1

The Innovation Curve Stage 1

Copycat Companies and Low-Hanging Fruit

It was 2007. I was asked to moderate a one-on-one keynote interview with Jason Jiang, the billionaire founder of NASDAQ-listed darling Focus Media, for *Advertising Age*'s annual conference in Shanghai.

Focus Media was a big deal in advertising; the company's looping series of ads on digital screens had become ubiquitous. When it had gone public two years before in 2005, it became the largest Chinese initial public offering (IPO) ever on the NASDAQ exchange, raising $172 million before its greenshoe option, which is when the underwrite is allowed to sell investors more shares than originally planned, which usually happens when the demand is high. Over the next 24 months the shares kept soaring, making

Jiang a staggering fortune. In 2008 *BusinessWeek* estimated Jiang's wealth at $1.8 billion, more than hotel chain heir John Marriott Jr.

Advertising Age's China head at the time, Normandy Madden, informed me that Jiang liked to control conversations and had an outsized personality. Madden confided she asked me to moderate because I was the only person she knew who could stand up to him. She wanted me to ask tough questions and not let Jiang dominate the discussion. "Don't back down," she said.

I reached out to Focus Media's head of marketing, Celia Tong, to arrange a lunch so that Jiang and I could get to know each other. Tong told me Jiang was confident but down-to-earth and liked to talk. Somewhat quirkily, she said Jiang loved foot massages. She also made a point of saying she had never sold a share of Focus Media stock because she believed in Jiang and his vision.

We met at a Shanghai restaurant that was a converted old villa in the city's French Concession, now wedged between two enormous construction sites. What had once been a quiet, genteel neighborhood for the moneyed elite was now a riot of jackhammer noises and grit and dust swirling in the air.

When I entered the private dining room, the slightly doughy Jiang stood up, shook my hand, and immediately started telling me his plans for Focus Media to dominate the advertising sector.

As the server brought over a mound of honey-glazed spareribs accompanied by a tangy sauce on the side, Jiang laid out his plans with the passion of a Pentecostal preacher.

"I want to be number one," he said bluntly. By the time we met, Focus Media was already the country's second-largest media company in terms of advertising revenue after the state-owned television network, CCTV. But Jiang wanted more, he stressed. His goal: to overcome CCTV to become the largest player. For a man who earned a few hundred dollars a month a couple of years before as an ad executive to become one of the world's richest men, anything seemed possible, even toppling CCTV's dominance.

Jiang grew animated as he revealed his plans to grow through acquisitions—he plotted to scoop up online advertising firms and companies in the mobile space. *Did he have a real growth plan*, I wondered, *or was acquisition the scheme*? I thought of Dennis Kozlowski, the former chief executive officer (CEO) of Tyco International that *BusinessWeek* named as one of the top 25 managers to watch in 2001. Between 1991 and 2001 he purchased more than 1,000 companies. Eventually he was jailed for receiving $81 million in unauthorized bonuses, even expensing half of a $2 million fortieth birthday bash for his wife.

Kozlowski became the poster boy for hiding fraud by acquiring so many companies that investors could not make sense of the records.

I wanted to test Jiang's plans. Would he end up like Kozlowski, acquiring companies for nefarious purposes, or would he use acquisitions, like Mark Zuckerberg at Facebook does, to complement core businesses and increase shareholder value?

As the server brought over a mound of steamed vegetables heaped with garlic, I asked Jiang about the effectiveness of Focus Media's core wall-mounted-screen advertising platform and the high installation hardware costs. He gazed at me, slightly bewildered, and said, "Yes, and I want to buy more companies to get bigger."

I was surprised Jiang did not seem to have a good answer. Was he so addicted to short-term, top-line growth that he did not care about sustainable growth?

As for hardware, he explained the screens and underlying technology were cheap and could last for five years or more. He did not think costs were an issue because everything in China was cheap then.

When changing ads, employees actually went from screen to screen and updated the commercial loops manually, using universal serial bus (USB) sticks—already ancient technology. Labor costs were still low enough that it was cheaper to use workers than develop an automated updating process.

As I left lunch, Jiang shook my hand and said we should grab a foot massage sometime. I left confused. Focus Media had a real business with real paying clients, and Jiang himself was brilliant. However, I was not sure if the business was sustainable. *Does it matter for Jiang or his early financial backers?* I thought. He had already made them all billions using basic technology.

Although not innovative, Jiang got rich by setting up an easy-to-understand business Western investors intuitively got—digital-screen posters in office buildings. Focus Media's model was similar to JCDecaux's billboards and posters that lined highways and airports, except Focus Media's advertising signs were digital.

Focus Media could leverage technology to generate more revenue per footprint by looping a series of TV commercials instead of just a single still image for one brand. More ads per space meant more revenue—an amazingly simple and straightforward concept. Media buyers such as Mindshare understood the model and allocated more clients' digital ad spending to them.

Over the next few years Focus Media's stock soared despite emerging questions about the advertising efficiency. The company grew through acquisitions, buying market research firm iResearch and Allyes, an online advertising firm. Tens of thousands of its digital screens popped up all over the country—along roadsides, near elevator banks, and in movie theaters.

Just as I warned Jiang, the screens broke earlier than expected. One in my office building did not work for months on end. Others became scratched, ruining the look of the advertisements. Later, one of Focus Media's senior executives admitted to me screens broke every two to three years and cost more to replace than imagined. Labor costs went up, too, so it was no longer cheap to send someone to upload content manually.

In 2011, Focus Media was blindsided by Muddy Waters, an investment research firm run by American Carson Block. Block published a scathing report accusing Focus Media of overstating the number of its screens by 50 percent. The company claimed Muddy Waters' allegations were exaggerated.

Block himself later faced accusations that he manipulated markets by colluding with hedge funds on reports, and has been proved wrong as much as right, but the damage had already been done. Investors abandoned Focus Media. Beset by a plummeting stock price, Jiang took his company private with the help of private equity (PE) firm FountainVest Partners. One of the partners at FountainVest told me just before its investment, "I think we can make money out of Focus Media by repositioning it."

Still, by that time Jiang had already banked his fortune.

In the late 1990s, none of China's fledgling tech start-ups—companies such as Sohu, Sina, and Focus Media—was known for being particularly innovative. They copied business models from Western players, such as Internet portal Yahoo! and JCDecaux, and tweaked them for Chinese consumers.

Nimble and market-oriented, these Chinese Internet players disrupted the dominance of stodgy old state-owned enterprises (SOEs) that were more concerned with catering to political masters than consumers.

Internet players delivered fresh content but used technology developed overseas. All day long, Sohu and Sina uploaded content on Chinese celebrities, food, and sports stars. Focus Media simply digitized advertising posters and moved faster than CCTV and other state-owned media outlets to offer different advertising media and packages to brands.

In those days there was so much money to make by copying proven business models from America that there was no real reason to be innovative. Charles Zhang, the founder of Sohu, exemplifies, too, an entrepreneur who became rich by copying what worked in America and tweaking it for China. He made hundreds of millions of dollars after his company's IPO in 2000, at a time when $60 a month was a decent salary.

Trying to be innovative probably would have hurt more than helped in raising capital and chanced creating too much *mafan,* or trouble, from conservative regulatory bodies, as one founder of a big Internet company told me in 2003. "Why take the risk," he said, when there were so many easy opportunities just to port over an existing model? You only needed to see the size of his houses or look at the number of companies, such as Bloomberg, that eventually conflicted with regulators, to realize he had a very good point.

Foreign investors in those days worried about being cheated. They had reason to be. Tales of Chinese companies duping gullible foreigners out of hundreds of millions of dollars abounded like urban legends, the type that would be famously recounted in books, such as Tim Clissold's 2004 book *Mr. China* and Paul Midler's *Poorly Made in China.* One due diligence project my firm, the China Market Research Group (CMR), did for a PE client highlights the risks well.

Our client wanted to buy a company that claimed it had 50 sales points throughout the country. The head of the PE firm even visited one sales point that was bustling and doing a resounding business. During our due diligence, we went to check out some of the other outlets—but could not find any. The Chinese firm had simply made them up and essentially built one fake outlet staffed with part-timers to show potential foreign investors.

To mitigate risk, some investors, such as Inter-Asia Venture Management, established in 1972 by Lewis Rutherfurd and Jim Hawes, put up half the capital to take Western companies to Asia instead of backing true Chinese start-ups. Inter-Asia would become the trusted local partner and then exit the investment through a trade sale back to the parent company.

Investors trusted Rutherfurd and Hawes. Rutherfurd came from a well-established blue-blooded family in America's Northeast. His grandfather was Frank L. Polk, a founding partner in the New York law firm Davis Polk & Wardwell. He had attended St. Paul's, Princeton, and then Harvard Business School, where he met Hawes, who had previously been a U.S. Navy Seal team instructor. Few Americans investing in China in those days had such gilded backgrounds as Rutherfurd and Hawes.

When I first met Hawes and Rutherfurd to join Inter-Asia's Shanghai office as chief of research and to be in charge of information technology (IT) investments, they were both around 60 and built like rocks. Rutherfurd led the entire Inter-Asia team on group hikes and runs, and Hawes still looked like he could go through a Navy Seal Hell Week with ease. Once we were on a ferry during a typhoon that to me seemed like it was about to capsize. Hawes calmly downed a full meal, guffawing while I squirmed and prayed to live another day.

Rutherfurd touted Inter-Asia's strategy of investing in Western brands' Chinese operations to potential investors as having "no business risk, just execution risk." Inter-Asia brought household names from the West, such as McDonald's and IKEA, to Asia and made millions. Pension funds and university endowments flocked to invest money into the firm's early funds. Regulators immediately saw the business model of McDonald's and other mature businesses and how they worked, and they were relatively quick to grant approvals.

By the late 1990s, foreign investors no longer remained content just to invest in the Chinese operations of Western companies. They wanted to localize investments and started backing home-grown Chinese start-ups, such as Sohu, Focus Media, and Sina. They also had a different exit strategy in mind—rather than Rutherfurd's strategy of relying mostly on trade sales, they wanted to exit through IPOs. Valuations for public listings were often much higher than what could be received from a trade sale to a corporation. Plus, public listings had the added benefit of catching the attention of the Western financial press, including the *Wall Street Journal,* which would write about their successes, making it easier to raise the next funds, and the cycle would begin again.

Investors remained scared about Chinese entrepreneurs cheating them, so they cautiously deployed capital. Instead of investing directly into Chinese firms, some firms, such as technology-focused venture capital firm Sutter Hill Ventures, put money into local venture capital firms run by Chinese investment professionals they trusted.

Sutter Hill, along with Yale's endowment, backed Chengwei Ventures, started by Eric Li, a Stanford graduate who later became famous for TED Talks and op-eds defending China's political system. Greylock Partners took a similar track to Sutter Hill by supporting Deng Feng's Northern Light Venture Capital instead of making direct investments on its own.

Other venture capital firms decided to take risks and open up shop in Shanghai and Beijing. Executives often had little in-country operating experience—and frequently didn't even have any Chinese-speaking employees aside from the secretary, driver, or junior analyst—but they still wanted a piece of the action. They tried to back mainland Chinese entrepreneurs who had returned to China from studying overseas (usually in the United States or the United Kingdom) and who spoke English well.

Due diligence often consisted of confirming the founder spoke good English, bathed regularly, and not much else. This is not an exaggeration: The China head for one of the world's most famous venture capital firms once rather condescendingly lamented to me that the entrepreneurs he met "all smell—they all smoke and go whoring at KTV (a kind of karaoke where men hire women to accompany them) bars. I don't know how to talk to them. Do you know someone who speaks English well and washes regularly?" and said if I did know someone, would I please introduce him.

Because of their uneasiness about operating in China and linguistic limitations, Western investors preferred simple, easy-to-understand business models that Western-educated Chinese ran. Baidu, the "Google of China," was founded by Robin Li, who had studied computer science at State University New York–Buffalo. Peggy Yu, a master of business administration grad of New York University's Stern School of Business set up online retailer Dang Dang—the Amazon of China. Jack Ma, who although not overseas educated had worked as an English teacher and could communicate easily with Westerners, positioned Alibaba's Taobao marketplace as the eBay of China. Renren, started by Joseph Chen, a University of Delaware and Stanford Business School alum, became the Facebook of China.

These copycat companies got capital investments from Western funds (Renren raised money from General Atlantic) or companies (Yahoo! invested $1 billion in Alibaba). At the time, China was still so poor and the market so immature that there were no meaningful Chinese venture capital firms, so entrepreneurs had to rely on foreign investors.

It became a joke that whenever a Silicon Valley tech start-up got funding, hundreds of copycat Chinese companies would start up within hours. It worked out well for a lot of them as well. Over the years founder after founder of these Internet copycats became wealthy without their companies ever having turned a profit.

Peggy Yu's Dang Dang took 11 years before it posted a single cash flow–positive quarter, and yet she had already become a billionaire by then from the company's 2010 IPO. Sina's Twitter-like microblogging platform, Sina Weibo, went public in April 2014 at a multibillion-dollar valuation, despite losing $47.6 million the quarter before. E-commerce retailer Mecox Lane raised $129 million and then saw its shares rally 57 percent on the first day after it went public in 2010 despite being unprofitable with a zero price/earnings (P/E) ratio.

Hedge fund and mutual fund investors forgave entrepreneurs for their lack of profits. Just as in the heady days of the Silicon Valley dot-com boom in the late 1990s, investors drooled at China's potential. They made investment decisions based on market share and sales growth, with little if any attention paid to return on equity or profits. Dang Dang's chief financial officer even explicitly announced after its IPO that it focused on market share and on increasing revenues because investors did not care about profits.

All the fervor from the international investment community taught China's tech entrepreneurs that trying to be innovative or care about profits did not make sense—as long as revenue and market share kept growing, they would personally get filthy rich, the bottom line be damned.

Jason Jiang, like many Chinese entrepreneurs in the late 1990s and early 2000s, made money by creating a company with a business model Westerners could understand easily. He did not become rich through pioneering new technologies—he didn't need to. Rather, Jiang built his fortune by creating scale and market share.

Others, such as Charles Zhang at Sohu, were even more obvious, copying Western business models from Yahoo! and other American Internet players, but it did not matter—they got rich and gained respect internationally for their business prowess. The first time I saw Zhang was at an invite-only reception JP Morgan arranged to bring their international board to. Tony Blair, my wife, and I were talking about Chinese youth; I could see Zhang cornering Henry Kissinger.

Other entrepreneurs saw the success of Zhang and Jiang and realized there was no need to spend money on research and development. Jiang did not even try to automate the updating of the digital screens; it was more cost-effective to send low-paid employees to update the screens by hand.

Investors also hesitated to back innovative companies in those days. They made money backing copycats, such as Dang Dang, and straightforward concepts, such as Focus Media, so they spent little time looking for innovative companies. Everyone got rich in the process.

In the winter of 2014 I wanted to find out what the financiers thought of investing in innovation a decade earlier, when Charles Zhang and Jason Jiang were just starting their companies, and where innovation was now in China, so I arranged to have lunch with Rob McCormack, the founding partner of Shanghai-based Mustang Ventures.

A Stanford alumnus, McCormack had worked for leading venture capital firm Kleiner Perkins Caufield Byers in Silicon Valley in its heyday before starting his own China-focused firm. Few investors have such deep experience both in China and America in early stage investing.

McCormack invited me to a bustling vegetarian restaurant just behind Plaza 66 in Shanghai. We met at 11:30 to make sure we got a table before the lunchtime stampede from the nearby office towers. Tall and thin, McCormack wore preppie clothing—an Oxford shirt and khaki pants. With his height and confidence when speaking, he posed a towering presence even when seated.

As a server presented a dish of vegetarian-friendly ersatz chicken, McCormack started telling me about his investment strategy. He remained bullish about the health care sector and expected returns for early-stage ventures, which had been lower than later-stage and buyout funds, improving gradually in the coming years as the market matured.

We moved our discussion toward the state of innovation in the early days of the Chinese Internet era. As McCormack took a bite of food, I edged in a question about why there was seemingly so little innovation then.

McCormack told me that historically there had been "business model innovation, but not technological innovation." He differentiated innovation into two parts: (1) business model innovation, which Chinese firms were adept at, was taking technology from other countries and using it in a way specific for China and (2) technological innovation, which was more like invention.

The initial emphasis on business model innovation was natural, McCormack explained, because there were great opportunities to improve on business models from other countries and localize them for the particular needs of the Chinese market. This was similar to what Japan and South Korea had done at similar stages in their economies in the 1960s to 1990s. Even America had gone through a similar progression from copycatting European technology until the late nineteenth century, when America became innovative in its own right.

That made sense, I thought. There was so much low-hanging fruit during the 1990s that there was no need to invest in technological innovation. When Samsung and Sony were just starting, they also relied on making cheap copycat products. It was only once they became established global players that they started investing in innovation to improve margins and defeat market leaders at the premium level.

I thought about how to apply McCormack's theories to Jason Jiang at Focus Media. Jiang had not invented anything from a technological sense but had combined digital screens and advertising to come up with Focus Media. He was not technologically innovative but it was business model innovation to use these technologies to localize for the Chinese market specifically.

The server brought over some watered-down tea. After taking a sip, McCormack called the server over to double-check we had been served tea and not water by mistake and then continued, "Chinese entrepreneurs aren't stupid. They know the goal is to generate profits. It was too risky to invest in technological innovation in those days." I thought about the high costs and low success rates of true technological innovation for the companies that have attempted it in China's Internet space. I could not think of any successful examples of technological innovation between 2000 and 2005. Most had just copycatted Western models and made piles of dough.

For McCormack the lack of continued technological innovation essentially boiled down to the abundance of easy opportunities that still existed in what was still an immature and fast-growing market—the so-called low-hanging fruit. Over the past 15 years there simply has been too much money to make by tweaking ideas that worked elsewhere for the local market to spend too much money and energy on innovation. Why tax yourself reaching for branches higher up the tree when there are plenty of juicy apples hanging right in front of you?

The lack of innovation in China over the past 30 years clearly was the result of circumstances rather than some inherent inability within Chinese culture to innovate, as Panos Mourdoukoutas, a professor of economics at Long Island University Post in New York, argued in *Forbes* in 2012. He said Chinese cannot innovate because of what he calls "Confucian conformity," which stalls innovation and libertarian ideas.[1] In Mourdoukoutas's thinking, China can never be a hotbed of innovation, despite obvious historical inventions, such as gunpowder, multistage rockets, and the compass, as historian Joseph Needham pointed out in his series of books, *Science and Civilisation in China,* that took place when Confucianism was more embedded in society on a day-to-day basis than today.[2]

If historically China could innovate, it did not in recent decades for other reasons aside from a cultural inability—simply put, as the country reformed its economy starting in 1978 to allow for private enterprise, there was no need to invest in innovation. Lack of creativity in the education system or regulatory issues play a role undoubtedly in slowing innovation, but the natural evolution in the economy plays an even bigger role.

These days the lower branches are becoming sparser as more of the easy opportunities and quick turnarounds are plucked from the tree, and as we move closer to the 2020s, there will be still fewer easy opportunities.

Unlike a decade ago when the Chinese economy was so small it was an afterthought for most businesses, it has now become one of the key markets to win for multinationals. Companies will have to innovate more to offset increased competition from Chinese and international firms and higher input costs.

The pure copycat business model era that gave rise to Dang Dang and Sohu is over. Consumers no longer just want products copied from the West and tweaked a bit for local tastes—but ones developed with China in mind from the very beginning. In research my firm, CMR, has conducted with consumers throughout the country, we found that rising pride in the made-in-China label means consumers want to buy products made for China. When I started CMR in 2005, consumers were looking to what was popular in America and western Europe in fashion and technology to develop their identity. Our research in 2014 suggests consumers are now looking at trendsetters in China more so than ever before.

The change in opportunities for low-hanging fruit versus innovation mirrors the greater macroeconomic shifts in the Chinese economy. The economy, too, now is at a very different stage than when Jason Jiang started Focus Media. The 1990s and early 2000s were marked by the upheaval of Prime Minister Zhu Rongji's economic reforms of the late 1990s to transition from a socialist to a more market-oriented economy. Zhu forced SOEs to sell off assets—typically to well-connected individuals—and lay off tens of millions of workers in privatization and efficiency drives.

During this reordering of the economy, it was easy to make money if you were well connected and trusted by the leadership not to rock the political boat. One restaurant owner in a prime location in central Beijing told me while we were sitting in his multimillion-dollar mansion that he got a 20-year lease free from an SOE that owned the building "because they wanted to attract consumers to their development." Without rent costs his restaurant made $10 million in profits a year until 2013, when sales plummeted after the crackdown on government banquets and he had to shutter his business. Another son of a senior official told me he'd been granted a monopoly on selling

Australian wine to a specific ministry in one district of Beijing and had banked millions.

The drivers of China's economy are changing. President Xi Jinping's far-reaching crackdown on corruption, which he started in 2013 after ascending to the presidency, is forcing companies to become market rather than connection-oriented. Under President Xi, the government has been arresting people for corruption, such as Zhou Yongkang, China's former security czar and member of the Standing Committee of the Politburo and Xu Caihou, the former vice chairman of the Central Military Commission and Politburo member. Song Lin, the chair of China Resources, a holding company for energy land and consumer holdings, was arrested for graft. Jiang Jemin, the minister in charge of state-owned assets, also was sacked.

President Xi has changed procurement processes to make them more transparent and has limited how much and when officials can spend on dining, airplane tickets, hotels, and cars. Official banquets are now limited to "four dishes and one soup."

Companies that were based on patronage are shutting down while companies that can adjust to the new more transparent realities are thriving. Take, for instance, the high-end food sector in Beijing. Chef Da Dong's Roast Duck, a fancy peking duck chain, is posting record revenues and opening new outlets because it sells mostly to individuals rather than to government banquets or SOEs, whereas thousands of restaurants that relied on government patronage have faced losses or shut their doors entirely.

Overall the economy, too, is slowing as it moves away from overreliance on cheap credit and heavy investment to pump growth. Prime Minister Li Keqiang has set a 7.5 percent growth rate target for 2014 and wants to focus on sustainable growth rather than the growth-at-all-costs model of the previous decades. The government is now encouraging less pollution and return on equity in investments rather than pure gross domestic product (GDP) growth numbers.

Credit is tightening and the growth of the overall money supply has decelerated, slowing to only 12.4 percent in March 2014 from around 20 percent in previous years. There are fewer opportunities to make money simply by knowing the right people or doing large-scale heavy investment projects fueled by cheap credit.

The result of the more difficult macroeconomic environment, the crackdown on corruption, and demanding consumers is that more companies must move up the value stream and focus on innovation and branding or face squeezed margins or even bankruptcy. Copycatting business models won't cut it anymore in many sectors. Companies need to focus on both business model and technological innovation to maintain a long-term edge.

One of the great debates is even if entrepreneurs and financiers recognize the need for innovation, can it actually happen in China, or are there barriers (aside from Panos Mourdoukoutas's cultural inability argument)?

U.S. Vice President Joe Biden does not think China can innovate. He dared cadets at the Air Force Academy graduation on May 28, 2014, "I challenge you, name me one innovative project, one innovative change, one innovative product that has come out of China."[3] Stephen L. Sass, a professor emeritus from Cornell University in materials science and engineering, has similar arguments as Biden. He wrote in the *New York Times* in January 2014 that China cannot become innovative "until it moves its institutional culture away from suppression of dissent and toward freedom of expression and encouragement of critical thought."[4]

Is this really true? I thought to myself as I read Biden's and Sass's arguments. To see if their arguments had merit, I went out to interview entrepreneurs and investors in different sectors to see whether they embraced a shift toward innovation and what the remaining barriers were, specifically for examples of innovation in China.

The answer was clear, as we shall see: Biden and Sass are wrong—there is innovation taking place in China today, and there will be even more tomorrow because the seeds of innovation are being planted today. It would be a mistake for governments and companies to underestimate the ability of Chinese firms to move up the value chain because the barriers that have impeded innovation in China are slowly going away.

Chapters 2 and 3 will look at innovation and trends in the Internet, industrial, biotechnology, and health care sectors. Chapter 4 will look at the continued constraints and challenges facing innovation and potential for innovation in the next five years. It is clear China is already well along the way toward stage 2 on the innovation curve.