engineer.

This meeting was at Kingsoft. Liu Qin had a feeling that Kingsoft was doing online games in a “very painful” way, and being young at that time, he spoke out of turn. He was originally going to ask Lei Jun for advice on the development of the Xunlei download manager, but he commented on Kingsoft in passing. He said to Lei Jun, “Kingsoft’s game development capability is very strong, but it may also cause a problem, if it isn’t willing to take the external resources it needs.” Hearing this, Lei Jun fell silent for a while, understanding very well where Liu was coming from. In those days, Chen Tianqiao’s Shanda Group was at its prime, mainly due to being the agency for South Korean online games, so money-making seemed very easy. Morningside Venture invested in Jiucheng Games, which also made large amounts of money by being the agency for South Korean and American games. Obviously, Liu Qin saw the problems, which provoked his thinking. But Lei Jun believed in the ability of engineers and wanted to rely more on himself.

Although Liu Qin was over four years younger than Lei Jun, and there was a huge difference in their reputations at the time, they quickly struck up a friendship, and often communicated with each other out of working hours. Sometimes they would go skiing together during the holidays. In 2009, when Lei had already become a famous angel investor, he asked Liu to make a summary of

his investment methodology, including how to become a successful investor as well as the most critical thing about investing. Liu Qin thought these questions were macro, and after ruminating for a while, said, “There are definitely a lot of truths worth mentioning, but I think the most important is the necessary quality of diligence. I believe that as an investor, you must be diligent enough to succeed.” Lei Jun immediately retorted, “The last thing I believe right now is that the universe rewards hard work.”

Lei Jun always said that he was “delayed” by being diligent. When he quit Kingsoft, he embarked on a painful review of the past, and some of his emotions would show when he was communicating with Liu Qin. He also talked about the core reasons why he had not seized certain opportunities at the beginning of the internet boom, and what those opportunities were. The simplest example is that when Lei Jun went to the United States in 1999 on a learning mission, he noticed the newly emerged Google. He even wrote an article describing the company’s new model and concept in detail when he returned to China, but for various reasons, he didn’t follow it up. This taught him one thing: in the internet start-up world, you had to act fast.

“Opportunity” was a word that often appeared in Lei Jun’s conversations with Liu Qin. No one had more say in seizing opportunities than they did as angel investors, and no one believed more in the huge momentum behind opportunities than they did. It was almost their instinct and vocation to see opportunities, grasp them and make a leap amidst them.

In June 2009, CITIC Press published the Chinese translation of Malcolm T. Gladwell’s book, *Outliers*. The author’s analysis of successful people in society brought to light a series of rather surprising statistics: most players in the Premier League were born between September and November; Bill Gates and Steve Jobs were both born in 1955; and many of the founders of prominent law firms in New York were of Jewish descent, with ancestors in the clothing business. These things were surprising, but knowing the stories behind the statistics would make things clear. Premier League players were registered in September, and among the players in the same period, those born in September were almost one year older than those born in August. The one-

year gap made a huge difference to their careers. Steve Jobs and Bill Gates were both born in 1955. Just as the personal computer industry began to grow, they graduated from or dropped out of college. Those born too early could hardly own a personal computer, and those born too late couldn’t catch up with the computer revolution in which the opportunities were seized by others. To conclude, there were never outliers. Successful people were made by both the times and the environment, by both opportunities and their own hard work.

Liu Qin read *Outliers* and became a fan of Gladwell, gaining a deeper understanding of the concept of opportunity. He found that this coincidence also existed for China’s PC internet entrepreneurs. Lei Jun, Ding Lei, Robin Li and Pony Ma were all born between the late 1960s and early 1970s, and the internet emerged in China around two years after they graduated from college.

Liu Qin and Lei Jun shared their understanding of the book, and for the time being, Liu also believed that opportunities and tides were the key factors in success and failure, rather than one hundred per cent diligence. They perceived that following the development of venture capital in China and the trend of combining it with the internet industry, a different landscape would take shape in the future.

Venture capital was a form of investment that originated in the US, with the first VC firm established in 1946. Later, venture capital and innovation became increasingly connected in Silicon Valley. The Silicon Valley 1.0 era created a group of venture capitalists who laid a solid foundation for the area’s subsequent take-off, and successful companies such as Google, Ebay, Cisco and Facebook created new breeds of entrepreneurs.

The concept of venture capital was first introduced to China in the 1980s and was initially driven by the state in a trial-and-error way. In the early 1990s, American International Group, ChinaVest, Fidelity Investments, Pan Asian and Morgan Stanley landed in the Chinese market. Morningside Venture Capital, of which Liu Qin was a partner, was a family fund of the Chen family in Hong Kong, and entered China in 1992. It was in 1999, when the first group of Chinese internet companies started to blossom, that Liu joined the company. At that

time, he interacted with young entrepreneurs, just as Lei Jun did, accumulating experience and improving his judgement.

Starting in 1998, Chinese venture capitalists and private equity investors started to be active. With the success of Morningside's investments in Sohu, Trip.com Group, The9 Limited, China Distance Education Holdings and iFeng News, Liu Qin—who had always kept a low profile—began to stand out in the venture capital community. People started to become familiar with the model whereby capital could be used to support entrepreneurs and facilitate the rapid growth of start-ups. Liu Qin was part of this trend, and opportunities abounded.

The year 2009 ushered in a new boom era, and there were many opportunities for him and Lei Jun. At the beginning of that year, the long-awaited 3G licences were finally issued to three operators by Li Yizhong, Minister of Industry and Information Technology. The industry was suddenly full of ideas about the 3G era.

Globally, smartphone sales rose by 33 million units in 2009 compared to the same period the previous year, and Apple's share of the global smartphone market went up from 8.6 per cent in 2008 to 14.4 per cent in 2009, surpassing that of Windows Mobile. Android phones saw the largest year-on-year growth in 2009, with market share increasing sevenfold to 3.9 per cent, while the sales of RIM's BlackBerry grew by 11 million units over the previous year, and its share of the market swelled by a few percentage points to 20 per cent.

Sales of Windows Mobile tumbled in 2009 due to the company's stagnant operating system. Many people were uncomfortable with the user interface design and layout, and in response to these problems, HTC launched the world's first highly-optimised Sense UI based on Android, which was one of the best user interfaces that year. At the time, some experts predicted that the focus of the mobile market in 2010 would still be on the operating system and the app store, and the hardware itself wouldn't see much innovation.

Another essential opportunity was the maturing of the venture capital industry in China. After 2005, many investors saw the opportunity in the second golden era for China's venture capital. There was a huge potential demand of Chinese consumers and an opportunity for entrepreneurs to create large corporations.

Seeing these trends, Lei Jun picked up the phone that day and finally said what Liu Qin had been anticipating for a long time, "Liu, I think we can talk about smartphones." Liu wasn't surprised. He knew that Lei Jun had finally made up his mind about a big business worth tens of billions of dollars. For this occasion, Lei Jun had done a lot of systemic preparation.

The phone call lasted 12 hours. Liu Qin's wife came to his study three times to see if he had finished yet, but she saw no sign that it was drawing to an end. Finally, she closed the door and let him be. Lei and Liu talked about the evolution they had seen in Apple. Through two years of observation, it had been proven that the iPhone was a disruptive product that spoke for itself. Most importantly, Apple was not just a hardware company; it was also a platform for users. This extreme experience of integrating software and hardware brought more possibilities to users. It also brought together countless developers to form a broad developer platform.

Liu Qin mentioned a company called Virgin Mobile. He told Lei Jun, "Virgin Mobile doesn't have a telecom operator base station. It's a virtual operator that defines the relationship with users and the life cycle of use. So, what you need to have in the future must not be just a smartphone company."

Liu Qin knew that what Lei Jun wanted was a US\$10 billion business—the "big plan" that he had been formulating for a long time. The more the two talked, the clearer the ideas were, the more ambitious they became, and the more certain they felt that lots of things they wanted to do were unprecedented.

The business model that Lei Jun had made countless deductions and analyses on was clearly depicted at this point: to make smartphones with top configuration and ultimate performance, equipped with exceptional and highly-customised operating systems and application software, priced at cost and delivered to users by replacing all intermediate links with the most efficient e-commerce channels, with continuous internet services provided to make profits. In this business model, the three elements of hardware, software and internet would support each other to form a cycle, which was later known as the "triathlon" model.

The two men believed that at this point in 2010, the premise for the "triathlon"

model was there. In terms of hardware, China itself was a major manufacturing power, where the world's most complete hardware manufacturing plants were. In terms of software, Kingsoft under Lei Jun's leadership had been one of the first companies to step into the field of interactive experience between the internet and interfaces, which was one of Lei's areas of expertise. In terms of internet platforms, Lei Jun had built up a complete knowledge base about e-commerce based on starting Joyo.com from scratch, not to mention that as an angel investor, he had also invested in vertical e-commerce companies VANCL and Letao.

In those days, people had become used to online shopping. Taobao had been around for seven years by 2010, while Alipay had created solutions for credit and online payment back in 2004. The first "Double 11" was held in 2009 by Taobao Mall, and e-commerce had reshaped the retail sector in China.

Lei's long talk with Liu Qin seemed to be a catharsis for all the issues he had been thinking about. He sorted them out in his head, made and confirmed predictions, and was even more determined to make the leap. Nonetheless, he also spent a long time talking to Liu about his main concern—risk. No one knew better than Lei Jun the risks that entrepreneurship carried. Although they had always talked about the great opportunities that came with change, they knew that opportunity was always accompanied by risk. In the world of venture capital, life-and-death situations were happening every day, and miracles and destruction followed each other. Yet only the miracles would be celebrated and spread, while the stories of destruction and death were silently forgotten.

Lei Jun had already achieved fame and fortune by that point. To the public, he was the hero of Kingsoft, the model worker of Zhongguancun, the gospel and benchmark of the angel investment community. The projects that he and Liu Qin invested in had yielded several times the principal, giving confidence to entrepreneurs. Most importantly, Lei Jun was also a business mentor who was often seen giving advice at the board meetings of the companies he invested in, and thus was deemed as a leader of entrepreneurs.

However, there is no such thing as succeeding once and for all. Lei Jun understood the hardships an entrepreneur had to go through, and knew too

well that entrepreneurship was an extremely painful experience. It requires a willpower of steel and the endurance of the near-death feeling of repeatedly falling into an abyss. Establishing a business in the mobile industry needed large amounts of investment and R&D, and if it failed, it would be a total loss. This venture would be completely different from his previous forays into software. It required a vast volume of capital. Once he started, the competitors he would be facing were giants, including the foreign brands Apple, Samsung and Motorola, and domestic brands Huawei, Coolpad, ZTE and Lenovo.

Even as a former battle-hardened entrepreneur, an angel investor who had achieved many goals, and a person who had been mentioned frequently and praised as a legend in the circle, Lei Jun was not guaranteed success when he started a new business. Every venture was a big gamble with an uncertain future. In this case, Lei wanted to cover all the capital himself, and even had a stop-loss line in mind: US\$100 million. If this US\$100 million was spent and the company had not taken off, he would quietly shut it down. However, one of the potential co-founders he was approaching disagreed. He believed that bringing in outside investors would make the company better in terms of governance.

Like all entrepreneurs, Lei Jun was both excited and worried about starting a business. He also had some of the most valuable qualities of an entrepreneur, such as a willingness to fight instinctive fears. He went skiing with Liu Qin several times, even teaching Liu the sport. They stood on different levels of the piste many times, and Liu Qin would tremble with fear. Lei Jun always told him, "Don't be afraid. Go forward, and control the tempo." The steep snow-face triggered their instinctive human fears, but the more fear they felt, the more they needed to charge down. Fear can make people instinctively lean backwards, and they would be more likely to fall as fear grew. Standing at the top of the piste, there was no choice but to go.

Liu Qin knew that Lei Jun's questions didn't need answers from others. Although Lei was 40 years old at that time, the dreams he'd had at the age of 18 had not yet been realised. Liu Qin also understood that angel investment couldn't really heal the pain and trauma Lei Jun had endured in his last venture, and that he needed something stronger to heal himself.

It was during their 12 hour phone call that Liu Qin confirmed his angel investment intention: Morningside would provide the first venture capital investment of US\$5 million for Lei Jun's start-up. Liu Qin saw himself as a patient investor, always looking at the long term. He wanted Morningside, a local fund, to keep its style. Deep inside, he felt that this was an opportunity worth US\$10 billion, so he was full of confidence. In addition, he firmly believed that offering the first round of investment would take some of the burden off Lei Jun's shoulders.

Chapter 2

Born for Passion

Finding allies

For a born entrepreneur like Lei Jun, being an investor was more like a transition, having recuperated in the investment circle, observed the industry and healed from the wounds of his last venture. However, when the time came, he would be back in the game, where he was destined to be bruised and battered, like people who take their surfboards to the shoreline even when a hurricane is approaching. While others would have turned back, he moved forward, enthusiasm unabated. For true entrepreneurs, entrepreneurship is sometimes more like a need.

Once the decision was made, Lei Jun immediately began to set up his own start-up team. He couldn't wait to push himself into this industrial windfall and start racing against time. For a start-up, there is nothing more critical than assembling a founding team. Since the project was so difficult, Lei Jun needed a group of mature, experienced people to work with him who shared his values and believed in a common vision. He knew that the team wouldn't be built overnight, and that he would need to go to the top companies to find the best talent.

The first candidate who came to mind was someone who had been a senior manager at a foreign technology company for more than a decade, enjoying its generous treatment, and who seemed the least likely to start a business. It was Lin Bin, then-vice president of Google Engineering Institute and Google's global technical director. Lin Bin was tall and thin with a broad forehead and narrow-



About the Author

Fan Haitao was a financial journalist at the *Beijing Youth Daily* and the Washington D.C. correspondent for Sina. In 2009, she co-wrote *Making a World of Difference*, the autobiography of the former CEO of Google China, Dr Lee Kai-fu, which has sold over a million copies. She was the first student from mainland China to earn a master's in oral history at Columbia University in 2013. After graduation, she set up her own studio dedicated to oral history interviewing and biography writing. She published her memoir, *Life Begins at Thirty*, in 2016, and has been invited by major Chinese universities to talk about non-fiction writing and oral history. She is currently the visiting professor at the Tianjin University of Sport's oral history research center.

**WITH A FOREWORD BY
FOUNDER, CHAIRMAN AND CEO LEI JUN
ON XIAOMI'S TENTH ANNIVERSARY**

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