INNOVATIVE TO THE CORE

This page intentionally left blank

INNOVATIVE TO THE CORE: STORIES FROM CHINA AND THE WORLD

AUTHORED BY

JUAN ANTONIO FERNANDEZ

China Europe International Business School (CEIBS), China

EMILY M. DAVID

China Europe International Business School (CEIBS), China

AND

SHAOHUI (SOPHIE) CHEN

China Europe International Business School (CEIBS), China

emerald PUBLISHING

United Kingdom – North America – Japan – India
Malaysia – China

Emerald Publishing Limited
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2023

Reprints and permissions service
Contact: permissions@emeraldinsight.com

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN: 978-1-80455-084-7 (Print)
ISBN: 978-1-80455-081-6 ((Online)
ISBN: 978-1-80455-083-0 (Epub)

To my wife, Hanning, and my three sons, Simon, Oscar, and Daniel. They are the best that life has given me.

– Juan Antonio

For Diego – my proofreader, support animal, and the love of my life who also happens to be the most innovative person I have ever met. Thank you for doing life with me and making each day more exciting than the one before.

– Emily

To my loving family and friends as my extended family.

– Sophie

CONTENTS

This page intentionally left blank

LIST OF FIGURES AND TABLES

Figures

Tables

This page intentionally left blank

ABOUT THE AUTHORS

Juan Antonio Fernandez is an Emeritus Professor of Management at China International Business School, Shanghai, China, where he has been a Professor since 2000. He was an Associate Dean and Director of the MBA Program from 2018 to 2020, which ranked two consecutive years fifth worldwide on the *Financial Times* index. He was also the Global EMBA Director from 2012 to 2015. He has taught executive programs in leadership, leading change, and innovation to companies such as Volkswagen, Bank of China, PingAn, IBM, Tencent, Jaguar, Volvo, L'Oréal, and other multinationals. He was a Fellow at Harvard Kennedy School of Government from 2011 to 2012 and again in 2016 and was Visiting Scholar at Lancaster University (UK) in 2006 and 2009.

His prior experience includes serving as the CFO and member of the Board of Directors of Anfi del Mar S.A. (Norway), Advisor to the Ministry of Commerce of the Canary Islands, and financial Analyst for the Industrial Spanish Bank, Spain. He was also the Assistant to the Commercial Attache? of the Spanish Embassy in Venezuela.

He has co-authored seven books, including *China CEO II, China CEO, China Entrepreneur, America Latina en China*, and *China's State-owned Enterprise Reforms*. He has given presentations about his Chinese research in the UK, India, Japan, South Korea, France, Italy, Chile, Peru, Mexico, Mongolia, Ghana, Zambia, and Spain.

He received his PhD and MBA from IESE, Spain. He has a Master of Liberal Arts in Psychology from Harvard University and is currently pursuing a degree in Philosophy from Oxford University.

Emily M. David is an Associate Professor of Organizational Behavior at CEIBS. She earned her PhD in Industrial-Organizational Psychology from the University of Houston and did her undergraduate work at Louisiana State University, earning a perfect 4.0 grade point average. Prior to joining CEIBS, she was an Associate Professor of Management in the College of Business at Zayed University in Dubai, UAE where she served as the Discipline Leader of the HR and Management faculty.

Her current research primarily focuses on discovering how to make workplaces more welcoming for people of all backgrounds and personality profiles in order to achieve better person–organization fit, maximize performance, and avoid employee burnout. She is also interested in fostering helping and other prosocial behaviors in the workplace. Her work has been published in a number of top scholarly outlets such as the *Journal of Management, Journal of Management Studies, Human Relations*, and *Journal of Organizational Behavior*. She was also awarded Poets & Quants prestigious "Best 40 under 40 Business Professors" in 2019.

She is an active member of the Academy of Management and Society for Industrial and Organisational Psychology. She has also worked as an In-house Researcher at both NASA (Wyle Laboratories) and the M.D. Anderson Cancer Centre in addition to consulting for a myriad of organizations including the City of Houston, Kuraray, Saudi ARAMCO, and Exxon Mobil. A true global citizen, she has also traveled extensively through over 42 countries, and has resided in Singapore, China, the UAE, Bolivia, and the USA.

Shaohui (Sophie) Chen is a Professor of Management at CEIBS, where she has been doing case development, teaching, and research work since 2005. She has been serving as the Program Director of Advanced Management Program (a flagship program of Executive Education in CEIBS) and Management Development Program for years. She is also the Core Faculty member of CEIBS Healthcare Sector Research Centre. She had taught at China Institute of Banking and had worked as senior executive for companies in the securities industry for several years.

She received her PhD from The University of Auckland and MS from Renmin University of China. Her research interest has been concentrated on management and employment relations, organizational behavior, leadership, and human resource management. Her research outcomes has been published in academic journals including the *International Journal of Human Resource Management*, the *Asia Pacific Journal of Management*, and *Employee Relations*. She also writes for Chinese business magazines and practitioners. Since 2016, she has initiated a project of Middle-level and First-line Manager Competence Survey and published white papers for three consecutive years.

Her teaching interests focus on organizational management, human resource management and leadership development. Beside teaching for degree programs such as MBA/EMBA and Financial MBA, she has been providing corporate-specific training programs to companies such as China Development Bank, COMAC, Google, CMBC, BCM Leasing, SAICMOTOR, Shanghai Pharma, Tai Ping Life, Sinochem, Eli Lilly, Astrazeneca, Novartis, SANOFI, West China Hospital, Masterkong, Thermo Fisher, Carl Zeiss AG, Huazhu Hotel, etc.

She has been active in providing consulting services and serves as leadership coach and independent director for domestic companies and organizations. She has been the independent member of the Board of Directors of Shengang Securities O. Ltd, the first China-Hong Kong joint venture security company.

ACKNOWLEDGMENTS

We would like to thank, first and foremost, CEIBS for the generous research support that allowed us to undertake this project. We also thank each and every one of our interviewees for sharing the invaluable insights that made this book possible. Finally, we are hugely appreciative of our dedicated agents, Nick Wallwork and Christopher Newson.

1

INTRODUCTION

It is not the strongest of the species which survive nor the most intelligent, but the species most responsive to change.
– Charles Darwin

Today, most companies are on a quest to become more innovative. By that, they often mean going digital, selling their products online, updating their website, or creating a mobile App. Although all of these are great initiatives, we believe that true innovation runs deeper than these surface-level interventions. To quote the old saying of "putting lipstick on a pig," such efforts in isolation often mean that the exterior changes but the core remains the same. This book is about helping cultures to become innovative to their core, so that innovation becomes the default way of doing things rather than a one-time cosmetic change.

Innovation, like leadership, is something that people can easily identify but often have more trouble defining. In informal discussions, it is frequently used interchangeably with words like creativity and invention. However, there are crucial differences between these overlapping concepts. Creativity is simply the generation of new ideas. Some of these ideas might become new products and services, but many will either die or accumulate dust in a forgotten location. Inventions, by contrast, are the creation of a new product usually in a lab or a research center. Many inventions become patents that can be incorporated into future products. Often, inventions take time to mature and evolve until they become a viable product.

Although innovation incorporates creativity and invention, these two factors alone are not sufficient for innovation to occur. We define innovation as a change in a product, a service, or business model that helps to drive profits or gain market share. The willingness of consumers to pay for the new product or service is the key defining factor that distinguishes innovation from creative ideas and new inventions. Kenneth Yu, the former President of 3M Greater China Area, eloquently described innovation in the following way.

> *First and foremost, innovation is an art. It is not a science, although because of innovation, a lot of scientific new things can be introduced. But the concept of innovation by itself is not a science. You cannot say that if the company follows these steps the company or the person will become innovative. It doesn't work that way. You need a culture that has to be developed over time.*

This perspective captures the fact that, while easy to understand conceptually, innovation is often quite difficult to introduce in practice. To effectively bring innovation to the core, there are no shortcuts or one-step solutions. Instead, organizations need to be nurtured and reinforced through multi-faceted efforts to change the leadership practices, systems, and employee behaviors. Each of these factors alone is insufficient to induce innovation to the core. Consistent messages from all three components are needed to produce deeply ingrained innovation so it becomes the way of doing things in the organization. Kenneth from 3M shared with us that sometimes innovative products may seem like failures until their time comes. New ideas might be born ahead of their time but should not be forgotten; someday they might find their market.

INNOVATION STORIES

An Invention Ahead of Its Time at 3M by Kenneth Yu

Someone invented a way to recycle light. You know, light goes in all directions. We developed at 3M a film that reflected the light back so that the light is not wasted. This resulted in a light bulb that consumed only a small fraction of the normal energy needed. But how many bulbs can you sell? Besides, the margin is very small. In a way, it was a marginal invention for 3M. Years later, the world saw all the new products like notebook computers, cell phones, iPads, digital TVs, etc. If you use your cell phone, you care about battery life. The amount of power in your battery is limited, so the solution was to have bigger batteries. Our customers came to us with this challenge – how can we reduce the energy consumption so that we can have smaller batteries and reduce the size of those gadgets?

The highest consumption of energy comes from the screen. Somebody at 3M remembered the film that reflected the light back and forth and they tested it. It worked very well; the screen looks just as bright with less energy consumed, therefore leading to longer battery life. The film was able to recycle about 90% of the light coming out from the light source. A high-definition TV consumes more power, and all the components are much hotter as the light increases. You must make a large light enhancement film to use less power. As an example of incremental improvement, the film didn't just enhance the light, it also enhanced the sharpness of the image. And the rest is history. Until today, as we are talking, 3M still owns a lion's share of many of the large panel TVs.

In the story above, Kenneth provides an example of an invention that ultimately revolutionized the industry but took years to become an innovation. The film was invented about two decades before 3M was able to monetize it. Kenneth added:

> *Commercialization is just like this. 3M made a lot of money with this film. The customer is also happy because now the cell phones and the notebooks can work for a much longer amount of time. This is an example of an invention that became a great success years after it was created.*

This highlights the importance of company memory, so inventions are not forgotten when their time comes.

Often when people think about innovation, they mistakenly assume that it must be something completely novel that disrupts the old ways. As an example of disruptive innovation, Kenneth from 3M points to Thomas Edison's invention of the light bulb, which transformed the way people live. In contrast, modern innovations are often incremental improvements or old technology implemented in new contexts. As a key example of this distinction, Kenneth pointed to the Chinese giant, Alibaba:

> *Alibaba certainly did not invent the cell phone. They did not invent the QR code. They invented Alipay. Likewise, Tencent invented WeChat Pay, which is a new way of payment. But they were not the first companies that did this. Hong Kong had previously been using the Octopus Card,*

> *for example. But somehow, they came up with Alipay using existing technologies and took advantage of the fact that everyone has a cell phone [to innovate payment transactions in China].*

True innovation occurs when people have a vision for a better product or way of doing things and they can translate this idea into commercial value. To foster these types of ideas in countries and organizations, you must become innovative to the core. 3M is an excellent example of a company that has embedded innovation at all levels of the organization. The story of how Post-it notes were created by accident is very well known; what began as a failure to create a strong aircraft adhesive ultimately resulted in 3M's signature product. What is not so well known is how Post-it notes were initially commercialized.

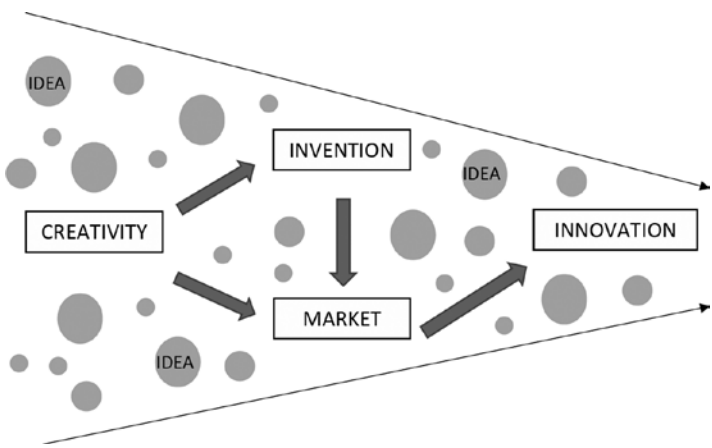
INNOVATION STORIES

How 3M's Post-it Notes Went Viral by Kenneth Yu

I was with 3M when the Post-it note was first invented. I can tell you a story now. This might be the first time you hear this. I got this from the person who championed the project. He lives in San Antonio and is a good friend of mine, Dr Geoffrey Nicholson. But he's not the only hero of this story. You may have heard the story about that the choir that used it as a paper marker. That is true. But that did not sell the product. We did not formally market or commercialize the product. In those days, they weren't called Post-it notes, we just called them sticky notes. Dr Nicholson noticed that the department secretaries at 3M really liked them. He talked to our CEO and asked him to send a box of sticky notes to other 500 CEOs of top companies in the USA. Our CEO asked those other CEOs to give the product to their secretaries to see if they like it.

If you are the CEO of Boeing, and you get a letter from the CEO of 3M, you do not throw it away. So, they gave the sticky notes to their secretaries and did not think too much about it after that. The secretaries started using these sticky notes on memos that they would send to the boss for signature and to other departments. Very quickly, the sticky notes propagated in the organization from the top down. So, the secretaries went to their bosses and asked for more sticky notes. They sent the request back to 3M CEO. Our CEO asked Nicholson to take care of it. We then stopped giving them away and commercialized them. We came up with a name, the packaging, and everything. You can imagine that each of the 500 secretaries could easily influence at least 10 others, so it went viral. Fluid communication inside the organization is key for innovation.

In sum, creativity is the generation of ideas. Some of these ideas become inventions, and creative outputs become innovations when they find a market (Fig. 1.1). To enhance the chances of this happening, we echo the sage advice of the two-time Nobel prize winner in physics, Linus Pauling, who once said, "The best way to have a good idea is to have a lot of ideas."



Source: Authors' original work.

Fig. 1.1. The Funnel Model of Innovation.

WHY WE WROTE THIS BOOK

Scholars and practitioners agree that innovation is perhaps more of a business imperative today than at any other point in history. When serving a world that is increasingly more volatile, uncertain, complex, and ambiguous (VUCA), countries and businesses must be able to agilely respond to changing environmental circumstances and consumer preferences.[1] Thriving in such a world requires leaders that can act on input from all levels, who design systems that reinforce innovative priorities, and who can anticipate the changing needs of its citizens and consumers. Continuous learning should take place and norms of open and informal communication should be encouraged. As we are currently living and working at the intersection of globalization, digitization, and a global COVID-19 pandemic, the time is ripe to further explore how innovative cultures at all levels can be built and reinforced.

Although much has been written on the topic of innovation, as business professors based in China, we saw a unique opportunity for a book that consolidates the lessons that China and the World can learn from each other. To this end, we aimed to better understand the core components of established innovative companies around the world in the hopes that firms can adopt some of these best practices as they continue their rapid progression from an innovation adopter to and innovation generators.

WHO IS IN THIS BOOK?

To build on the quantitative insights provided by our survey, we conducted 30 in-depth interviews with subject matter experts. To achieve a balanced perspective, we focused on gaining wisdom from top managers and consultants hailing from around the world. We focused on talking to seasoned business leaders who were either raised or had worked in some of the most innovative countries in the world and those who worked for some of the most innovative companies in the world. These included executives at multinational organizations, entrepreneurs, consultants, and people working for governments and in nonprofit innovation centers. In Tables 1.1 and 1.2, we provide a snapshot of the interviewees you will hear from over the course of this book.

Table 1.1. Experts and Consultants (In Alphabetic Order).

	Name	Nationality	Company	Position	Country	Website
1	Cameron Johnson	USA	Tidalwave Solutions	Partner	China	www.tidalwave.com
2	Daniel Wang	China	CEIBS eLab	Director	China	www.ceibs.edu
3	Hellmut Schutte	Germany	Former Dean Instead Singapore	Professor at INSEAD	France	www.insead.edu
4	Jari Grosse-Ruyken	Germany	hivetime	Managing Partner	China	www.hivetime.com
5	Jonathan Woetzel	USA	McKinsey & Company	Senior Partner, Director Global Institute	Global	www.mckinesy.com
6	Martin Bech	Denmark	Academy of Technical Sciences (ATV)	Advisor	Denmark	www.atv.dk
7	Nicolas Musy	Switzerland	The Swiss Centers	Founder	China	www.swisscenters.org
8	Omar Al-Busaidy	UAE	UAE Consulate in New York	Economic Affairs	Dubai	u.ae
9	Ramon Baeza	Spain	BGC	MG & Senior Partner	USA	www.bcg.com
10	Roy Chason	Israel	KnoHao	Founder	Spain	www.kno-hao.com
11	Tae-Yeol Kim	South Korea	Professor of Management	CEIBS	China	www.ceibs.edu

Source: Authors' original work.