

## Zero Distance

“When Danah Zohar first published the early ideas of her Quantum Management Theory in the late 1990’s, she articulated a new paradigm, inspired by quantum physics, and began a major contribution to our search for a new management theory that can replace outdated Taylorism. Now, in *ZERO DISTANCE*, the most comprehensive account of her project, she outlines how the theory has been implemented through the revolutionary RenDanHeyi business model of China’s Haier Group, and subsequently several other large companies. Zohar’s suggestion that the Haier model also offers a new social and political model is thought provoking. This book is a significant addition to our continuing conversation about the best way to manage companies and other human social systems. I recommend it highly.”

—Gary Hamel, *London Business School, Author of Humanocracy*

“We live in times when healing is required. In business, we must heal the distance between management and employees. In our globalised world, we need to heal the distance between East and West. And for the sake of both our leadership and our souls, we must find a way for science and spirituality to work together. With *Zero Distance*, Danah Zohar has produced a book that demonstrates how we can rid ourselves of corrosive fragmentation and misunderstanding. She shows that an inclusive, enlightened business can flourish while bringing benefit to all, and that quantum physics and the Tao offer a path for common understanding between East and West.”

—Lord Andrew Stone, *Former Global Managing Director, Marks & Spencer Plc*

“I have benefited greatly from the quantum management theory developed by Professor Danah Zohar, which has accelerated our departure from classical linear management models and creation of the non-linear business model that is known as Rendanheyi. In her newest book, *Zero Distance*, Professor Zohar explains with both theoretical depth and practical breadth how to cope with a VUCA world in this networked era.”

—Zhang Ruimin, *Chairman of the Board and CEO, Haier Group*

“*Zero Distance* brilliantly describes the revolutionary scope and depth of the management transformation process in which I took part at Roche India. I will be an ambassador for Quantum Leadership for the rest of my life, as I have tried it and there is no single doubt that it works!!! Quantum physics explains the universe, including us, so why should it not work in companies? I thank Danah

Zohar for changing my professional and private life, and for giving me things to get better at in both.”

—Daniel Pluss, *Finance Department Head Africa and Global Market Development & Operations Lead, Roche Pharmaceutical*

“This is a terrific book. It leaps from quantum physics to management to some of the most profound issues of our day including COVID-19. It is a stark reminder that connectivity and uncertainty go hand-in-hand, and that the best managers will nurture small self-organized teams and challenge them to produce extraordinary results rather than commanding top-down. The exemplars of quantum management are extraordinary, from the U.S. military to Roche India to the China-based Haier Group. I found the text very stimulating. It made me think.”

—Marshall Meyer, *Tsai Wan-Tsai Professor Emeritus of Management and Sociology, Wharton Business School, University of Pennsylvania*

“Danah Zohar’ *Zero Distance* is a *tour de force* exposition of the 21st century quantum organization as a complex adaptive system—an inevitable evolution of the rigid, non-adaptive bureaucratic structures of the 20th century. These new organizations, including Haier Corporation and GEA, Roche India and the U.S. Army, resemble not so much a single ship but a fleet with many ships, each with its own captain and crew and its own local mission to accomplish. The overall leader is the “admiral of the fleet” who provides strategic vision, guiding spirit, a central operational system, services and resources for the many ships in the fleet, working not *on* people but, rather, *through* people.”

—Stephen Denning, *Author of The Age of Agile*

Danah Zohar

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Management in the Quantum Age

palgrave  
macmillan

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ISBN 978-981-16-7848-6      ISBN 978-981-16-7849-3 (eBook)  
<http://doi.org/10.1007/978-981-16-7849-3>

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Cover design by Mind Times Press

This Palgrave Macmillan imprint is published by the registered company Springer Nature Singapore Pte Ltd.  
The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore

*For Zhang Ruimin, my personal “Yinxi” -*

*Here is your book. Now I must pass through the gate, and leave Zhou.*

# ON MANAGEMENT MODEL INNOVATION IN THE INTERNET OF THINGS ERA: FOREWORD BY CEO ZHANG RUIMIN

One important topic in the large body of economic research concerns wealth creation and sharing. Organizations today are not yet capable of achieving both goals together, but Haier's Rendanheyi model is breaking ground toward these two goals. In Rendanheyi, "ren" refers to employees; "dan" refers not to orders, but users; and "heyi" means to connect employees and users and to link the value created by employees to the value experienced by users, aligning value creation and value sharing for the employees.

Rendanheyi is a leading management model in the Internet of Things (IoT) era. In the industrial age, Chinese companies learned from Western management models. In today's IoT era, as companies experiment with new management models, Haier is looking to blaze a new trail.

Many examples testify to the importance of blazing a new trail. American high jumper Dick Fosbury invented his trademark flop which he first unveiled at the highly competitive 1968 Mexico Olympics. At that time, the competing athletes all used the straddle technique, so his unconventional method attracted laughs of ridicule from the crowd, until he won the gold medal and set a new Olympic height record of 2.24 meters. He then received a long standing ovation. Fosbury made history and completely revolutionized the sport of the high jump.

Professor Danah Zohar is a thinker who dares to chart new paths. Her fusion of quantum theory with management study has opened up new ways of looking at the world and at management. Her new book *Zero*

*Distance: Management for the Quantum Age* offers a novel and practical organizational model for individuals, businesses, and society at large. The twenty-first century is the era of quantum management. Grounded in Haier's own practice, the Rendanheyi model draws inspiration from traditional culture, adapts to the changing times, and provides a system for implementing quantum management principles. Professor Zohar has stressed the point many a time that the Rendanheyi model has confirmed for the first time the feasibility of quantum management in an actual business model.

Chinese companies used to be followers and imitators of Western companies and Western management models. Why must Chinese companies always follow in the footsteps of Western companies and management models? Why can't Chinese companies create a new model and lead, as Karl Marx wrote in the preface to *Das Kapital*, "Go on your own way and let people talk."

At Haier, there is a saying, "There is no such thing as a successful company. There are only companies that move with the times." Many companies like to talk about how successful they are, but no company should proclaim victory because perceived success depends on relevance to the current time and such relevance may not last. Even the average life span of Fortune 500 companies is diminishing. Therefore, what matters is to feel the pulse of the times and adapt to future trends.

A very compelling example of this concept is Kodak. Kodak had outperformed its competition to become the dominant film company but lost out to the digital age. This loss was not because Kodak didn't work on digital technology. As early as 1975, Kodak made the first digital camera prototype (although with only 10 megapixels). However, Kodak failed to keep up with the times and, despite research and development spending, it lost relevance in the digital age. During bankruptcy reorganization, Kodak's digital patent portfolio sold for a meager USD1.175 billion. One can say that Kodak did not lose to competition, but to the changing times.

Andy Grove, former president of Intel, says organizations need Cassandra. Cassandra was a priestess in ancient Greek mythology who foretold, among other things, the fall of Troy. However, organizations can't pin their hope on prophets. Instead, organizations must rely on people who truly have zero distance from their users.

The Golden Circle theory, proposed by American management scientist Simon Sinek, consists of three concentric circles. The innermost circle

is “why” (direction), the middle circle is “how” (pathway), and the outer circle is “what” (goal). One goes from asking “why” to achieving “what” and then asks “why” again. The cycle repeats itself. Today, my talk is built upon the Golden Circle framework.

Why is Haier disrupting the traditional management paradigm? Because it is doomed. How does Haier achieve disruption? It depends on the “RDHY scorecard, win–win value-added statement, and ecosystem brand” which we are experimenting with at Haier. Our ultimate goal is to become a leader in the IoT era.

## WHY DISRUPT THE TRADITIONAL MANAGEMENT PARADIGM?

The traditional management paradigm has failed in the following four aspects: First, classical management theories are not adapted to the current era; Second, classical management models informed by the classical management theories are not adapted to the current era; Third, the organizational purpose under classical management theories is wrong; Fourth, the traditional management paradigm leads to traditional brands, yet traditional brands are no longer suited to the current era.

### 1. Disrupting classical management theories

Three great pioneers laid the foundation of classical management theories that are still followed by organizations today. The first pioneer was Frederick Taylor, the “father of scientific management.” Taylor’s publication *The Principles of Scientific Management* upended the small workshop model. Even before this, Adam Smith had spoken of the “division of labor” in the first chapter of *The Wealth of Nations*. He believed that it was thousands of times more efficient to divide production rather than to leave it entirely to one entity. The second pioneer was Max Weber, “father of organizational theory.” He developed the idea of a “hierarchical organization,” also known as a bureaucracy. The third pioneer was Henri Fayol, “father of modern management theory.” He developed the modern operational management theory, which is used to examine how the various departments of an organization operate.

Efficient mass production was made possible through the application of Taylor's theory. Now, user needs are highly personalized, and therefore, the scientifically managed mass production model will have to be retooled for mass customization in order to meet individualized needs.

Similarly, the bureaucratic organization should be transformed into a decentralized, distributed matrix organization. In the past, C-suite executives had more information than others because of information asymmetry in the business world. Now that information sharing tools are more widely available, C-suite executives may only receive information marginally faster than others.

Fayol's general management theory primarily addresses the linear management of one-sided markets. But Jean Tirole, winner of the 2014 Nobel Prize in Economics, proposed the idea of a "two-sided market" (or even "multi-sided markets"). He argues that there is no need for so many departments in an organization. Haier, for example, removed approximately 12,000 middle-management positions. These managers either moved on or became autonomous entrepreneurs.

## 2. Disrupting classical management models

Since the industrial revolution, two classical management models have been widely studied by companies around the world, the Ford model and the Toyota model. The Ford model is centered around efficient mass production, while the Toyota model is centered on continuous improvement with zero defects. Ford reduced production costs through the assembly line, bringing the price of a car from a high of more than USD2,300 to USD360. This innovation made cars affordable for every American household. Toyota, on the other hand, adopted a just-in-time (JIT) model, which enabled faster production and higher-quality products.

Neither model is a good fit for the IoT era today. William Malek, an American strategy scholar, proposed a management idea akin to Haier's Rendanheyi model. However, the model received harsh criticism at Stanford University where professors found the idea unfathomable. Malek was thrilled to see what Haier had done in the management space, as Haier's work has proved his theory. Malek sees Haier as the benchmark for organizational revolution.

Traditional organizations regard employees as tools, but Haier sees them as value creators. Traditional organizations have no users, only customers, and when a product is sold, the deal is done. Haier's customers are users. The sale of a product is not the end, but a beginning. Haier continues to engage with users throughout product iterations.

According to Liz Wiseman, a Thinker50-ranked thinker, Toyota stands for zero defect, while Haier stands for zero distance. Toyota's zero defect works in the realm of products, but when a product becomes a networked appliance, it is merely a node in a network. The physical attributes of the product are no longer of greatest importance because users need the product, and more importantly, the whole network behind it.

### 3. Disrupting classical organizational purposes

The guiding ideology of organizational purpose in Western capitalist societies can be found in a 1970 New York Times essay by Nobel laureate Milton Friedman titled, "The Social Responsibility of Business Is to Increase Its Profits." Friedman argued that the responsibility of business is to make profits, and its purpose is to put shareholders first, maximizing shareholder value. To this end, companies are seeking long-term profit maximization. This is no longer the case today. In 2018, a CEO roundtable in the United States joined by CEOs of some 200 large companies issued a joint statement to pursue the maximization of interests for all stakeholders. This is still not enough. What's more important is to unlock the value of employees and users.

Gary Hamel, a leader in the strategic management field, published the bestselling book, *Humanocracy: Creating Organizations as Amazing as the People Inside Them*, which devoted a considerable section to a Haier case study. Hamel opposes bureaucracy, arguing that many of the models to address the problems of bureaucracy only treat the symptoms, not the root cause (as they fail to change the DNA of an organization). This is likened to a poorly built building. Remaking the rooms can only do so much when the entire structure must be rebuilt.

Since its inception in 1984, Haier has lived through new strategy phases every seven years. Now, it has entered the sixth strategy phase. Throughout its journey, Haier has always adhered to the purpose of "maximizing human value."

In 1985, Haier was known for “smashing defective refrigerators,” but underneath this symbolic gesture was our effort to change the employees’ beliefs that “we can’t make good products” and to ensure that all employees were in alignment with the Total Quality Management (TQM) system. TQM was invented by Deming, an American thinker. Unfortunately, TQM did not catch on in the US, but rather, in Japan. This is because American culture promotes individualism, while Japanese culture is collectivist. The beauty of TQM is that users are the next step. The system may not have caught on in America because there, workers like to focus on their own jobs and rarely look elsewhere.

In 1999, Haier began to build its brand through exports. Haier was among the first Chinese companies to set up factories in the US. There was some skepticism in the media about Haier, saying that our facilities in the US would surely fail. Haier’s approach was unlike others; while other companies sought export revenues in foreign currencies, Haier set its mind to building its brand through exports and its connections with local cultures and users.

In 2012, Haier bought Sanyo Electric’s white goods business. At the time, Sanyo’s business had been on a loss-making streak for eight years in Japan. Ruth Benedict, an American who wrote a best-seller about Japanese culture, *The Chrysanthemum and the Sword*, pointed out that the Japanese are characterized by polarized behaviors. Japanese companies used the seniority-based wage system to create an economic miracle, but in the IoT era, the same system had become fatal for business, making the organization extremely immobile. After acquiring Sanyo, Haier implemented the Rendan-heyi model. Though the trade union initially rejected the model, they came to accept it.

The story of frontline salesperson Michiko Hayakawa is a case in point. She bid for an ambitious target that won her the directorship of the logistics department when her predecessor was still in the position—this was unthinkable in Japan. Even more unthinkable was for a woman to become head of a department. In Japanese culture, one can only succeed when the former director retires. As a general rule, people under 50 years of age are unlikely to become directors.

The failure rate of cross-border M&A is 70%, and 70% of these failures are caused by culture. Haier has acquired many companies, such as GEA in the US, Fisher & Paykel in New Zealand, Sanyo in

Japan, and Candy in Italy. These acquisitions have been successful thanks to Haier's "salad culture." There are different vegetables in a salad. Each represents a country, a company, and a culture, but the salad dressing is the same, that is Rendanheyi. All countries and nationalities can embrace the Rendanheyi model because it values dignity for all. The Americans take pride in the "everyone is created equal" statement in the Declaration of Independence, but American companies have not truly achieved this. The Rendanheyi model, however, truly allows everyone to shine with value.

#### 4. Disrupting traditional product brands

Traditional brands focus on products. Economist Robert Gordon referenced a great deal of data in his book *The Rise and Fall of American Growth* where he concluded that "the average growth rate of total factor productivity in the third industrial revolution was only 1/3rd of that of the second." The electrification process of the second industrial revolution produced many inventions, such as household appliances, airplanes, and highways, each leading to sustained and widespread growth throughout the world. Conversely, the third revolution based on information technology did not bring forth as many inventions.

George Gilder, one of the three great thinkers of the digital age, once said, "All the changes converge in one epochal event: the overthrow of matter." The so-called "overthrow of matter" refers to the Internet of Things enabled by microprocessors, sensors, and the like. We are no longer in a time of product brands. Brands must adapt to the IoT era. Haier's observation is that "products will be replaced by scenarios, and industries will be enveloped by ecosystems."

Now, all influencers/promoters like to claim that they offer "the lowest price across all channels" in their live streaming sessions, but users need more than just products—they need scenarios. For example, for the smart home, users don't need singular products; rather, they need scenarios made up of a portfolio of products. Similar to shopping for a designer jacket, shirt, tie, and shoes. You won't pull off the look if your outfit doesn't match. To mix and match clothes for a look that aligns with the character of the wearer is an apt analogy to the statement that "products will be replaced by scenarios."

Joseph Pine, author of *The Experience Economy*, once said, “Goods are tangible, services intangible, and experiences memorable.” Product brands that focus on the product economy face fierce competition and operate in what is now a red ocean. Platform brands (e.g., internet platforms) can still focus on the service economy while the blue waters last. Ecosystem brands focus on the experience economy and play in “uncharted waters.” “Uncharted waters” are ecosystems that are difficult—if not impossible—to imitate.

In 1993, American economist James Moore put forward the idea of the business ecosystem and described its three main characteristics, light, inimitable, and scalable. “Light” means you don’t need to plant trees. Plants thrive on their own, as in the Amazon rainforest. “Inimitable” means it is possible to build a similar garden, but impossible to copy an ecosystem. “Scalable” means that an ecosystem thrives sustainably and may produce new species, whereas a garden does not.

The most important idea in Hegel’s philosophy is reflection, the movement of “negation of nothing” back to “reflection in itself”. Self-reflection is the study of one’s own problems. The last thing organizations want is complacency. In Haier’s 30-plus-year journey, we have made three “smashes,” each a self-disruption in its own right.

The first was “smashing defective refrigerators,” the result of deep self-reflection on “high-quality products are made by high-quality people.” Why can’t we make high-quality products? Because we don’t have high-quality people. Why don’t we have high-quality people? Because we don’t want to improve. Because of the first smash, in 1988, Haier received China’s first quality gold medal in the history of the refrigerator industry.

The second was “smashing the organization,” when we came up with the world’s first management model for the IoT era. Haier grew by learning from overseas classical management models. Since the implementation of the Rendanheyi model in 2005, Haier has transformed itself into a networked organization with more than 4000 micro enterprises (MEs).

The third was “smashing the label.” Haier has remained the world’s top white goods brand for 11 consecutive years. The next step is not to play defense, but to upgrade. Like “smashing defective refrigerators,” the idea is to make better refrigerators rather than giving up refrigerators. “Smashing the label” is Haier’s effort to upgrade from a home appliances brand to an ecosystem brand.

## HOW TO DISRUPT: THE WORKABLE AND REPLICABLE SYSTEM OF THE RENDANHEYI MODEL

How can Haier disrupt? It depends on the “RDHY scorecard, win-win value added statement, and ecosystem brand.” These three tools make up the workable and replicable system of the Rendanheyi model.

The goal of Rendanheyi is to transform a company into an ecosystem brand. Brands normally come in two categories: traditional product brands (such as Adidas and Nike) and e-commerce brands (such as Taobao). Haier is the only ecosystem brand on the BrandZ Top 100 Most Valuable Global Brands list and the only one to make the list for two consecutive years.

The financial tool for ecosystem brand valuation is the win-win value-added statement, whereas traditional organizations generally use the balance sheet, cash flow statement, and income statement. The American Institute of Management Accountants regards Haier’s win-win value-added statement as a financial tool for the IoT era and a “fourth statement” that all start-ups and listed companies need. Most investors and consumers would love to read this statement because it contains both financial and non-financial metrics.

Management guru Peter Drucker attended a conference of business leaders in his 90s. There he first asked, “Who knows the least about the business in an enterprise?” His answer was the CFO. The audience was confused. He explained, corporate finance must be based on the future, while CFOs only look at past performance. Corporate finance is a dynamic picture, but CFOs only take a screenshot. So, in a sense, what they see is the past.

The strategy tool in the Rendanheyi model is the Rendanheyi scorecard. The European Foundation for Management Development has developed a Rendanheyi scorecard certification system. Unlike other certification systems that are led by foreign companies, this is the first global certification system led by a Chinese company.

### 1. The goal of Rendanheyi: Ecosystem brand

An ecosystem brand differs from traditional brands in three ways: offering a seamless experience, a boundaryless ecosystem, and contactless payment.

Neither the traditional economy nor e-commerce has achieved a seamless experience because they are based on transactions, not interactions. A seamless experience is about understanding user needs, delivering scenarios instead of mere products, and being able to iterate. In the past, companies organized their own sales. Now, they need to collaborate with many other companies to create value and share in the value-added returns. Today, mobile payment still requires manual confirmation, but the IoT era will no longer need that. For example, our washing machine can dispense detergent automatically according to the laundry size, material, water quality, and types of stains. When the detergent is running low, a refill will be purchased automatically and delivered to your doorstep as per the user agreement. This is true contactless payment.

### 2. The financial tool for ecosystem brand valuation: Win-win value-added statement

In the past, companies followed the value chain theory proposed by Michael Porter in 1985. Haier's win-win value-added statement however, takes a very different approach.

First, the win-win value-added statement reflects value streams rather than a value chain. Porter believes that in the value chain, only a few key strategic sections can create value and the others do not. Therefore, there are profit centers and cost centers. However, in the win-win value-added statement, all nodes are centers of value creation, and everyone must create value or risk becoming a liability to others.

Second, traditional statements only show product revenue, and revenue minus cost is profit. Conversely, the win-win value-added statement shows the ecosystem revenue as well. The guiding indicators of the value chain are key performance indicators (KPIs), while the guiding indicators of the win-win value-added statement are user performance indicators (UPIs). The traditional statement shows how much value users create for the enterprise, while the win-win value-added statement reflects how much value the enterprise creates for users. Therefore, these are two distinct ideas.

The win–win value-added statement is comprised of six core elements, the first of which is user resources. The win–win value-added statement highlights the importance of users, while traditional statements leave users out of the picture. Therefore, the traditional statement has a static balance, while the win–win value-added statement has a dynamic balance. The common accounting method used by most organizations is double entry bookkeeping invented by the Italians whereby a debit entry corresponds to a credit entry, and the two must match down to the penny. User resources are dynamic. We create when users have needs. We recreate when users have new needs. It is an iterative cycle in dynamic balance, just as American scholar James Carse said in his book *Finite and Infinite Games*, infinite games have no ending and cannot be reproduced.

Third, diminishing marginal returns is an ironclad law of economics, but thanks to ecosystems, Haier can achieve incremental marginal returns. If Haier only manufactures washing machines, it can only have diminishing marginal returns. But when Haier upgrades to an ecosystem and becomes an Internet of Clothing brand that encompasses the clothing industry, it now has incremental marginal returns.

### 3. The strategy tool of Rendanheyi: Rendanheyi scorecard

The Rendanheyi scorecard embodies the system theory in traditional Chinese philosophy. The root of traditional Chinese philosophy comes from *The Book of Changes*, the core of which speaks of overall connection and dynamic balance.

The *Book of Changes* deals with the relationships among the five elements: metal, wood, water, fire, and earth. The adjacent elements generate one another while distant elements restrict each other. Among them, water, wood, and fire are adjacent, therefore, water generates wood and wood generates fire. Water and fire are distant, so water restricts fire. Similarly, an organization should not claim to be the industry champion, because it is but a node in the entire system. The organization must complement, check, and coordinate with other organizations.

The *Tao Te Ching* says, “the deepest cut doesn’t sever.” It speaks to the indivisibility of a system. In her new book, *Zero Distance: Management for the Quantum Age*, Professor Zohar also says, “There are no causes, only relationships.” We can draw a parallel between these two ideas. They both emphasize integrity

and systematicity. As the founder of quantum management theory, Professor Zohar integrates quantum theory with management science. Quantum theory has disrupted Newtonian mechanics. The idea of “quantum entanglement” says that two particles, no matter how far apart, exert influence on each other. Einstein described it as “spooky action at a distance.” In Rendanheyi, the relationship between employees and users is also like quantum entanglement.

On the horizontal axis of the Rendanheyi scorecard are leading targets and from left to right are premium brand, scenario brand, and ecosystem brand. On the vertical axis is the ecosystem micro-community (EMC) contract. MEs spontaneously organize themselves around user needs to form clusters (EMCs) on the value chain. EMCs cooperate with one another to accomplish goals and realize the “four self’s,” namely, self-organized, self-driven, self-value-added, and self-evolved. Where the two axes intersect is value-added sharing. Haier has no compensation department. The self-organized EMCs create and share value autonomously. They are responsible for identifying value targets and sharing the value-added returns, but they will automatically disband if the targets are not reached within three months.

For example, Haier Biomedical entrepreneurs identified a pain point while supplying hospitals with blood-storage equipment. It is difficult to collect blood, but there is still a serious waste of blood in hospitals. A blood bag that leaves the blood bank cannot be returned, even when the blood is not used in the operating room. Recognizing this problem, the entrepreneurs engaged blood banks, hospitals, and other partners to establish the U-Blood platform and became an entrepreneurial ME. Haier didn’t invest in U-Blood, but VC firms and the start-up team co-invested. Later, Haier Biomedical went public with a high PE ratio of 140x (around  $100 \times$  now). At the same time, the entrepreneurs’ shares were converted into public shares of the listed company. No one asked these employees to start a business; it was purely self-organized.

## A LEADER IN THE IOT ERA

Haier has an ecosystem brand, COSMOPlat, and a scenario brand, Three-Winged Bird. COSMOPlat was inspired by Chaos, the ancient deity of beginning in Greek mythology, also known as the Cosmic Egg. Chaos

predated all gods, even Zeus. The Three-Winged Bird is a self-portrait of Chaos, representing a strange attractor. Chaos refers to the phenomenon that a small change in a dynamic system can lead to a long and momentous chain reaction throughout the whole system. The Chaos system starts with only a small change and experiences a massive shift. The purpose of the reference is that one can seize user pain points produce a huge market through constant iterations via the “butterfly effect.” A butterfly in the Amazon rainforest flapped its wings a few times and two weeks later a hurricane reached Texas. Haier names its scenario brand the Three-Winged Bird with the ambition of creating new markets and new users.

Therefore, Haier has achieved three types of leadership under the Rendanheyi model:

### 1. Leadership in theory

Harvard University produced five case studies on Rendanheyi in the space of five years. Nine of the world’s top 10 business schools include the Haier case studies in their syllabi. In international academic conferences, the pinyin of Rendanheyi is used, like “kungfu” in English. European scholars, after examining more than 30 existing management models from around the world, concluded that Rendanheyi is a clear standout.

James Moore sees Haier as taking a path that is vital to the future of humanity, because his idea of a business ecosystem didn’t attract much interest until Haier’s implementation proved its value. Six localized Rendanheyi research centers have been founded by local scholars around the world, without any Haier secondees. According to Annika Steiber, director of the Rendanheyi Silicon Valley Center at Menlo College, in the twenty-first century, there should be a universal management concept that can be followed and adopted by organizations in different countries in different ways and in varying degrees. Haier is the only organization that has truly disrupted traditional management models. Haier’s model will overtake the Silicon Valley model because the latter only applies to SMEs, while Rendanheyi exemplifies the successful transformation of large enterprises.

### 2. Leadership in standards

For international standards in the IoT era, including model standards, ecosystem standards, and smart home standards, all the four

main international standard bodies have picked Haier as a standard-setter. The EU is now promoting Project GAIA-X, and Haier's COSMOPlat has been engaged by the project as a founding member to contribute its experience in mass customization. There are only 44 "lighthouse factories" around the world, and Haier is the sole company with two lighthouse factories in the same country.

### 3. Leadership in replication

Up to now, 64,560 companies from 74 countries and regions have registered as members of the Rendanheyi Boundaryless Network. According to an article in MIT's *Sloan Management Review*, Haier's model trumps those of Toyota, Apple, and Hasbro in the context of the COVID-19 pandemic. The supply chain of these companies showed signs of rigidity because of the deep-rooted organizational rigidity, while Haier's organizational model has been very nimble. During the pandemic, Haier achieved growth in North America and Japan, defying market trends. Bloomberg, the world's largest financial intelligence platform, argues that, "In a sense, Rendanheyi is no longer a term exclusive to Haier, but rather a management revolution in the IoT era to be celebrated by companies around the globe."

The Rendanheyi model has been replicated in different industries and in various countries across the world. In the catering industry, the Italian restaurant brand Convis has achieved an initial milestone of organizational change to operate as an ME. In the ICT industry, the European headquarters of Fujitsu has started a transformation toward an ME-based organization. In the textile industry, Jaipur Rugs, India's largest carpet manufacturer is actively piloting the ME model. In the industrial sector, Severstal Group, a well-known Russian industrial and investment holding company, is preparing to adopt the Rendanheyi model. International organizations such as the UNDP Asia Pacific Regional Innovation Centre also posted on their official social media account saying that the application of the Rendanheyi model can indeed have positive impacts.

In 2020, Chinese President Xi Jinping proposed "a new development paradigm with domestic circulation as the mainstay and domestic and international circulations reinforcing each other." The premise of having domestic circulation as the mainstay and dual circulations co-evolve underscores the importance of leadership. The Rendanheyi model is in a leading position because it

enables co-creation among Chinese and international brands in a dynamic ecosystem, much more advanced than a simple supply chain relationship. For example, Haier's Internet of Clothing platform has attracted more than 5,000 ecosystem resource providers from nearly 15 industries, including international brands such as Procter & Gamble and Decathlon while having aggregated 65 million ecosystem users.

Marx's epitaph reads, "The philosophers have only interpreted the world, in various ways. The point, however, is to change it." Similarly, everyone is interpreting the IoT era, so how does one become an IoT business? I think we must change our world through IoT, and the path to change is what Wang Yangming calls "the unity of knowledge and action."

Some say action is easier than knowledge, and others say the opposite. For us, both views are too static. We should hold a dynamic view. The difficulty with the "unity of knowledge and action" lies in constant iterations. When knowledge is relevant and action improves to keep up, knowledge will improve and the action will improve again. I encourage Chinese companies to take collaborative actions so they can truly shape a business model that leads the world in IoT.

Qingdao, China

Zhang Ruimin

## PERSONAL FOREWORD

Each of the eleven books I have now written has been a very personal project for me, always arising from attempts to bring my education as a scientist and philosopher to bear on problems, issues, and events that were troubling, or at least preoccupying me, in my daily life, and that I felt were likely troubling or preoccupying many others. Each book was an attempt to offer a vision to myself, and hopefully others, of “some better way,” some sense of changes that I and others could make that would improve the quality of our lives. But I feel that no other book I have written has been so personal or felt so urgent, or its subject matter troubling to so many others, as this one.

During the past four years that I have been working on this book, all of us have experienced Brexit, the Trump presidency, and the Covid-19 pandemic. Many have suffered directly from these events, experiencing disorientation, depression, financial hardship or insecurity, personal illness, and even the loss of loved ones and livelihood. Those of us in the West who pay attention to, and are aware of our vulnerability to larger scale world events, have experienced these personal challenges in the wider context of a chaotic, global upheaval that sees the prospect of a declining America, in particular, and the Western world order in general, doubt about the efficacy of democracy, indeed a declining moral order that leaves many wondering who and what we can count on. The world as we have known it seems to be spinning out of control.

Personally, my own head has been spinning during much of these past four years. I have spent far too many hours watching and re-watching the news, simply trying to understand what it all means. Why does the world seem suddenly to be falling apart? What are the forces behind it? I have suffered my own lost months simply immobilized with depression and anxiety. I have been very ill with Covid, endured the months of “lingering symptoms” that follow, and suffered the isolation and loneliness of lockdown and social distancing. I have missed the international travel and international friends that were so much a part of my life and work, and the livelihood that depended on it. I have watched my native America, where I was born and grew up, slip into a country I no longer recognize, and experienced Britain, where I have lived for the past fifty years, no longer feeling like home.

And so, like many others I believe, during these past four years I have felt disillusioned, lost many of the assumptions that framed my life, lost a sense of security about things I thought I could take for granted, and even lost the ground from beneath what had supported many of my memories. Indeed, at times, I felt I had lost the whole framework that supported my “being-in-the-world.” And thus in response, as always when troubled in the past, I have written a book, this book, in an effort to work out for myself and others a vision of “a better way,” a better path we might all follow, and a new framework that might guide us and make sense of it all. And as always before, I have drawn my inspiration for this book from my lifelong passion for quantum physics, and the vision from the philosophy it offers of a very different reality and a very different way we might live this in our lives and leadership.

On the surface, this is a book written for leaders, particularly business leaders, because the nature, role, and activities of business and the preferences, values, and style of its leadership lie so closely at the heart of what has brought us to this present crisis. It was American business and its well-paid lobbyists that put Trump in office, both through their wish for the tax cuts and deregulation he promised during the 2016 election, and through much longer term lobbying that created America’s obscene wealth inequality that motivated so many people to jump on the Trump bandwagon. At the same time, it is mainly the money, power, and cross-border global reach business leaders now possess that makes them best placed and most responsible to lead us beyond these dark times. Business is the wealth creating engine of society and the employer, directly or indirectly, of most people. Business leaders, both directly and through

their influence on the decisions political leaders make, play a huge role in deciding both the distribution of wealth and the living and working conditions enjoyed by most others. The practices, values, and preferences of business leaders hold sway in determining the quality of life for the majority, the quality of our health, and the endangered health of our planet.

I will be arguing that it is in business leaders' own interest that they now take the lead in reversing much of the damage for which they have largely been responsible. This is because the mindset that lies behind the leadership attitudes and management practices that have gutted America's middle class and put over 70 million Americans into poverty is the same mindset that is now threatening business itself. This book is primarily about changing that mindset.

But this is not just a book for business leaders. They, like the rest of us, also have personal lives, families, and relationships. They, too, are citizens of their communities, nations, and the global family, and thus a new vision for what it means to be a good person, what makes a good society, and how we can build a stable global order concerns them both as guardians of their companies and in their more private lives. And we who are not business leaders must all play the role of leaders in various dimensions of our lives, in our families, among our friends, in our communities. Indeed, I will be arguing for a vision of business in which every employee will become a leader. So the quality of our leadership also determines the health, well-being, and happiness of others, especially those we most love. The nature of leadership and the question of how to be a good leader is an issue for us all. We will see that perhaps the most powerful insight of quantum physics is that everything is connected to everything, and everyone to everyone. It is a very big deal to all of us whether companies succeed, and the means and morals by which they do so. Everything is everyone's "business." And, thus, I think this book is a book for all.

There is one more personal comment I want to make about this book. Most of the positive and exciting things that I have experienced during the past six years have been things I experienced while spending a great deal of time in China. The business model highlighted in this book was conceived by a Chinese CEO and first implemented in his Chinese company. It is not "politically correct" in most Western circles today to say anything positive about China, but if I did not highlight in what follows some of the many creative & exciting projects & initiatives coming out of China today, and the positive qualities of Chinese

society I have experienced and valued, I could not have written an honest book. Just as the whole world has learned and gained great value from the achievements of Western nations, I believe that only wilful ignorance & a failure of imagination can stop the West now learning from and adapting to our own ways and purposes the many almost miraculous achievements of modern China. The *RenDanHeyi* management model I write about so extensively here is one of them.

## ABOUT MYSELF

It may interest readers to know the personal story behind my life's work devoted to making the wider implications of quantum physics accessible to "ordinary" people. There was a much earlier time in my life when it felt like "the bottom had dropped out of everything," and it was discovering the philosophy offered by quantum physics that restored the ground beneath my feet.

Until age 10, I was raised by my devout Methodist grandparents in the Ohio countryside. I sat beside them in church every Sunday, & their simple Christian beliefs provided the focus and framework of meaning for my early childhood. But at age 11, I lost my faith in Christianity, and have never been able to find that lost meaning in any other organized religion. The vacuum that left in my young life began to be filled with a fascination I developed for atomic physics at age 13, and still more so when I read David Bohm's classic textbook *Quantum Theory* at age 15. Quantum physics became, and has remained, the driving passion of my life. I then spent all my teenage years building atomic devices in my bedroom, smashing atoms, and finding, in the philosophy offered by quantum theory, answers to all those Big Questions that young people ask. The homemade atomic devices collected many top prizes at local and national science fairs and contests, and these won me a physics scholarship to MIT. I was one of only 17 young women that entered MIT's Class of '66, along with 1000 young men.

At the end of my first year at MIT, I realized that I was far more interested in the philosophy suggested by quantum physics than in having a career as a practicing research scientist, and I was allowed to change my course of studies to pursue a combined degree in Philosophy & Quantum Physics. During the ensuing three years of my undergraduate studies, I reflected constantly on the wider philosophical implications of quantum physics, and this understanding was enriched by a specialization

in Heideggerian philosophy and Heidegger's concern with the damaging implications of technological thought. I also had the good fortune to attend the seminar offered by C.P. Snow during his year as a Visiting Professor at MIT, and I had an early intuition that quantum philosophy could bridge The Two Cultures Divide for which he was so famous. I recently discovered an old video made by the BBC to describe student life at MIT in which I had appeared as President of the MIT Humanities Society, already speaking about the possibility of "a quantum society."

I continued my study of Heidegger and reflections on the wider relevance of quantum philosophy for new thinking about personal & social sciences I was exploring during my three years of postgraduate studies at Harvard while pursuing a Ph.D. at the Divinity School in Philosophy, Psychology, & Religion. I finally published my first "quantum" book, *The Quantum Self*, in 1990, offering a new, quantum framework for psychology that could replace Freud's dominant, mechanistic framework that had been inspired by Newtonian physics. Ironically, and very much to my surprise, it was the publication of that book that began my career as a management thinker.

After publication of *The Quantum Self* in England, I received a call from a professor at London's City University Business School, asking me to give a lecture about the book to his MBA students. Despite my passionate protests that I knew nothing about business at that time, he insisted, and the enthusiastic reception given to my lecture by the MBA students led the professor to recommend me to the Training Manager of Shell UK, who was looking for someone who could speak about paradigm shifts in management as part of the "Challenges for Change" course he was designing for Shell senior managers. After two years of developing my management thinking while teaching in that course, I wrote up what I had been teaching in my first book on Quantum Management, *Rewiring the Corporate Brain*. Everything else about my developing work on a theory of Quantum Management and my career as a "management guru" followed, beginning with an invitation to deliver a keynote speech at a systems thinking business conference in Boston, and invitations soon after to introduce this thinking to senior managers at Motorola and then to Shell USA's Leadership Council in Dallas. The rest is "history."

## ACKNOWLEDGMENTS

I am very grateful to The Haier Group for generously supporting the research for this book, and for granting me full access to the company and its microenterprise leaders. I thank my students, Felix Wentian He and Domi Zhong Hongsheng for their massive personal assistance during my stays in China. Christopher and D'Artagnan Giercke offered me sublime hospitality at their Genghis Khan Polo Camp in Mongolia, where I spent many months working on the book. My good friend Johnson Chang provided the book and me with a peaceful home in Suzhou, where I could write sitting by the waterfall in his Chinese garden. And I owe special gratitude to my agents, Jackie Huang, of The Andrew Nurnberg Literary Agency, Beijing, and my New York Agent, Robin Straus.

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