



CHINNOVATION

Yinglan Tan

How Chinese
Innovators
are Changing
the World

Advanced Praise for
Chinnovation: How Chinese Innovators Are Changing the World

Yinglan Tan's book could not be more timely. China's success as a factory for the world and the fundamental transformation it has had on global industries and markets, while impressive, is yesterday's story. Yinglan introduces us to the individuals and firms who are driving tomorrow's story of China's emergence as a locus of innovation that will have major implications for consumers, firms, and economies around the world.

Steven White

*Associate Professor, School of Economics and Management
Tsinghua University*

Informative and entertaining! Brimming with brilliant analysis and actionable insights. How do Chinese entrepreneurs survive in China? They innovate like crazy, in ways that will amaze most Westerners. Hear their authentic voices as they describe the real struggles underlying monster successes like Alibaba and Tencent. This book is a wake-up call, a must-read for anyone fascinated with China!

Wu Po Chi

*Adjunct Professor, School of Business and Management
Hong Kong University of Science and Technology*

Since Schumpeter, much has been written on Innovation Economics. Given the growing role of China in the global economy, professionals worldwide, as well as entrepreneurs in China, should read *Chinnovation*. Based on many real-life cases, this first systematic study of innovation in China offers a broad view, often in lively detail.

You Xing

*Chief China Representative
Paris Region Economic Development Agency*

Convergent incomes and divergent growth between East and West is the economic story of our times. China leads this charge and is re-establishing itself as a center for global technology and innovation. I love the way *Chinnovation* draws on the war stories of Chinese entrepreneurs and investors to dispel the myths and proffer practical advice to the next generation of high growth multinationals.

Daniel Heaf

Director of Digital, BBC Worldwide

A great book to shed light on what kind of innovation thrives in China and what makes it work. I highly recommend this book to entrepreneurs who wish to capture Chinese markets. Yinglan Tan has done a remarkable job in analyzing the reasons behind the successes and failures of these new Chinese companies. All are invaluable lessons for the newcomers.

Jennifer Pan

Managing Director, ChinaSense, Inc.

Chinnovation is definitely an exciting read. It shows readers how China's economic growth has been fuelled by hard working and innovative entrepreneurs, and not just because of government-led policies. *Chinnovation* proves that the transition from "Made in China" to "Innovated in China" is indeed a reality.

Ikkei Matsuda

President and CEO, Hokkaido Venture Capital, Inc.

Yinglan Tan offers a fresh and unconventional look at innovation and entrepreneurship in the world's second largest economy. *Chinnovation* is an insightful project that removes the myths and secrecy to present the true picture of Chinese entrepreneurs and how innovation is driving the country in the 21st century. A must read for all interested in innovation, entrepreneurship, and China.

Irina Anghel

Secretary General

South Eastern Europe Private Equity and Venture Capital Association

As the crucial innovation battleground for high growth businesses of the future, China is both alluring and intimidating, with rapidly changing market conditions and regulatory landscape, intense competition, and unique rules of engagement. Against this backdrop, *Chinnovation* provides a refreshing, modern Art of War treatise on the Tao of creating successful innovation in China.

Ku Kay Mok

Partner, Gobi Partners

The book brings to life the most intelligent and promising young entrepreneurs in China, demonstrate how local entrepreneurs can succeed with local insights and local executions to address local needs. Yinglan Tan presents a whole new angle to look at innovation in China and how China and the world might benefit from these "chinnovations" and "chinnovators".

Zhao Hanxi

Director, CITIC Capital

As China progresses through another rapid evolution and transformation of its industries, we see a rapidly growing field of Chinese entrepreneurs that can propel China to possibly top the global tables in creativity and innovation. *Chinnovation* reveals to readers the truth behind these Chinese start-ups and their journey through innovation. This is a must-read for would-be entrepreneurs and seasoned business leaders alike.

Patrick Lee

Executive Chairman, Sing Lun Holdings Limited

Yinglan Tan takes us on a journey through extraordinary stories of entrepreneurship in China. An easy read, it is sure to make you feel like you have lived and breathed the air of opportunity that China represents today, far beyond the statistics seen in popular press and analyst briefings. You get the unique privilege of getting into the minds of the entrepreneurs, seeing their rapid ingenious actions and you find yourself celebrating their stupendous results. A must read!

Rajen Makhijani

Management Consultant, Heidrick and Struggles

Award Nominated Bollywood Screenwriter

Chinnovation

**HOW CHINESE INNOVATORS
ARE CHANGING THE WORLD**

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I thank you one and all from the bottom of my heart.

Introduction

Innovation is the core of our national development strategy.

—PRESIDENT HU JINTAO, 2007

Innovation in China—mystery or mastery? It is widely believed that China's entrepreneur class has grown and that their businesses are succeeding primarily due to their knowledge of the domestic market, their quick adaptation to market changes, and their resourcefulness. Since 1999, Chinese founders have led more than 46 Chinese firms to IPOs on NASDAQ. From this unprecedented number of start-ups to a rising class of billion-dollar giants going global, high-tech companies in China have a dramatically intensifying need for leadership.

A new era is under way for global high-technology innovation and entrepreneurship, marked by the rise of China. During the past several decades, Beijing, Shanghai, Shenzhen, and other cities have developed as centers in key information communications technology industries. More recently, from Beijing to the Pearl River Delta, markets for new products are expanding, competencies in new technologies are growing, and a new generation of high-technology regions is emerging. All these signs point toward China as a rising powerhouse, accelerating the shift of locus for the global high-technology arena across the Pacific.

From high-profile young executives taking companies public to mainland entrepreneurs who are redefining the norms of daily activity, *Chinnovation* traces the humble beginnings of entrepreneurial innovation and the backstories of some now well-established consumer goods

firms from Mao Zedong's Cultural Revolution through the self-made Internet era to the Middle Kingdom's rapid growth.

The ascent of Asia has introduced new avenues for entrepreneurship, especially in China. Innovation has been a hot topic for many Asian governments; however, little has been written about innovation in China. Suppose you were at a cocktail party and wanted to explain in 30 seconds: Is there innovation in China? What are examples of innovation in Chinese companies? What is the path that an innovative Chinese private-owned enterprise is likely to take? What are the experiences and capabilities that these innovative companies acquire? How do these companies experiment with innovative approaches and also manage the risk of innovation? What are the lessons learned and how would these entrepreneurial innovators advise others who are embarking on the same journey?

Most people climb on the innovation bandwagon without really defining its meaning. There are many ways to define *innovation*. Does it have to be a first? Does it have to be profitable? Does it have to be a technology or can a business model or process qualify? To me, it is either doing the same things in a new way (process) or doing new things (creating a product or service).

Does China have the right environment for innovation? One way to assess this might be the trinity of *financial capital*, *human capital*, and *intellectual capital* or more simply, *money*, *people*, and *idea*. In the Silicon Valley metaphor, an entrepreneur with a bright idea meets a venture capitalist—a VC—who finances that idea. In Hollywood, someone with a good script is bankrolled by a well-funded director. It turns out that Chinese firms innovate a lot—but in response to the dictates of their environment. They tend much more toward process innovation. What is the Chinese way of innovating *in general* and why does this produce an outcome where 99 percent of firms only innovate in terms of process while 1 percent pioneer genuinely new technology?

The book also has lessons for Chinese managers, especially those who want to learn from the best on how to innovate and embark on the journey. What is the future, and how can you learn from others who are further down that path?

The book also has implications for foreign firms. China's rapid economic growth has made it a vital market. Yet those corporations face their toughest competition not from other multinationals but from China's own homegrown businesses, which turn out to be more nimble and innovative than their foreign counterparts.

Chinnovation uncovers the common threads with frameworks and probing questions as Chinese innovation and entrepreneurship expand the country's reach in the world. This is not a book on current best practices; rather, it distills the truth from the myth, drawing from the journeys of innovative Chinese companies.

Innovation in China is a topic understood by few. Even fewer are those Chinese entrepreneurs who have innovated successfully and profitably. You hear about the successes, but what is the real story behind them? How do these entrepreneurs innovate on their ideas and turn them into commercially viable ventures? What is the expertise required to translate ideas into world-class companies? What are the most important changes to the people and processes required to be successful in China?

A well-known Silicon Valley venture capitalist once told me: "Chinese people aren't entrepreneurial! They don't create things. They're just good at ripping them off." After my interviews with a variety of entrepreneurs, I realized that the reverse is true. These start-up founders are as scrappy and willing to take risks as their peers anywhere, at times even surpassing the people who flocked to Silicon Valley in the late 1990s.

No longer satisfied with China's role as the world's factory, Chinese government leaders have declared that "homegrown innovation" (自主创新) is the watchword for the future. They are sounding an urgent call to reduce dependence on foreign technology and build China into an "innovation-driven economy." As President Hu Jintao said, homegrown innovation is the "core of national competitiveness"—the path to sustainable economic prosperity and global leadership.¹

Many believe innovation is the way out of the economic crisis for the "Made in China" brand.² One of China's leading producers of slippers used to export 90 percent of its annual output to the United States. In 2008, the company's exports fell about 20 percent from a year earlier. Its counterstrategy? The company put efforts into developing its domestic market, moving up the value chain and building its own brand, and the situation improved significantly.

"The world's factory" is no longer the default setting for development. This book's main thesis is that China will soon become the world's innovator, moving beyond being the world's factory and ultimately becoming the world's leader.

Innovation in China is among the most discussed topics in international business today, and possibly the least understood. This book

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provides a primer on what some of China's best innovative business leaders have in common and showcases examples for China in its transition from "Made in China" to "Innovated in China."

Drawing on a wealth of on-the-ground stories and thorough research, *Chinnovation* shows how Chinese companies of every stripe have overcome the barriers to successful, profitable innovation:

- How did Neil Shen, co-founder of Ctrip.com (and currently managing partner of Sequoia Capital China), first see the opportunity for a travel site for China, which eventually became NASDAQ-listed Ctrip?
- How did Richard Chang, founder of SMIC (Semiconductor Manufacturing International Cooperation), manage risk and diversify his company's product line to catch up with its competitors?
- How did Ray Zhang, CEO of eHi, scale one of the most innovative hybrid car-rental companies in China?
- How did Zhang Tao, CEO of Dianping, start a Zagat-inspired user-review site for restaurants and establish a continuous process of innovation?

Chinnovation is essential reading for practitioners, investors, and entrepreneurs interested in China. It could also prove useful to students of China who want a better understanding of what goes on in Chinese innovation and the lessons learned in the journey of these leaders.

Notes

1. Marguerite Hancock Gong and George Krompacky, "The Rise of China: Changing Patterns of Global Innovation and Entrepreneurship," Walter H. Shorenstein Asia-Pacific Research Center, January 1, 2007; available online: http://aparc.stanford.edu/news/the_rise_of_china_changing_patterns_of_global_innovation_and_entrepreneurship_20070101/; access date: September 20, 2010.
2. Xinhua, *Innovation, Key for "Made in China" to Out of Crisis*, CCTV, September 10, 2009; available online: <http://english.cctv.com/20091009/102935.shtml>; access date: September 20, 2010.

1

Welcome to the World of Chinnovation

What does anybody here know of China? Even those Europeans who have been in that Empire are almost as ignorant of it as the rest of us. Everything is covered by a veil, through which a glimpse of what is within may occasionally be caught, a glimpse just sufficient to set the imagination to work and more likely to mislead than inform.

—LORD MACAULAY, c. 1790

To begin, it's useful to present a short history of China's growth enterprise and how innovation first sprouted, covering the second half of the 20th century. How have the innovators left their mark and changed the nature of industry? This book distills the blueprint for innovation.

Imagine that this is 2030: a world where China is a working democracy with a \$4 trillion economy. Ubiquitous, unseen nanodevices record everything you say and do. Flying delivery drones with powerful wireless communication have replaced the car as king of the road. If you do need to drive yourself somewhere, you SMS your coordinates and receive a list of the nearest rental car options with various models and color selections. Your chosen car is delivered to you by a GPS-powered robot and you unlock the car via fingerprint recognition. And if you're observed violating the rules of the road, say by parking in the wrong place, the ticket shows up in your e-mail inbox complete with payment options.

Professional knowledge becomes obsolete almost as quickly as it's acquired. Instead, you have downloadable modules on your nanoimplants. You'll do everything you do today from your online semantic

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desktop. Your calendar will hook to all your activities, so it can keep up with you automatically and work with others' calendars to help you coordinate your schedule. You can use any cellphone to log in and access all your contacts and finances. Sounds impossible?

Flash back a few thousand years to the 4th century B.C. Sometime in that century, the Chinese developed a lodestone compass to indicate direction. By the 1st century B.C., the Chinese had developed the technology for deep drilling boreholes. The first woodblock printing press was invented in China. The next few centuries saw the Chinese invent movable type, paper (one of the first recorded accounts of using toilet paper was during the Sui Dynasty in 589), fireworks, and cannon. And the list goes on. I recently visited an exhibition of "sky lanterns," nifty aeronautical contraptions invented by Zhuge Liang (a military strategist in the Three Kingdoms) and was further impressed by innovation among the Chinese. The cycle of innovation was once very strong here, and now it seems to have gone full circle back to China.

Why This Book?

Books on China crowd the shelves. Unfortunately for the would-be innovator in China, the academic books have generally failed to capture the true reality of innovation in Asia because the data was too patchy, while those that captured the life stories of successful Chinese entrepreneurs haven't adequately distilled the full essence of innovation. This book focuses directly on the key concepts and winning techniques used by innovators in China, translating what really goes on in an innovator's mind into structured processes that you can use to promote your own ideas.

Not that long ago, it might have been possible to cover the whole topic of innovation in China in one white paper. Now, not even a book can provide comprehensive coverage. Entire industries in China have flourished, as China's enterprises have ascended the innovation chain. In the face of increasing international and domestic competition, companies strive to outperform one another and to increase their performance and innovation capabilities via myriad strategies. Many industry veterans have encapsulated various facets of innovation in China with zingy buzzwords. Haier's CEO, Zhang Ruimin, has coined the term *recombinative innovation*, which is the combination of ideas and technologies in novel ways rather than developing products from scratch. Huawei, a leading global telecommunications solutions company

founded and based in China, has coined the *principle of the pressure point*, which is the tactic of expanding strategically via cost-innovation into the area where the global players are weaker and chipping away at adjacent sectors. These terms capture salient points of China innovation, but to make the topic manageable and targeted, I have decided to focus on high-growth Chinese businesses in this book.

Why high-growth Chinese businesses? First, research on innovation tends to overemphasize patents, inventions, and scientific publications in research labs and large multinational firms. The study of high-growth Chinese businesses provides a window into the middle level of the innovation game in terms of product, processes, and know-how, making it possible to identify some of the distinguishing features *vis-à-vis* other levels. Second, the study of high-growth Chinese businesses provides insights into the use of high-tech innovations by low-tech companies. Many of the companies weren't producing high-tech products; they were either customer-facing low-tech businesses producing services in an innovative way or were adept at product innovation. Third, all of the enterprises whose people I interviewed were experiencing rapid growth—really rapid, mostly between 30 percent and 50 percent per year. (One was growing at a staggering rate of 166 percent year-on-year.) While the growth of the China economy played an important role, the particular ability by these multinationals of the future to innovate and satisfy unfulfilled demand provides a useful view of the economic drivers of the innovation game in Asia.

That may still seem broad, but I've found a surprisingly high degree of agreement among interviewees on the key characteristics that entrepreneurial innovators were looking for when identifying innovation opportunities, their thought processes, and the steps they took. Despite vast differences in background, company stage, and sector, a consensus quickly emerged. Aimed specifically at Western and non-Chinese businesses, managers, and entrepreneurs, this book offers a practical guide to best innovation practices for business success in China. The book is organized around the journey that entrepreneurial innovators embark upon while building a company, with each chapter encapsulating the key takeaway points at that specific stage of the journey.

It is through this process of innovation under uncertainty that unbelievable fortunes are made in China's march toward global supremacy. *Chinnovation* takes readers into this world of translating ideas into globally competitive companies. For those who want to

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innovate like the best, *Chinnovation* distills key points from real-life innovation experiences, revealing the unique strategies, the implementation mechanisms, and the measurements the best innovators use. It discusses some of the best and worst experiences, the pitfalls inevitably encountered when risks are taken, and the ways individuals can use the lessons they've learned.

Impossible? Since its economic reform began in 1978, China has gone from a poor, developing country to the second-largest economy in the world. Yet when it comes to science and technology, most people have the impression (not helped by CNN images) that China is a country with massive steelworks and vast smoking factories. Very quietly, China has become the world's second-largest producer of scientific knowledge, surpassed only by the United States, a status it has achieved at an awe-inspiring rate. If its progress continues on its current trajectory, China will overtake the United States before 2020.

There are quality concerns. In university education, only slightly over 10 percent of faculty members have PhDs, and only 40 percent have any postgraduate degree.¹ In respect of R&D personnel, McKinsey Global Institute has found that only 10 percent of China's young white-collar workers are fit for employment at multinational corporations. Of total R&D personnel, less than 4 percent have PhDs, and only 10 percent have master's degrees. A 2007 McKinsey survey also indicated that poor enforcement of commercial laws and intellectual property (IP) protections continue to worry executives in China.

The Innovator's Playbook

Capitalists and enterprises build dynamic economies and innovation. However, this fundamentally rests on the innovators and entrepreneurs who assume and accept the benefits and risks of an initiative. Based on my interviews, I see a few common denominators that define the innovator's playbook. The best entrepreneurial innovators nurture a childlike mind. They are playful, open-minded, and unrestrained by the inner voice of reason, collective cynicism, or fear of failure. They also aspire to be at the forefront, as the proverb says, preferring to be the head of the rooster rather than the tail of an ox.

But they maintain a dose of sensibility in managing innovation teams, akin to parents teaching their children to ride a bicycle. That is, they teach, support, and help, but what is most important is that they learn when to let go and maintain fine balance. They refrain from giving

their staff a crutch to rely upon, which would stifle the innovation process. These entrepreneurial innovators often accelerate the innovation process by ensuring that the organization reaches “escape velocity,” thereby unleashing its energy and transforming latent ideas to create new products and services.

In a large, growing market, these entrepreneurial innovators can revolutionize industry structures. Large incumbents typically listen to their customers, who are not likely to express a desire for radical innovation. By contrast, entrepreneurial innovators identify a niche where there is demand for radical innovation and then rapidly introduce changes and start challenging leading players to catch up. The top Chinese entrepreneurial innovators benchmark the best in their businesses as well as in other lines of businesses. A healthcare screening company gained new insights by studying service modules and automation of a semiconductor foundry. A sports retail company adapted the traits of the hospitality industry and customized them for the service industry. A car-rental company adopted the best practices in global positioning systems and robotics and applied them to automated car rental.

In the face of increasing international and domestic competition, innovation is the key strategy that Chinese companies are promoting to improve their performance and returns to stakeholders. The overriding factor and the single most important driver of successful innovation is talent. Betting on the best talent, the entrepreneurial innovator chooses between acquiring talent on the free market or buying and building talent. The best entrepreneurial innovators have definitive strategies for doing both.

In this aspect, the innovation journey can also be analogous to football (soccer). Teams aspire for success on a global stage where a good performance typically raises the inflection point of the team. This results in more expensive acquisitions that are perceived to be of lower risk, because the talent has proven itself demonstrably in the marketplace. The talent pool is increasingly globalized across national boundaries. Just as a football team doesn’t have complete information about what a player’s true level of ability is on draft day, the entrepreneurial innovator doesn’t know the real potential of any one innovation project. Good teams collect as much data as possible and have sophisticated models to project future performance. Entrepreneurial innovators also arm themselves with a well-organized talent-scouting team to gather multiple data points in preparation to draft innovation opportunities.

Voices of Experience

Chinnovation shows you how premier innovative Chinese firms such as Neusoft, SMIC, and Ctrip innovate on their ideas and turn them into commercially viable ventures, and how entrepreneurs can make important changes to the people and processes required to translate their ideas into world-class companies in China. It offers you:

- The liberating concept that innovative initiatives improve performance, because A teams make initiatives successful and lesser teams don't
- A “magic carpet” technique in developing innovative processes
- A guide to coaching start-ups effectively
- The ultimate innovation development manual
- Insight and advice acquired by interviewing dozens of world-class innovators
- An easy read

Having gone through the long process of researching, writing, checking, revising, and editing *Chinnovation*, I have learned that the innovation marathon is not simple. Happily, my task did not require me to become an expert on innovation; I only had to interview experts, top entrepreneurial innovators, and VCs and invite them to share their insights, anecdotes, and advice—a far more manageable goal. *Chinnovation* illustrates the trials and tribulations that an entrepreneur has to go through to finish the innovation race.

This is not a book on current best practices; rather, it separates the truth from the myth, drawing from the journeys of innovative Chinese entrepreneurs who have worked with star venture capitalists, distilling them into a primer on what some of China's best innovative business leaders have in common. It showcases examples of the transition from “Made in China” to “Innovated in China.” The book also has hiring implications. Suppose you are an entrepreneur looking to hire a chief innovation officer: What kind of experience do you need to find? Would the candidate be able to withstand the trials and tribulations of the long journey?

For more tools, tips, and tricks, further resources are available at www.chinnovate.com.

Among the many interviewees featured in *Chinnovation*, here are the key people I consulted:

Executives (Featured Technology Innovators)

- Liu Jiren, CEO, Neusoft
- Nick Yang, Founder, KongZhong, Chinaren.com, and Wukong.com
- Richard Chang, Founder, Semiconductor Manufacturing International Corporation
- Jane Yan, CEO, Venusinfo Technology (Venustech)
- Zhang Tao, CEO, Dianping
- Gary Wang, CEO, Tudou
- Liang Yi, Co-founder, Mobim
- Zhang Chaming, CEO, iPartment
- Zou Bo, CEO, Senodia
- Wayne Dai, CEO, Verisilicon

Executives (Featured Process Innovators)

- Jiang Xipei, Chairman, Far East Holdings Corp
- Wu Jianguang, CEO, Really Sports
- Qiu Xuefan, Vice Chairman, Zhejiang Chamber of Commerce
- Ray Zhang, CEO, eHi
- Wu Chihfeng, CEO, Carême and Luxefood Holdings

Venture Capitalists

- Neil Shen, Managing Director, Sequoia Capital China
- Chua Kee Lock, CEO and President, Vertex Venture Holdings
- York Chen, President and Managing Partner, iD TechVentures Ltd.
- Tan Lip-Bu, Chairman and Founder, Walden International
- Lee Kheng Nam, Venture Partner, Global Granite Ventures
- Hsu Ta-lin, Founder and Chairman, H&Q Asia Pacific
- YK Chu, Managing Partner, WI Harper

**Basic Overview of Terms and Concepts:
Innovation 101**

It is interesting (and a little amusing) to note how many organizations in recent years have adopted the word *innovation* as a core value or as part of their mission statements. However, innovation means different things to different individuals. Industries never stand still; they continually evolve. Operations improve, markets expand, and players come and go.

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Broadly, innovation has been understood by many as incremental and emergent—or radical and revolutionary—changes in thinking, products, processes, or organizations, but the exact definition is difficult to pinpoint.

Much has been written by academics on innovation, and there are many frameworks to enumerate. Here are a few lucid and coherent concepts to set the stage for discussion.

The first concept, *disruptive innovation*, a term coined by Clayton Christensen of Harvard Business School, describes a process by which a product or service sprouts as a simple application at the bottom of a market and then relentlessly moves upmarket, eventually displacing established competitors.² How do you identify this pattern? As Figure 1.1 shows, it allows a whole new population of consumers access to a product or service that was historically only available to consumers with a lot of money or a lot of skill.

Another key concept is *value innovation*, or more popularly known as *blue ocean strategy*, popularized by W. Chan Kim and Renée Mauborgne, professors from INSEAD. The central thesis of blue ocean strategy is that blue ocean is created when a company achieves value innovation that creates value simultaneously for both the buyer and the company. This is often achieved at simultaneous pursuit of differentiation and low cost.³

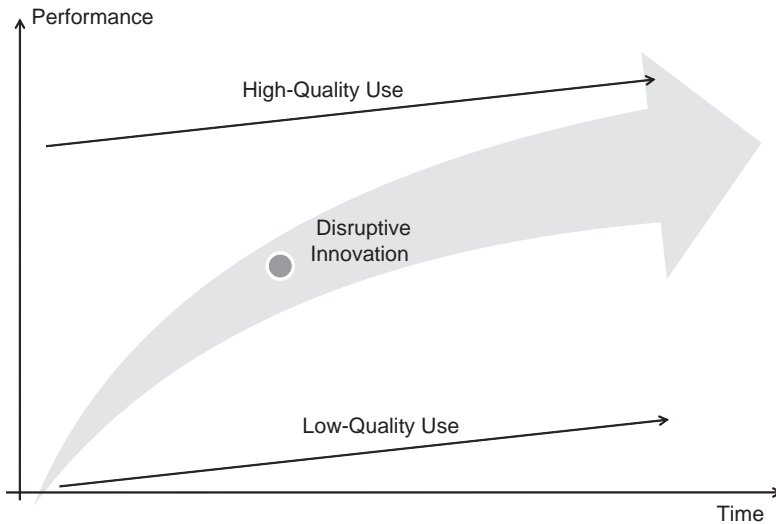


Figure 1.1 Figure Illustrating Disruptive Innovation.

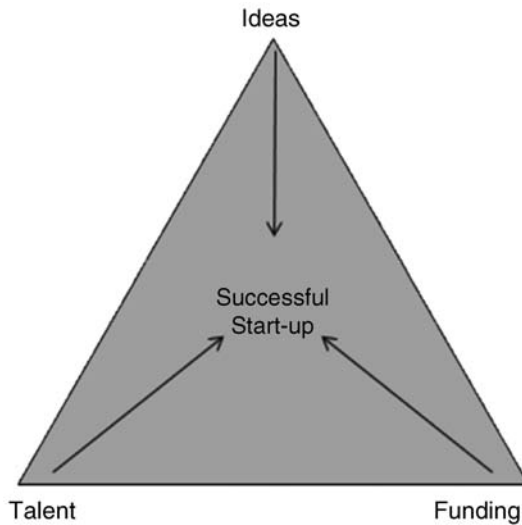


Figure 1.2 The Trinity of Innovation.

The third concept is the *trinity of innovation* (Figure 1.2), which John Kao, author of *Innovation Nation*, alludes to.⁴ The basic constituents of innovation are ideas, people, and money. In Silicon Valley, innovative start-ups form when an entrepreneur (human capital) with an idea (intellectual capital) approaches a venture capitalist (financial capital). This is the same as Hollywood, when an agent (people) with a script (idea) approaches a director (money) and makes a successful movie!

Scope innovations are primarily associated with supply-side changes, usually resulting in a better, cheaper, or faster product, typically enabled by technology. This usually includes *cost-innovation* (a concept coined by professors Peter Williamson and Zeng Ming) or *reverse innovation*, the practice of competing in niche markets and customizing products at mass market low prices. This can also include demand-side changes, such as increasing or decreasing the scope of marketing and distribution of different types of products.

What do sports and service industries have in common? How about bread and education or cars and phones? At first glance, it's easy to assume the answer is *nothing*. But out of each of these seemingly random combinations have come radical innovations in China that have created whole new fields. These *cross-discipline innovations* are fertile zones where ideas from different fields and cultures meet and collide, ultimately

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igniting an explosion of extraordinary new developments where processes from one industry are adapted in another industry.

Industrial evolution involves radical series of innovations that redefine the borders of an industry. The changes may not be noticeable initially, but beyond a certain tipping point, accelerates rapidly. This typically results in large-scale changes in the industry world view that are eventually implemented and accepted by the majority—as past norms and assumptions become obsolete. Examples include the DVD replacing VCR (When was the last time you popped a videotape into your VCR when you wanted to watch a movie?) and desktop processors replacing commercial print shops.

Crowdsourcing is a distributed problem-solving and production mechanism which many of the innovators featured here use, and is simply the act of outsourcing tasks to a large group of people or community (a crowd) through an open call. First coined by Jeff Howe, the term *crowdsourcing* stems largely from the fact that technological advances have allowed organizations to tap into the global world of ideas, helping organizations work through a rapid design process.⁵

Service innovation is a new or significantly improved service concept that is taken into practice. It can be, for example, a new customer interaction channel, a distribution system, or a technological concept—or a combination of them.⁶

(Ch)innovation

Armed with these frameworks, I set out to understand the various innovative Chinese companies. I found it an arduous task. Even though these concepts captured various facets of innovation in Chinese companies, none of them quite squared with some of the observations I made—gaps and inadequacies turned up in each of the case studies. The most striking incident was when I sat in a top business school, in a classroom full of China's senior executives. As the faculty member thoroughly dissected the innovation strategy of a particular Chinese enterprise and the factors it was dealing with, one of the executives stood up and retorted in Chinese: “Professor, I thank you for the comprehensive analysis that you have, but your explanation cannot be further from the truth. Our company has worked closely with this company for 15 years and I am a close friend of the CEO of the case study.” He then proceeded to give a 20-point rebuttal on why the faculty's concept and frameworks did not tally with the facts and figures that he had obtained from sources within the company.

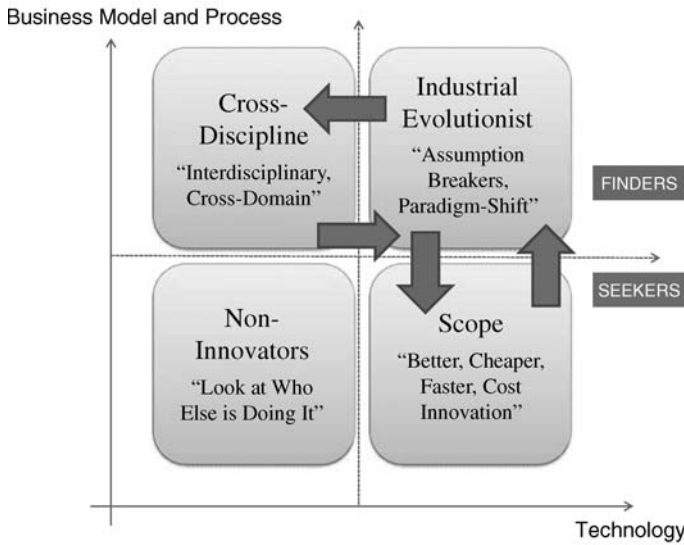


Figure 1.3 The Matrix of Technological and Business Model Innovation.

I wondered if perhaps there might be another way to describe and understand innovation in China, so I set out to quantify a matrix of innovation. On the matrix (shown in Figure 1.3), firms are classified into one of four groups—scope innovators, cross-discipline innovators, industrial evolutionists, or non-innovators. The scope innovator makes a better, cheaper, faster product and specializes in making a “new” product. The cross-disciplinary innovator cross-pollinates disciplines and routinely plugs in business models from other fields and enhances the whole process, usually in the form of service innovation or business model innovation. The industrial evolutionist looks for frontiers, often shifting the tectonic plates of an entire industry. The non-innovator is typically risk-averse and looks around to see how others are doing things before adopting anything new.

Cross-disciplinary innovators and scope innovators can be “seekers,” continually seeking to improve without knowing exactly what they are looking for, or “finders”—people who typically know what they want and make sure they find it.⁷

However, this description is incomplete. Innovation is merely a means to an end. What matters is not innovation for its own sake but *useful* innovation. The key question is whether the innovation creates value. Are the customers happy? Will they refer other customers to you? One of the

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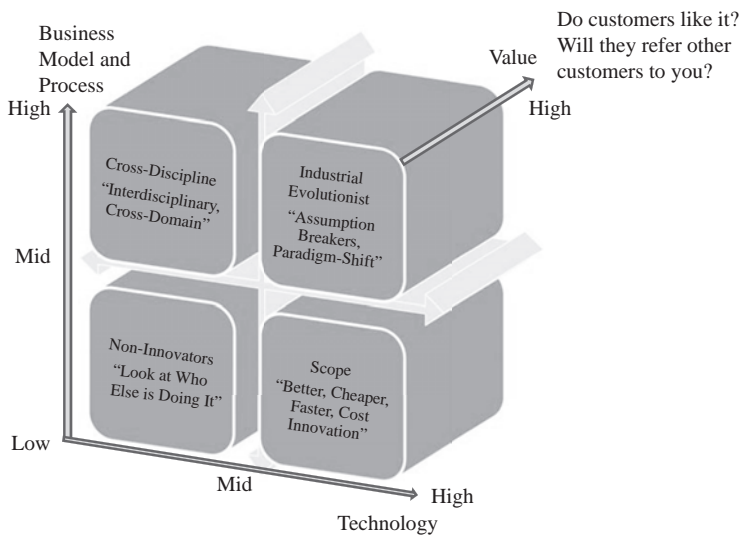


Figure 1.4 Innovation Stack.

people I talked with believed that pen-writing software would replace computer keyboards and mice in China, given the Chinese proclivity for writing in *kanji* characters. However, widespread adoption has failed to materialize in China, simply because most customers do not derive greater utility from this technologically advanced device. Perhaps a useful way to frame your thinking on the topic is the *innovation stack* (Figure 1.4).

For the scope innovators, making a better, cheaper, faster new product matters only if it fulfills an unmet customer need. The cross-disciplinary innovators, who learn lessons from other industries and readapt their business model, have to deliver overall greater value to the customers. Do they deliver their services in a more “usefully innovative” manner? The industrial evolutionists, who look to shift the tectonic plates of an entire industry, must find the right permutation of technological and business model innovation such that the end product makes sense in terms of higher benefits and lower cost for the customer. Thus, the third dimension comes in the form of value to the end customer and user.

So What Is Chinnovation

In a nutshell, what is “Chinnovation”? A Chinese entrepreneur trying to sell mid-price products in rural areas instead of cities—is that

Chinnovation? There are key differences between innovative ideas and *innovation*—the latter being the execution and implementation of innovative ideas to create value. Is Chinnovation referring to product and technological innovation, or could it be an innovation in process, marketing strategy, or human resource policies?

Chinnovation

Chinnovation is applying changes in technology and business strategy to have new and better ways to create value for both the customer and the corporation. In China, this is often characterized by eight distinctive characteristics (termed the ‘Eight Rs of Chinnovation’):

- Revenue
- Rapidity
- Requirements
- Reproduction
- Rivals
- Restrictions
- Remixing
- Raw Materials

Revenue

Compared to their Western counterparts, Chinese innovators are laser-focused on revenues. If one compares Facebook to QQ (China’s largest social networking service), Facebook has 300 million active users compared to QQ’s 450 million users. Facebook was only recently profitable while QQ has a \$2 billion revenue and \$1 billion profit.⁸ Eric Tao, vice president of Keytone Ventures (formerly an associate at Kleiner Perkins Caufield and Byers China) concurs:

The investment strategy for China is very different. Companies like Google with 100X returns don’t come to China. VCs tend to do later-stage deals and invest in the later rounds. For example, U.S. Kleiner Perkins offices invest in over 30 pre-revenue companies. The KP office in China is completely the opposite; our

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China team never invests in companies without revenue, unless the company has an extremely convincing model and revenue and clear customer absorption rate.

Rapidity

Chinese innovators move fast. One of the innovators I talked with acted on an inspiration days after Michael Jackson's death, securing the rights to build a Neverland Ranch in China. In manufacturing industries, certain companies that started off doing OEM for foreign firms have moved from OEM to ODM to Research & Development to taking over the entire value chain within a couple of years. One of the innovators I interviewed took only 18 months between starting a company and listing it on NASDAQ. *Rapidity* also refers to the rapid prototyping process, where Chinese innovators are lauded for engaging with customers closely to develop products and sales processes—quickly in a series of iterations.

Requirements

Requirements are whatever the customers say they are. Chinese innovators are highly localized and sensitive to the needs of their customers, as they pay close attention to people struggling with solutions available in China. Widely perceived as the world's largest manufacturing base, China has innovators who understand that the higher value in the chain is in consumer-facing innovative products. By tapping China's cost advantage in niche markets to increase their process flexibility, China's innovators are fulfilling the requirements of their customers at rock-bottom prices.

Reproduction

One Facebook in the U.S. will spawn 20 copycats in China overnight. There is a fine line between innovation and low-value reproduction. On the other hand, there's a lot of pressure to copy. Several Chinese entrepreneurs told me that VCs refused to fund them because their business model was not based on a proven U.S. business model. Zany Zeng, co-founder of Oak Pacific Interactive, says: "There are more me-too innovations in China. When I operated Xiaonei, I'd change its homepage when Facebook changed theirs, without understanding why.