

The Chinese Way Total Quality Management

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Abstract: The story what I want to say is why China did not have a chance to become a world power in these five hundred years (1500-2000)? And after more than 30 years of reform and opening up, China has accumulated the momentum and finally broke out in recent years. Under the situation of political stability, China utilizes the TQM-like mode of planning process for the economic and social development, and from the PDCA Deming Cycle look at China's Five-Year Plan, the 9th Five-Year Plan, the 10th Five-Year Plan, the 11th Five-Year Plan, the 12th Five-Year Plan of China, and 13th Five-Year Plan (2016-2020). Then can be continuously carry out those plans, and promote medium-and-high-speed economic growth and move toward a medium and high-end standard so as to achieve the grand goal of building a well-to-do society in an all-round way by 2020. China's Ministry of Industry and Information Technology issued in October 2016, "Industrial Technology Innovation Capability Development Plan (2016-2020)", this kind of Quality Function Deployment (QFD) or Policy Management of the mode of governance, deploy from the Central Committee of the 13th Five-Year Plan to the State Council's development strategy, and then by the Ministry of Industry and Information Technology in charge of his own professional projects to provinces, municipalities and autonomous regions related professional unit. This kind of top-down promotion and implementation model is very difficult to implement in a liberal democracy government body. The Director General of the State Administration of Quality Supervision, Inspection and Quarantine on "One Belt One Road Initiative" Press Conference, answered questions raised by Chinese and foreign reporters on issues related to "Quality Improvement". When we discuss the issue of economic and social development of a country, with quality as its topic, it will get less controversy in ideology. The quality of the subject to the "essence of substance" requirements are precise and accurate; to the "process of business" focus on efficiency and effectiveness; to the "conduct oneself" emphasis on words and deeds should be consistent; to the "quality of life" pursue the balance of production, ecology, life; to the society "Datong (The Ideal World)" is our dream. Guided by the above quality issues, quality professionals may can be dedicated to that: "for satisfying the universal value of human material and spiritual needs, integrate the methodologies of essence of substance, process of business and psychology, for enhancing the quality of human life, to engage in quality related science research, technology development, and application promotion. There will be many projects to be carried out, especially the establishment of 'The Chinese Way Total Quality Management'".

Key words: the rise of the great powers, the rising China, One Belt One Road, Made in China 2025, The Chinese Way TQM

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1. The Stories of “The Rise of the Great Powers”

“The Rise of the Great Powers” is a 12-part Chinese documentary television series produced by CCTV. It was first broadcast on CCTV-2 from 13 to 24 November 2006. It discussed the rise of nine great powers: Portugal, Spain, Netherlands, United Kingdom, France, Germany, Japan, Russia (Soviet Union), and United States.

After the film was broadcast, CCTV cooperated with China Democracy and Law Publishing House to launch a series of eight books of the same title with a large-scale expansion; and from 20:55 on May 1, 2007, prime time CCTV-1 broadcast again. The 12th part “**Thoughts on the Great Path: Conclusion**” stated as following. The strength of a nation must unify the opinions of its constituent peoples so that power can be concentrated and, by means of cultural baptism, the political direction of correcting itself can be determined and strengthened. With the favorable economic capability, the survival of the people, the use of science and technology advantages to ensure the country's strong. State and country get along with the same as between people, conflicts between people will fight, between countries is a war, people will become a long time between the tribe, being a nation, a long-standing relationship between nations will create a federation. In today's world, because of the development of science and technology, the distance between countries is getting closer and the economic cooperation is getting more and more frequently, even it is getting worse and worse, should not be solved by force. It is the responsibility of all countries to play their role in an integrated world.

If you want to see the complete films please watch videos on YouTube¹. And try to understand the reason why China authority produced this film, please refer to the paper “The Rise of Nations and the Historical Perspective of the Rising China” by Professor Mao Han-kuang, honorary professor at the Department of History and Research at National Chung Cheng University (Mao Han-kuang, 2012). He did even more on the comparative analysis of the history of China and foreign countries. Why China did not have a chance to become a world power in these five hundred years (1500-2000)? Finally, on the factors and conditions of the rise of great powers, were listed as the following:

- 1) The mainstream elite of a power can grasp the conditions of good timing, geographical convenience and good human relations, and fulfill the ideal of decisiveness.
- 2) Structural changes such as politics, economy, science and technology have made the overall national power surpass the ancient of her own country, and surpass other countries.
- 3) The rise of a great power enhances the happiness of the nation internally and maintains the harmony of other countries externally.
- 4) The rise of great powers or the appearance of Charisma characters, centralized Central Government, however, in the second wave of maintenance and construction, there was no transition to collective leadership or parliamentary politics or to most public opinion policing, then sudden rise in the final sharp decline.
- 5) Cultural thinking cannot tie the domestic public together, causing tensions in other countries. When rising, it will slow down the time and strength, or decline from prosperity.
- 6) Core cohesiveness.

¹ <https://youtu.be/P9ebJ3eJCrI?list=PLwXMmy5fUrVzrhuQ4Bp-CB9qIN1rOmhdF>.

2. The Rising China

The story what I want to say is not so grand and great, I just in the position of political and economic nonprofessional point of view, to tell the story with faithfully expounded my personal experience in the past three decades. After more than 30 years of reform and opening up, China has accumulated the momentum and finally broke out in recent years. In terms of GDP alone, after surpassed Japan in 2010, to be the second largest economy in the world by 6 trillion U.S. dollars, in the next few years, it grew exponentially and by 2015 it had been twice of Japan as shown in Figure 1: Taiwan, Japan, China GDP trend comparison (1952-2015).

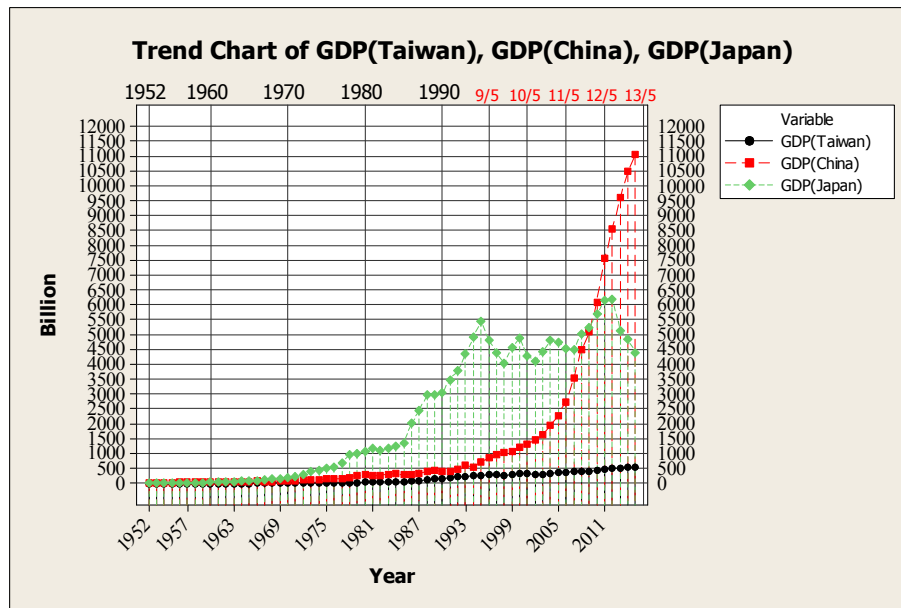


Figure 1 Taiwan, Japan, China GDP Trend Comparison (1952-2015)

Furthermore, Xi Jinping described the status of China in October 2017: “We have made major achievements in economic development. We have remained the commitment to the new development philosophy, adopted the right approach to development, and endeavored to transform the growth model. The result has been a constant improvement in the quality and effect of development. The economy has maintained a medium-high growth rate, making China a leader among the major economies. With the gross domestic product rising from 54 trillion to 80 trillion Yuan, China has maintained its position as the world’s second largest economy and contributed more than 30 percent of global economic growth. Supply-side structural reform has made further headway, bringing a steady improvement in the economic structure. Emerging industries like the digital economy are thriving; the construction of high-speed railways, highways, bridges, ports, airports, and other types of infrastructure has picked up pace. Agricultural modernization has steadily advanced, with annual grain production reaching 600 million metric tons. The level of urbanization has risen by an annual average of 1.2 percentage points, and more than 80 million people who have moved from rural to urban areas have gained permanent urban residency. Regional development has become more balanced; One Belt One Road Initiative, the coordinated development of the Beijing-Tianjin-Hebei region, and the development of the Yangtze Economic Belt have all made notable progress. Through devoting great energy to implementing the innovation-driven development strategy, we have seen much accomplished toward making China a country of innovators, with major advances made in science and

technology, including the successful launch of Tiangong-2 space lab, the commissioning of the deep-sea manned submersible Jiaolong and of the five-hundred-meter aperture spherical telescope (FAST) Tianyan, the launch of the dark matter probe satellite Wukong and the quantum science satellite Mozi, and the test flight of the airliner C919. Construction on islands and reefs in the South China Sea has seen steady progress. The new institutions of the open economy have been steadily improved; China now leads the world in trade, outbound investment, and foreign exchange reserves.”²

Even more remarkable is that the expressway network has now developed into the world’s largest freeway network, as shown in Figure 2. The high-speed railway network has also developed into the world’s largest high-speed railway network, as shown in Figure 3.

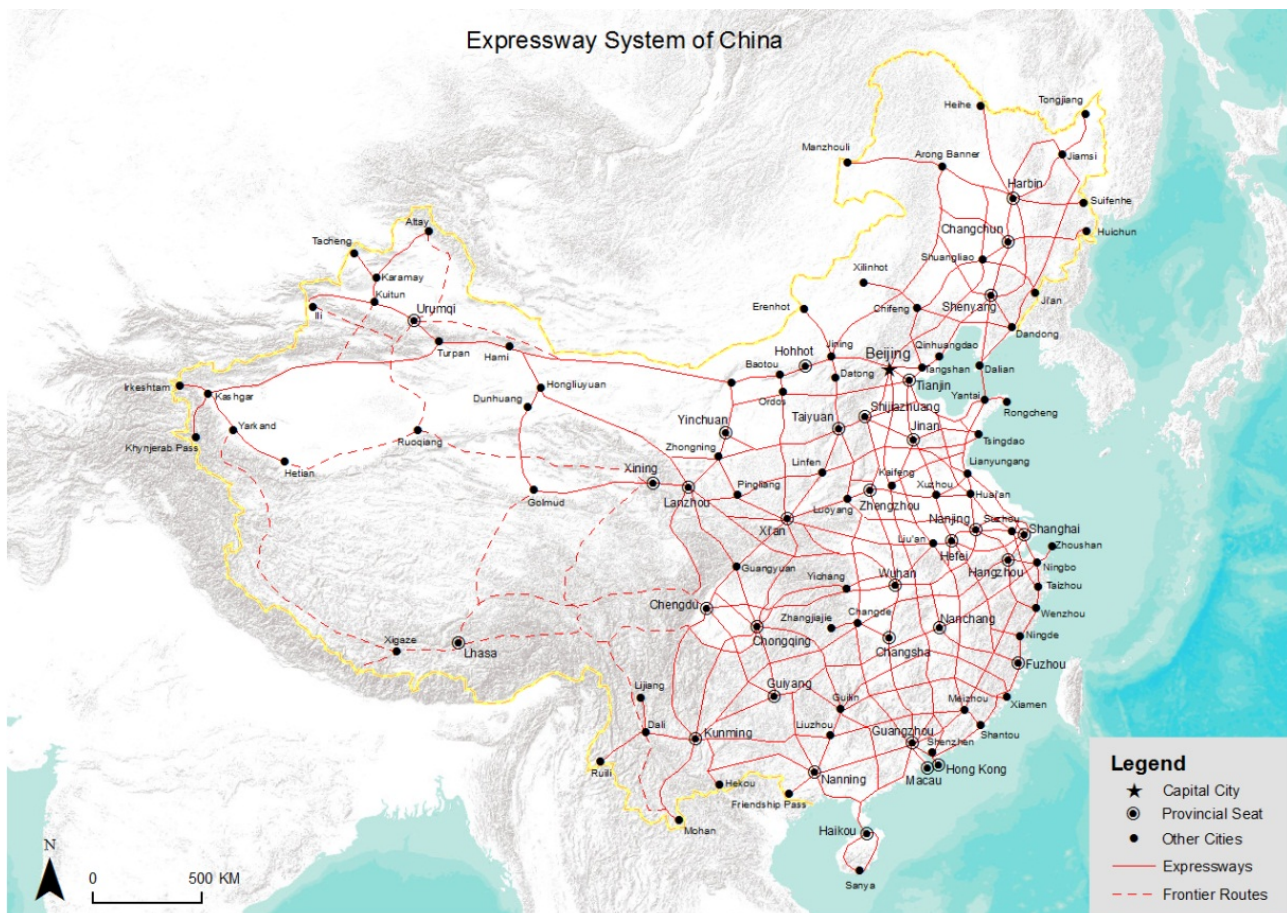


Figure 2 Expressway Network of China

² Xi Jinping’s speech in the 19th National Congress of the Communist Party of China, on October 18, 2017.



Figure 3 High-Speed Railway Network of China

The reform and opening up in mainland China is the policy of internal reform and opening up to the outside world since the Third Plenary Session of the Eleventh Central Committee in December 1978. China's internal reform first started in the countryside. In November 1978, Xiaogangcun, Fengyang County, Anhui Province, started to implement the "household contract responsibility system for rural households" and opened the curtain of China's internal reform. Opening up to the outside world is a basic national policy of China. The road to strengthening China is a powerful driving force for the development of the socialist cause. Reform and opening up set up a socialist market economic system.

Deng Xiaoping's slogan on the China's reform and opening up: In December 1980 at the Central Work Conference, Chen Yun said in a speech: "We want to reform, but we must keep pace. ... We always summarize our experience that we should "feel the stones across the river" Deng Xiaoping fully agreed with Chen Yun's proposal of "feeling the stones across the river". Deng Xiaoping said that the idea of "We must resolutely try, boldly break", "blaze a trail of blood" is an expression of this idea.

"Well-to-do life" is the concept that Deng Xiaoping first proposed for the strategy of modernization when he met with the Japanese Prime Minister Masayoshi Ohira in 1979. In order to plan the blueprint for the development of China's modernization, Deng Xiaoping visualized the famous "three-step" strategy of modernization, namely: The first step is to double the GDP, from 1981 to 1990; the second step is to double it again from 1991 to the end of the 20th century to reach a well-to-do society. The third step is to increase fourfold it by the middle of the 21st

century and reach the level of the moderately developed countries.

January 19, 1992 to 23, when the 88-year-old reform and opening up chief designer Deng Xiaoping visited Shenzhen Special Economic Zone for the second time and delivered an important speech to promote China to set off a new round of reform and opening up prosperity. On the long history of China's reform and opening up, the importance of Deng Xiaoping's speech in his tour of South China in 1992, it cannot be estimated. Today, more than two decades later, when we come to see the status in China today with the speech of the South Tour, the reform still has a long way to go.

The most important thing about Deng Xiaoping's speech on his tour of South China is to conclude of the 50 years of reform and opening up unchanged: "In this short span of more than a decade, our country has developed so fast, people are happy and the world is paying attention. This is enough to prove the correctness of the roadmap, principles and policies since the Third Plenary Session of the Party Central Committee. To say that in the past, all and all just a word, adhering to this roadmap, principles and policies remain unchanged."³

Later leaders of the Chinese Communist Party, Jiang Zemin, Hu Jintao, Xi Jinping, all of them were following this roadmap, principles and policies to govern China, the next 9th, 10th, 11th, 12th, 13th economic and social development Five-Year Plans can be confirmed. At the same time, Figure 4: the trend of GDP in China, Japan and Taiwan (1952-2015) and Figure 5: the trend of the average GDP in China, Japan and Taiwan (1952-2015) show that in the first and second steps of the "three-step" strategy, the people's living standards across the country have generally reached a well-to-do level with an average GDP of 8,000 USD, achieving a historic leap from adequate food and clothing to well-to-do society. This is a milestone in the history of the Chinese nation. The next step will be to start the third phase of the strategy of building a well-to-do society in an all-round way, that is, to a level of medium-developed countries.

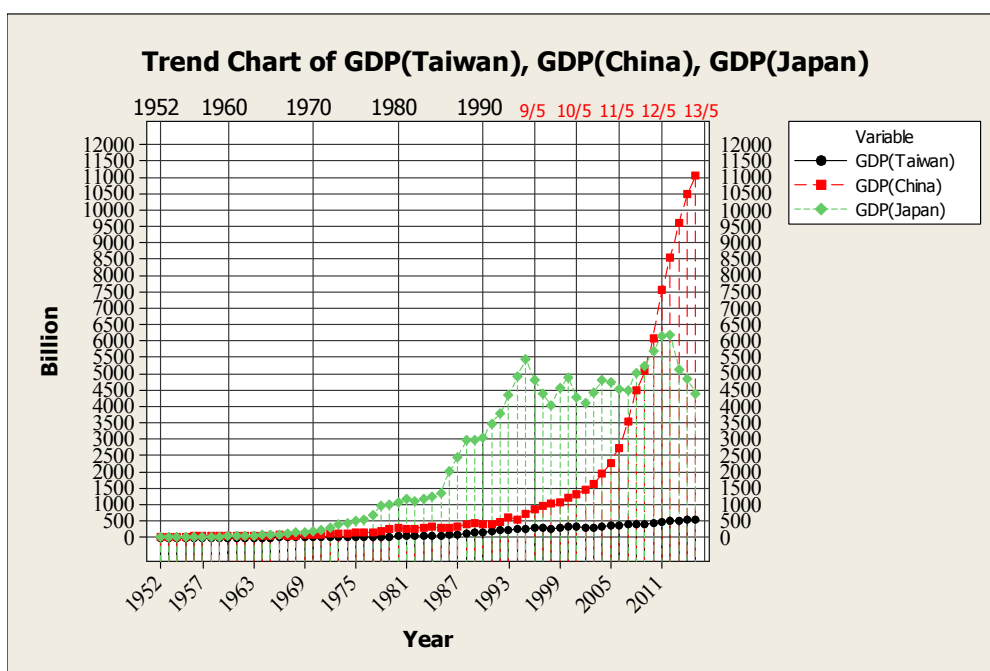


Figure 4 The Trend of GDP in China, Japan and Taiwan (1952-2015)

³ The Third Plenary Session of the Eleventh Central Committee held in 1978 established Deng Xiaoping's leadership. At the Third Plenary Session of the 11th Central Committee of the Communist Party of China, Deng Xiaoping announced the end of the planned

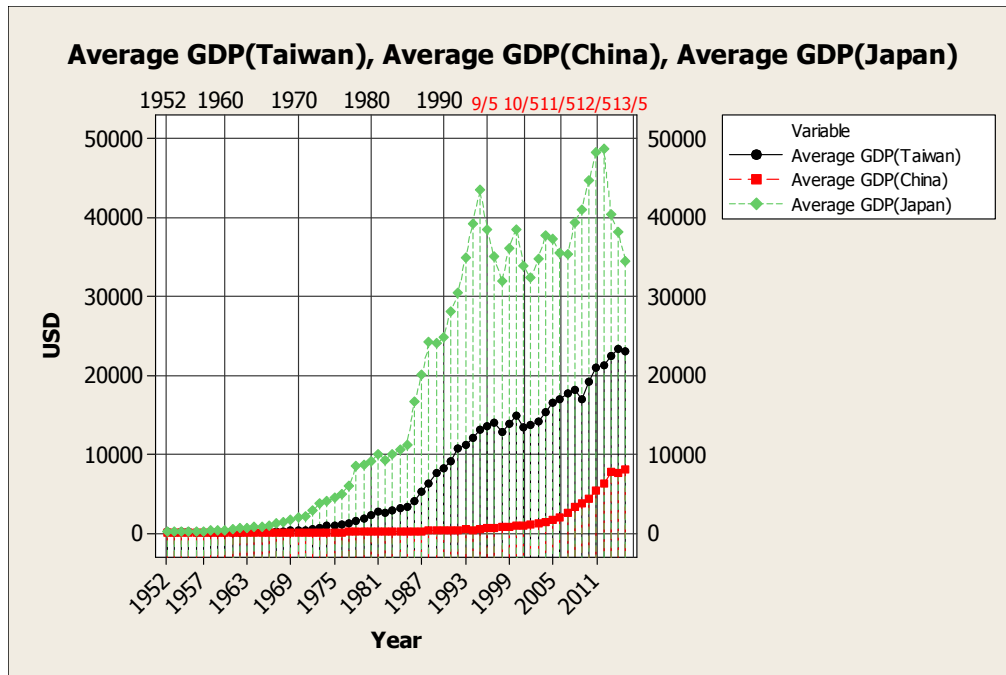


Figure 5 The Trend of the Average GDP in China, Japan and Taiwan (1952-2015)

The 13th Five-Year Plan aims at the goal of “building a well-to-do society in an all-round way” and proposes the five development concepts of “innovation”, “coordination”, “greenness”, “openness” and “sharing” so that during the 13th Five-Year Plan Maintain medium-to-high-speed economic growth of more than 6.5% annually, taking into account the balance, inclusiveness and sustainability of development.

- 1) “Innovation” is the first impetus to lead development, including theoretical innovation, institutional innovation, technological innovation and cultural innovation, in support of economic development upgrading and transformation.
- 2) “Coordination” is an inherent requirement of sustained and healthy development, focusing on promoting the coordinated development of urban and rural areas and the coordinated economic and social development so as to enhance the integrity of development.
- 3) “Greenness” is a necessary condition for sustainable development. We must uphold the basic national policy of conserving resources and protecting the environment and uphold sustainable development.
- 4) “Openness” will enable the country and the world economy to merge in depth, maintain the balance of internal and external needs and the balance of imports and exports, and give equal priority to “bringing in” and “going global” so as to develop a higher-level open economy.
- 5) “Sharing” let the fruits of development be shared by the people so that all the people will gain more sense of acquisition and enhance their development momentum in the process of building a shared development.

China has implemented this kind of Total Quality Management (TQM) mode of administration with a huge number of state machines. In the past 30 years, hardly have any countries in the world could pass through on this way. When we regard democratic freedom as a universal value, she insists on the party leadership and services the

economy, opening the reform and opening up and bringing China into a period of rapid growth of non-state-owned economy.

people. In mainland China, politics is more important than the economy because China takes the party leadership and politics determines the direction of the economic development.

The Communist Party of China's (CPC) power and decision-making mechanism includes the National Congress, the Central Committee, alternate members of the Central Committee, the Political Bureau, and members of the Political Bureau, standing members of the Political Bureau, the General Secretary, the Central Discipline Commission and the Central Military Commission, shown as Figure 6.

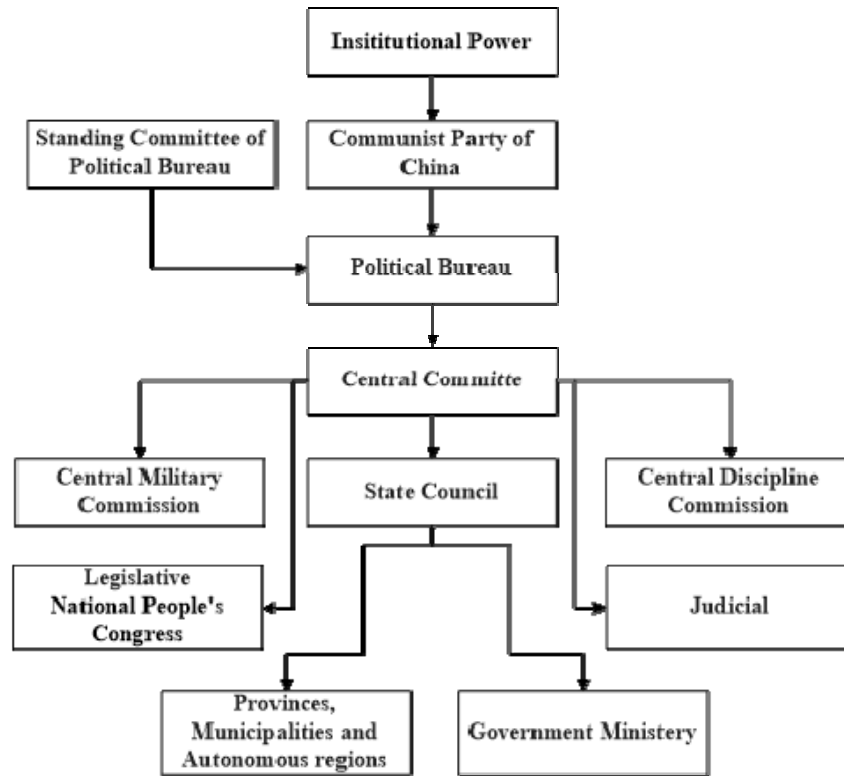


Figure 6 The Communist Party of China's Power

According to the provisions of the Communist Party of China, the CPC holds the National Assembly of the Party once for each 5 years and elects the new Central Committee. Each Central Committee convenes a number of mid-term plenary sessions during a five-year term. The plenary session of the Central Committee is convened by the Politburo of the Central Committee and held at least once a year, usually seven times for each Central Committee. The first Plenary Session immediately after the closing of the Party Central Committee is held to decide the central government organizations, the 2nd Plenary Session is held in February of year mantissa is 3 or 8 and decides the leaders of state organizations, the 3rd Plenary Session is held in the second half of year mantissa is 3 or 8 held, the 4th Plenary Session is held in the second half of year mantissa is 4 or 9, the 5th Plenary Session is held in the second half of year mantissa is 5 or 10, the 6th Plenary session is held in the second half of year mantissa is 6 or 1, the 7th Plenary session is held on the eve of the next Party Congress. A cycle of five years, go round and repeat, for example, Table 1: Policy Map (18th National Congress and Central Committee Plenary Session) and Table 2: Policy Map (19th National Congress and Central Committee Plenary Session).

Table 1 Policy Map 18th National Congress (2012-2016)

Year	Meetings	Mission
2012	The 7th Plenary session (The 17th National Congress) The 18th National Congress The first Plenary Session (18)	Elects the new Central Committee Decides the central government organizations
2013	The 2nd Plenary Session (18) The 3rd Plenary Session (18)	Decides the leaders of state organizations,
2014	The 4th Plenary Session (18)	Strategies Planning and Reviewing
2015	The 5th Plenary Session (18)	Strategies Planning and Reviewing
2016	The 6th Plenary Session (18)	Strategies Planning and Reviewing

Table 2 Policy Map 19th National Congress (2017-2021)

Year	Meetings	Mission
2017	The 7th Plenary session(The 18th National Congress) The 19th National Congress The first Plenary Session(19)	Elects the new Central Committee Decides the central government organizations
2018	The 2nd Plenary Session(19) The 3rd Plenary Session(19)	Decides the leaders of state organizations
2019	The 4th Plenary Session(19)	Strategies Planning and Reviewing
2020	The 5th Plenary Session(19)	Strategies Planning and Reviewing
2021	The 6th Plenary Session(19)	Strategies Planning and Reviewing
2022	The 7th Plenary session(The 18th National Congress) The 20th National Congress The first Plenary Session(20)	Elects the new Central Committee Decides the central government organizations
2023	The 2nd Plenary Session(20) The 3rd Plenary Session(20)	Decides the leaders of state organizations

Countries would enhance their national strength, political stability is more important than economic development. National Strength can refer to such hardware power as military affairs, economy, diplomacy, science and technology, and resources as well as software power such as information network infrastructure and cultural level. Among these, military strength, economy, diplomacy and science and technology can all easily enhance the national strength of the country, and political stability plays an important role in elevating the power at these levels.

Under the situation of political stability, the 9th Five-Year Plan, the 10th Five-Year Plan, the 11th Five-Year Plan and the 12th Five-Year Plan of China, then can be continuously carry out those plans. Next, I describe the TQM-like mode of planning process of 13th Five-Year Plan (2016-2020) for the economic and social development⁴.

The Five-Year Planning period in mainland China lasts two and a half years. Taking the 12th Five-Year Plan as an example, the 12th Five-Year Plan has been started since the mid-11th Five-Year assessment report in mid-2008. Similarly, from mid-2013 the mid-term assessment report of the 12th Five-Year Period has already begun to start the 13th Five-Year Plan. From the PDCA Deming Cycle point of view of China's Five-Year Plan, the structure shown in Table 1. The Fifth Plenary Session of the 18th CPC Central Committee will make overall plans for the development during the 13th Five-Year Plan period, promote medium-and-high-speed economic growth and move toward a medium and high-end standard so as to achieve the grand goal of building a well-to-do

⁴ Most of the following excerpts from the competitive intelligence point of view, mainland China thirteenth five-year planning process and progress, technology industry information room-David published on July 15, 2015. <http://iknow.stpi.narl.org.tw/post/Real.aspx?PostID=11335>.

society in an all-round way by 2020.

Table 3 From the PDCA Deming Cycle look at China's Five-Year Plan

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
12th five-year plan	Do, check & action														
13th five-year plan			Plan			Do, check & action									
14th five-year plan								Plan			Do, check & action				

3. Industrial Technology Innovation Capability Development Plan (2016-2020)

In order to implement the “Outline of the 13th Five-Year Plan”, “Made in China 2025”, “National Innovation-Driven Development Strategy Outline” and “13th Five-Year Plan of National Science and Technology Innovation”; clarify the objectives and major tasks for the development of technological innovation capability in the fields of industry and information of the 13th Five-Year Plan; guide and strengthen the technological innovation in key industries; enhance the capability of technological innovation in industries; and promote the industrial transformation and upgrading. China’s Ministry of Industry and Information Technology issued in October 2016, “Industrial Technology Innovation Capability Development Plan (2016-2020)” proposed, by 2020, focusing on the establishment of about 15 manufacturing innovation centers around the country, accreditation of about 100 Ministry of Industry and Information Technology Key laboratories, building 60 industrial technology-based public service platform, around the core areas of smart manufacturing system revision of more than 10,000 standards, dominating the publication of more than 120 international standards.

This kind of Quality Function Deployment (QFD) or Policy Management of the mode of governance, deploy from the Central Committee of the 13th Five-Year Plan to the State Council’s development strategy, and then by the Ministry of Industry and Information Technology in charge of his own professional projects to provinces, municipalities and autonomous regions related professional unit. This kind of top-down promotion and implementation model is very difficult to implement in a liberal democracy government body.

In addition to achieving the quantitative targets mentioned above, the main tasks of the “Development Plan for Industrial Technological Innovation Capability (2016-2020)” include several tasks and directions, some relevant topics in the field of quality related specialization are listed by columns as follows:

3.1 Column 1: Manufacturing Innovation Center Construction Project

Focus on the Ten key areas of “Made in China 2025”, the next generation of information technology, high-end CNC machine tools and robots, aerospace equipment, marine engineering equipment and high-tech vessels, advanced rail transportation equipment, energy-saving and new energy vehicles, electric power equipment, agricultural machinery and equipment, new materials, biomedicine and high-performance medical equipment. Taking into account the needs of transformation and upgrading of the manufacturing industry; focusing on major national strategies; taking enterprises as the mainstay, combining industries, universities and research institutes. By means of corporate business model, constructing state-building Industry Innovation Center; focusing on industrial frontier and common key technology research and development; protection and application of intellectual property rights; the commercialization of scientific and technological achievements; standards development, public service, personnel training, international cooperation and other work to enhance China’s manufacturing innovation ability.

According to the requirements of the Ministry of Industry and Information Technology on improving the manufacturing innovation system and advancing the guidance for the construction of manufacturing innovation centers and the layout requirements of the “Guide for Made in China 2025 provinces and cities in China” issued by the Ministry of Industry and Information Technology. Select the key industries to gather the advantages of provinces and cities, bringing together regional innovation resources, led by enterprises with industry influence, with capital as a link. Jointly with universities with strong R&D capabilities, with industry-leading research institutes or industrial parks that can integrate regional services, we will explore various synergistic modes of production, education and research and build provincial manufacturing innovation centers. Focus on major regional technology needs, explore the realization of diversified investment, diversification and market-oriented operation, the formation of new R&D institutions. By creating an innovation platform for regional manufacturing industry and serving as a support and complement to the national innovation center for manufacturing industry, the local manufacturing innovation capability will be promoted. By 2020, it will focus on the formation of about 15 national manufacturing innovation centers and a number of provincial manufacturing innovation centers.

3.2 Column 2: Utilization of Intellectual Property Rights Enhancement Project

Encourage and support enterprises to participate in market competition by using intellectual property rights, carry out actions to enhance the utilization of intellectual property rights of enterprises, foster a group of advantageous enterprises with the comprehensive strength of intellectual property rights, and exert the typical leading role of benchmark enterprises with intellectual property rights. Improve the enterprise-led, multi-participatory patent synergies system, to carry out industrial intellectual property rights to promote the use of synergy. We will promote the creation, layout, joint operation and profit sharing of intellectual property rights among members of the Alliance for Industrial Technology Innovation, encourage and support pillar enterprises in the industry and specialized agencies to collaborate in intellectual property evaluation, acquisition, operation and risk warning and response in key areas. Support the construction of intellectual property rights service operation platform for key industries and upgrade the intellectual property rights service capabilities of the industry.

3.3 Column 3: Standardization System Promotion Project

We will organize the implementation of the “Standardization and Quality Enhancement Plan for Equipment Manufacturing Industry” and promote the standardization in key areas such as promote the integration of information technology and industrialization, smart manufacturing, green manufacturing, industrial foundation, 5G, mobile Internet, smart hardware, smart home, cloud computing and big data. Support the establishment of key areas of standard promotion union. Support the development of corporate standards that meet market and innovation needs and establish a system of self-disclosure and supervision of corporate product and service standards. Promote the basic common standards, testing methods and standards with international standards, encourage and support enterprises, research institutes, industry organizations to participate in international standards, enhance international standard drafting in the right of speech and dominance, and promote the internationalization of our standard process.

3.4 Column 12: Software and Information Technology Services Focus on the Direction of Development

Fundamentals and Application Software Technology: Industrial Foundation Software Platform, Industrial Operating System, Industrial Data Integration and Processing Platform System, Manufacturing Operations Management System, Model-Based Systems Engineering, Computer Aided Design and Manufacturing Modeling, Semantic Web Modeling, Knowledge Modeling, 3D Modeling of Complex Personalized Products, Full Life Cycle Flexible Modeling, Human-Intelligence Integration Modeling, Multi-Domain Unified Modeling and Joint

Simulation, Engineering Analysis, Multi-Disciplinary Optimization and Comprehensive Simulation.

Cloud Computing and Big Data Technology: Hardware (Server, Sensor, Manufacturing Equipment), Resource Virtualization and Service Technology, Data Resource Transfer, Data Acquisition, Data Storage, Data Pick, Data Integrate, Data Management, Data Display Technology, Intelligent Information Processing Technology Based on Cognitive Mechanism, Intelligent Voice Technology, and Semantic-Based Retrieval Technology.

Information Security Technologies: Information Security Technologies such as Vulnerability Scanning for Industrial Systems and Devices, Exploitations of Vulnerabilities and Host Protection, Key Technologies and Products in Information Security for Industrial Big Data, Industrial Cloud and Cyber Physical Systems (CPS), Industrial Firewalls, Networks Gateways and other industrial information security border protection products, Advanced Persistent Threat (APT) Protection, attack detection and traceability, electronic authentication technology, trusted websites, trusted mobile applications (APP), trusted mail and other electronic certification.

4. Director General of China AQSIQ Zhi Shuping on “One Belt One Road” Press Conference

The Press Center of the Fifth Session of the 12th NPC held a press conference at the multi-purpose hall of the Center for Meta-information at 10:00 on March 14, 2017 (Tuesday), inviting Zhi Shuping, the Director General of the State Administration of Quality Supervision, Inspection and Quarantine, Sun Dawei, director of the Supervisory Commission, and Tian Shihong, director of the National Standardization Administration Commission, answered questions raised by Chinese and foreign reporters on issues related to “Quality Improvement”, Chinanet live broadcast. The following excerpts from Zhi Shuping on “Quality Improvement”, “Quality Era”, “One Belt One Road” and other issues of saying and doing.

4.1 “Quality Improvement”

General Secretary Xi Jinping has famously saying, is the “Three Transformations”: To promote “the transformation from China Speed to China Quality, from Made in China to Created in China, and from Chinese Products to Chinese Brand”. General Secretary Xi Jinping emphasized in particular the need to improve supply quality as the main direction of supply-side structural reform, and to improve the quality of products and services as the central task of upgrading the supply system. General Secretary Xi Jinping also said: We must establish a strong sense of quality first, and strive to comprehensively improve quality under the utmost strength and conduct quality improvement activities. Premier Li Keqiang also constantly stressed quality work, pointing out that quality is the foundation of strengthening the country, establishing the enterprise and transforming itself. In the government work report last year, the premier emphasized that accelerating the building of a strong country with quality will once again emphasize quality improvement and push China's economic development into an era of quality.

4.2 “Quality Era”

How to treat the quality era or how to describe the quality of the times? Because this is a new topic, I have also seriously considered it myself. I think just like what I just mentioned to you, the party and the state attach great importance to quality. The 18th CPC National Congress proposed to shift the foothold of promoting development to improving the quality and efficiency. All the previous Central Economic Work Conferences emphasized the need to improve the quality of development and efficiency as the center. I myself feel that if the foothold is turned around, the status of the quality center is established, it can be said that the arrival of the quality

era, we are also very longing for. If we make it a little more specific, it is the improvement of the quality environment that I said earlier, if the party committees and governments at all levels do not simply talk about GDP as a hero, but pay more attention to quality improvement, especially the quality of economic and social development; if all walks of life put quality in a prominent place, such as quality of agriculture, quality of manufacture industry, the service industry stresses the quality, in all aspects of the quality of the first place; if people are concerned about the medical, health, education, pension care are valued quality, and even our state organizations to do business, to the people services are particular about quality. All walks of life have to pay attention to quality; quality of creation to become a social fashion, the era of quality is coming. Now we are concerned about the situation of domestic products, because of the quality of domestic products are strong, then the country due to the quality to be strong, it is the arrival of the quality era.

As for how to enter the quality era, the quality of the times is not to say that access can be immediately entered, not overnight and “into”, must forward pace by pace, as General Secretary Xi Jinping asked, stepping stone remains footprint, scratched iron keeps traces, step by step to move forward, hammer nails one by one to grab, it will enter the quality of the times. If you want to enter the era of quality, I think at least to grasp several aspects:

The first is to grasp the strategy. Truly putting quality into a strategic position, as the Central Committee requested, put it in a foothold position and put it in the main direction of the supply-side structural reform and its central task. I just said a few words; I hope reporters help to spread, “quality first, does best, main direction, center mission.” All this is an emphasis the CPC Central Committee asks for the quality to become a strategy, to shout loudly about the quality of power.

Second is to grasp upgrade. In fact, it is necessary to conduct quality improvement activities in an all-round way. One by one to improve quality in all-round field, such as, product quality improvement, service quality improvement, project quality improvement and environmental quality improvement. And then raise the level of economic development are up, it is necessary to upgrade.

Third is to grasp the foundation. Quality improvement must have a solid foundation, that is, measurement, standards, certification and accreditation, inspection and testing of these internationally recognized national quality and technical basis. To improve the quality, we must first make these foundations.

Fourth is to grasp common governance. Mobilize the whole society, the implementation of Total Quality Management (TQM). The main responsibilities of the quality are undertaken by the enterprises, first mobilize the enterprises, and let it play a dominant role, to play its main responsibility to stimulate market vitality. We must also strengthen government supervision and government services and establish a system of quality tracing and encouragement. Let the whole society mobilize, let the pursuit of quality, emphasis on quality, quality of creation become a social fashion, the formation of a good environment for quality development, the formation of a people value quality, everyone to create quality, all people enjoy a brand new era.

4.3 “One Belt One Road”

The “One Belt One Road Initiative” is a very large national strategy put forward by the Central Committee. Now the entire party and people across the country are paying attention to and support for the “One Belt One Road”. As you just said, AQSIQ is a foreign-related department. I began to say that when the AQSIQ was established in that year, under the background of joining the WTO, the supervision of the quality of domestic products and the inspection and quarantine of import and export commodities were integrated together. Therefore, the name of the bureau called the inspection and quarantine in the last two alphabets of AQSIQ. In this case, some

products import, export, trade and international cooperation in production capability are closely related to the functions of our bureau.

General Secretary Xi Jinping proclaimed that “One Belt One Road” should achieve the policy communication, facilities unicom, trade unimpeded, financial intermediation and people communicate friendly. To implement these “links”, it can be said that AQSIQ has its uses. Because we have inspection and quarantine, as well as standards, measurement, certification and accreditation, inspection and testing, it is a technical department that really sets the focus of One Belt One Road service. Just before entering, the host of conference press told us that in the final analysis we are the technology management law enforcement department. We have to give play to our technical expertise by means of playing “technology cards”, reading “service scriptures” and servicing “One Belt One Road”.

To let it simply, the first is a comprehensive planning and promotion. We should start from the domestic front and issue supportive opinions on development and opening up along the border areas. We will set up an inspection and quarantine regulatory information system around the Chinese and European trains to provide inspection and quarantine facilities for the opening of China-EU trains. Strengthen supervision around the Silk Road Economic Belt, promote the inspection and quarantine clearance integration, all located in the Silk Road Economic Belt Inspection and Quarantine Bureaus, the inspection request, inspection, release all implemented integration. Also promulgated the program of inspection and quarantine for the construction of the maritime Silk Road in the 21st century and conducted a comprehensive plan.

Because we control inspection and quarantine, but also quality, standards in our hands, we use this for the trade, construction for foreign projects, to provide support for enterprises to “going global”. Such as standards, many companies to go out, measurement, standards compare with foreign are not the same, need to recognize mutual exchange. For example, when a major oil and gas project was developed overseas, it encountered a standard issue. 83 Chinese standards were registered and authorized for use in Turkmenistan, which brought great convenience and saved a lot of costs.

In addition, after the “One Belt One Road” was launched, many outbound trains encountered the problems of inspection and quarantine. Because each country has her own the inspection and quarantine system, especially food and agricultural products, every country is very strict, and some animal and plant products cannot enter and pass by. Therefore, we study inspection and quarantine policies to provide them with convenience. Such as the Central European train, some European countries to China, inevitably through Russia, Belarus, Kazakhstan and other countries, the middle of the quarantine inspection how to do. We discussed these brother countries and finally solved the problem of transit quarantine. Like the passage of German pork from Germany all the way to Chengdu, the inspection and quarantine problems among the intermediate countries are all we got through negotiation. In addition, some countries also need to borrow China to transport their goods to the neighboring countries; this also raises a problem of transit inspection and quarantine. Now some countries have their products pass by China, from Xinjiang to Lianyungang and then to the countries in Southeast Asia. We are also helping them get through the joints. We did a lot of similar work and provided a lot of technical support.

The third is risk monitoring. A lot of cargo exchange and personnel exchanges, there is a problem of quality and safety and risk monitoring. We have set up a joint working group with the countries concerned to step up the quarantine of the epidemic and prevent the spread of the disease. We also strengthened the monitoring of national quality and safety risks along the line.

5. The Chinese Way Total Quality Management

The so-called “The Chinese Way Total Quality Management” should be progressive. It does not yet have a reasonable and sustainable concrete framework for scientific assessment. Countries would enhance their national strength, political stability is more important than economic development. National Strength can refer to such hardware power as military affairs, economy, diplomacy, science and technology, and resources as well as software power such as information network infrastructural and cultural level. Among these, military strength, economy, diplomacy and science and technology can all easily enhance the national strength of the country, and political stability plays an important role in elevating the power at these levels. More importantly, the people of the country must unify their opinions so that their power can be concentrated, and rely on the baptism of culture to decide on and strengthen their political direction, keep high economic level to ensure the quality of nationals, take advantage of science technology to ensure a strong state. The people’s spiritual needs should also be uniformed by integrating values, integrating knowledge, integrating ideas and integrating wisdom. The so-called “The Chinese Way Total Quality Management” should be progressive; the following events can be verified.

Xinhua News Agency, Beijing, and January 25, 2017 recently, the CPC Central Committee General Office and the State Council General Office issued “the Opinions on Carrying out the Project of Inheriting and Developing Chinese Excellent Traditional Culture”, and issued a circular calling on all localities and departments to conscientiously carry it out in light of actual conditions⁵.

The central government has issued guidelines on preserving and developing excellent traditional culture, wishing a significantly improved in the international influence of Chinese culture by 2025.

The guidelines, which were jointly issued by the General Office of the Communist Party of China (CPC) Central Committee, and the General Office of the State Council, have been designed to preserve and carry forward various forms of traditional arts and Chinese culture.

The guidelines set out that by 2025, major achievements will be registered in traditional culture-related research, education, protection, inheritance, innovation and exchanges. The international influence of Chinese culture should register a “marked boost”.

Specific tasks were listed in the guidelines, including protecting traditional Chinese villages, residences, historic architecture, agricultural and industrial heritage; preserving dialects; and supporting Chinese poetry, music, dance, calligraphy, painting, historical and cultural documentaries, animation and publications.

“Cultural historical remains must be protected within urbanization and development of new socialist countryside,” the guideline said.

“Historically and culturally significant cities, streets, blocks and former residences of historical characters, as well as distinctive features of cities must be preserved.”

It also called for protecting historic townships and villages, and supporting time-honored Chinese brands.

International cultural exchanges were also emphasized. Overseas Chinese cultural centers, Confucius institutes, cultural festivals, exhibitions, book fairs, movie festivals, sports events should be mobilized to promote excellent Chinese traditional culture, according to the guidelines.

“The 2nd World Summit for Chinese Quality” was organized by The World Alliance for Chinese Quality

⁵ “Opinions on carrying out the Chinese excellent traditional culture and inheritance development project (關於實施中華優秀傳統文化傳承發展工程的意見)”, available online at: http://news.xinhuanet.com/politics/2017-01/25/c_1120383155.htm.

(WACQ)⁶, co-organized by CSQ and Tamkang University on November 16, 2017, the theme of the conference is “How to Realize a New Chinese Culture Centered on Quality”, as it said:

“The Chinese culture, which is mainly based on Confucianism, has a long history and extensive depth after thousands of years of accumulation. There are excellent traditions, but some are also can not keep up with the progress of the modern times. Therefore, we should go for something, most of which is “quality”. How to inject new “quality elements” and create “a new Chinese culture centered on quality” so that everyone attaches importance to quality, everything focuses on quality, always focusing on quality and laying the foundation for the sustainable and prosperous development of the Chinese nation, this is our the most important mission of this era.

Chinese society should first have a solid foundation, that is, “a stable and happy society”. Only by maintaining this foundation will we be able to engage in “national quality education and quality cultural infrastructure” and then we will be able to better establish the four pillars of “product quality, service quality, environmental quality and national quality”, and these are the core elements “National Total Quality Management, NTQM”. After the establishment of these four pillars, “the state can sustain prosperity”, so as to achieve the goal of improving the quality of life of all citizens.

The great rejuvenation of the Chinese nation is a common wish of the Chinese in the world. However, it is not an easy task to achieve this. The great rejuvenation path of the Chinese nation is “the road to quality”, that is, to promote “NTQM” in a comprehensive and in-depth manner. From the definition of “NTQM”, we can understand that to promote the implementation of “NTQM” is to simultaneously achieve “a new Chinese culture centered on quality”.

The following enumerates the topics of several keynote speeches and conference papers related to the Chinese way TQM published by experts and scholars.

- 1) Robert Lu, Vice Chairman, Kenmec Group: “The Quality philosophy of New Chinese Culture”.
- 2) TN Goh, Professor of National University of Singapore: “Explore Forward-Looking Quality Management”.
- 3) Lotto, Kim-Hung LAI, Chairman, Hong Kong Society for Quality: Quality Innovation Trend: “Extenics — A Novel Innovation Theory and Methodology originated in China”.
- 4) Wang Chih-Han, Lai Hsin-Yang, Lin Gon-Fu, Kuan Sheng-Pin, Perng Horng-Linn, Chen Wen-Kuei, Lu Robert, Members of CSQ/QKC: “Chinese Quality Philosophy and Fundamental”.
- 5) Lin Gon-Fu, Member of CSQ/QKC: “Explore Rooted in the Chinese Culture Management Philosophy and Application”.
- 6) Pan Jeh-Nan, Professor of National Cheng Kung University: “The Philosophy and Decision Wisdom for Business Executives”.
- 7) William Kuo, Chair. Supervisor of European Taiwan Chamber of Commerce: “Art of War and Management”.
- 8) Xiong Wei, Professor of Zhejiang University: “QFD Theory and Method Based on Chinese Culture Characteristics”.

⁶ WACQ was established in 2015, the core members of WACQ are CAQ (China), CSQ (Taiwan), HKSQ (Hong Kong), and SQI (Singapore), the official language is Chinese.

6. Conclusion

When we discuss the issue of economic and social development of a country, with quality as its topic, it will get less controversy in ideology. The quality of the subject to the “essence of substance” requirements are precise and accurate; to the “process of business” focus on efficiency and effectiveness; to the “conduct oneself” emphasis on words and deeds should be consistent; to the “quality of life” pursue the balance of production, ecology, life; to the society “Datong (The Ideal World)” is our dream.

When the Great Way (or Principle) prevails, the world is owned by all; they elect men of talents, virtue and ability; they practice honesty, and they cultivate universal peace. People love not only their own parents; they treat with parental care not only for their children. Provision is made so that the aged may live comfortably until their death, so that the able-bodied (those in the prime of life) may find employment, and so that the young may have the means of growing up. The widowers, widows, orphans, childless, and those who are disabled by disease are all sufficiently maintained. Men have their work, and women have their home. They do not like goods to be wasted on the ground, but preserve them, not for themselves alone. They do not like their strength to be wasted in idleness, but spend it, not only for their own benefit. In this way selfish scheming are suppressed and have no chance of arising. Robbers, filchers and rebellious traitors do not exist. Hence, the outer doors can be left open, and need not be shut. This is what we call “Datong” (The Ideal World).

Guided by the above quality issues, quality professionals may can be dedicated to that: “for satisfying the universal value of human material and spiritual needs, integrate the methodologies of essence of substance, process of business and psychology, for enhancing the quality of human life, to engage in quality related science research, technology development, and application promotion.” There will be many projects to be carried out, especially the establishment of “The Chinese Way Total Quality Management”.

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