

#### The Management Transformation of Huawei

Huawei has become China's most prominent multinational company and a leader in the ICT sector. Given unprecedented access to the company, the authors of this book examine the management transformation of Huawei from its inception in 1987 until 2019, observing in detail not only the creation of its organizational routines but also the breaking of routines across most major functional areas: management, product development, HR, supply chain, finance, R&D, intellectual property, and international business. "Dynamic capabilities" are central to theories of competitive advantage and this book highlights Huawei as an ideal case study for the successful implementation of change routines and change-supporting values. The chapters cover all the major change initiatives the firm has undertaken since 1996 to import best practices from the west, with the help of consultants. The insights presented in the book will be particularly interesting for academics in the field of strategy, management, and business history.

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# The Management Transformation of Huawei

From Humble Beginnings to Global Leadership

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### **Preface**

Ever since *Industrial Civilization* arose in the eighteenth century, enterprises based on the factory system have been the main players in the economic arena for most countries. In China, Jiangnan Manufacturing Bureau (the term bureau here, "ju" in Chinese, was used as part of the name for thirty-plus factories) was established in September 1865, and since then the country undertook more than 150 years of experimentation: the Self-Strengthening Movement (1861–1895), National Capitalism, Compradors, Public and Private Joint Ventures, 156 Soviet-Aided Projects and Soviet Experts, the Great Iron and Steel Production Movement, the Great Leap Forward Movement, The Charter of the Anshan Iron and Steel Company, Learning from Daqing in Industry Development, the Self-Reliance Plan, and so on. It is a fact that China has never stopped learning from the developed world – the United Kingdom, Japan, Germany, the United States, and the Soviet Union.

Such learning became more intensive with China's "Reform and Opening-up Drive" in the late 1970s. After going through many setbacks, China finally started to catch up. In terms of the scale of manufacturing, the endeavor to surpass the United Kingdom and to catch up with the United States in the 1960s was obviously not so successful. But today China has managed to exceed the United Kingdom, Italy, France, Germany, and has eventually taken over Japan and the United States in terms of the size of its economy. In the past decade a good number of Chinese companies have come a long way from "catching up" to becoming global leaders in their own right.

Today's bookstores, libraries, internet platforms, and social media networks are filled with many heroic tales of successful companies – so many that it is almost confusing for the readers to make their selections. As scholars, when we reflect on the

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achievement some of the leading companies, we aim to go beyond telling inspirational tales and ask the "why" question behind the success. What were the reason why some companies became so successful while many others languished or failed?

Many well-known management theories are been developed since the advent of *Industrial Civilization* that pose these "why" questions: from the United Kingdom, Adam Smith's The Wealth of Nations and Division of Labor Theory; from France, Henri Fayol's General and Industrial Management and Fourteen Principles of Management; from Germany, Max Weber's The Protestant Ethic and the Spirit of Capitalism and Bureaucratic Management Theory; from the United States, F. W. Taylor's The Principles of Scientific Management, Elton Mayo's Human Relations Management Theory, Maslow's Hierarchy of Needs, Herbert Simon's Decision Making Theory, Peter Drucker's Modern Management Theory, Michael Porter's Competitive Strategy; from Japan, William Ouchi's Theory Z, and also theories of Total Quality Management and Lean Production developed by the Americans based on the Japanese business management practice, and on top of these, there are also books distilled from management practices from those world-renowned companies that have created global impact, such as: Alfred Sloan's My Years with General Motors, Alfred Chandler Jr.'s The Visible Hand: Managerial Revolution in American Business, Takahiro Fujimoto's The Evolution of the Toyota Manufacturing System. By no means is this list exhaustive.

With rise of Chinese economy in recent times and the success of some its firms on a global scale, there has been considerable interest both in China and the rest of the world to understand how similar or different the management of Chinese firms are from the management of firms in Western countries. To what extent are management principles universal and to what extent are they idiosyncratic to development stage and the cultural and social conditions of a country? These are questions that not only are central to the contemporary scholarship but also of great interest to the



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leading Chinese and Western companies that operate in the Chinese context.

A few years ago, I had a long conversation with Ren Zhengfei – the founder of Huawei – and Tian Tao, who has been studying and writing about Huawei for many years. That discussion covered the historical changes in both China and the world at large, and our thoughts went back to thousands of years in time. Just like everyone else, we marveled at the continuous growth of the Chinese economy since 1978. After the country implemented the Reform and Opening-Up Strategy, Chinese companies grew at an exponential rate. It is clear that the Chinese companies that became successful were deeply committed to learning from the West in all managerial aspects. But they did not necessarily follow the same development path of Western companies. We also suspected that their success could not be completely explained by the Western management theories. Chinese companies appeared to integrate the traditional Chinese "dialectical Yin and Yang" and "grayness" concept into their management practice, but the gap between "knowing and doing" had yet to be bridged, and the traditional term "Confucian Merchants" could not define them anymore. In a short period of thirty years, Chinese companies went through an equivalent of 100 years of development for their Western counterpart. Companies transitioned from catching up to taking the lead in some sectors, from quantitative change to qualitative change. It seemed to us that these trailblazing Chinese companies deserved to be studied with the same scientific rigor that Western scholars brought the history of IBM, General Motors, Intel, and the like. Furthermore, we strongly felt that the results from such systematic analysis of leading Chinese deserved to be widely disseminated.

Driven by such a mission, and with the support of Tian Tao and a group of former Huawei executives, the Ruihua Innovation Management Institute was founded at Zhejiang University School of Management, codirected by Tiao Tao and myself. We organized quarterly forums on Huawei's management to analyze key



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experiences of Huawei, to find possible rules and principles behind Huawei's management experience, and to extract theoretical ideas that could be applied to other companies. The quarterly forums brought together a large number of retired Huawei executives and scholars. (A list of all presentation can be found in Appendix B.) These presentation and other interviews we did with former Huawei managers formed an invaluable source of information that allowed us to go beyond the material that is available in the public domain to piece together as systematic as possible and account of the management transformations of Huawei.

Just as the core idea of microeconomics features Pareto optimality, for more than a century, the core idea of management has been to establish a balanced and effective allocation and collaboration system, and the core proposition for companies has been to build a stable equilibrium and maintain it for efficiency via means of management. However, Huawei's management practice tells us that when change becomes the new norm, when breaking balance becomes an active means of management behavior where interferences such as iteration, trial and error, mobility, uncertainty, and ambiguity or grayness is no longer exceptions but the rule. The significance of this book in my view is that it takes us behind the scenes of Huawei, but also to show a new perspective of achieving nonlinear growth. For me the book is a new starting point for committing to sorting out the nonlinear growth management law of Chinese companies and the formation of "C theory."

Over the past several years, our research team endeavored to investigate multidimensional facts about Huawei, taking the perspective of time and motion, of change and stability, to discover the key points from Huawei's dynamic process of establishing equilibrium and breaking equilibrium and to reveal the science behind its success. Of course, it is impossible to present Huawei's key for success and come up with a set of complete, in-depth theories in just one book. We admit that we have not said everything one could say about this topic. But we are confident that this book is the most



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systematic attempt to date to critically observe and examine the transformation of the Huawei's management practices during its first thirty years of existence from 1987 to 2017.

I would like to extend special thanks to Mr. Tian Tao, Mr. Hu Yanping, and many of the Huawei people for making themselves available to our research team. Without their willingness to share their experience and insights on the history of Huawei, this book would have far poorer. After the first draft of the book manuscript came out, they gave rigorous feedbacks to the viewpoints presented in the book and helped spotting some factual errors we had committed in our analyses and interpretations. I would like to emphasize that the views expressed in this book should not be construed as the views of anyone within Huawei. This book represents an academic effort. The interviews with members of Huawei are only a small portion of information we analyzed. The authors of the chapters and commentaries came to their conclusions based on all the evidence available as will be apparent in the extensive reference list at the end of each chapter. I would also like to thank the commentators who are renowned experts on their subjects, and have given of their time in discussing the draft of the chapters. I am indebted to their insight and comparison between Huawei and other successful companies that they are familiar with, which greatly enriched the contents of this book. Last but not least, I am grateful to our co-authors, many of whom are our former and current PhD students. Without them, this project would not have been possible.

But this book is only the beginning to study Chinese enterprises to extract from their management practices a "C theory" in a general sense. To be sure, other Chinese companies need to be studied in detailed before we can be certain of the robustness of our theoretical ideas.

Xiaobo Wu

