Design Policy Driven Development of Chinese Industry: The Experience from Guangdong Province

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Governments all over the world are paying great attention to economic innovation and the development of design in modern society. They are spending more and more resources on making rules for Industrial Design Policy and measuring its implementation. As a method to make macroeconomic regulation and control by the government, the effectiveness and importance of design policy has already been widely admitted. In a macro-background of the three turns of Chinese design policy, taking the design policy of Guangdong province as an example, this article will analyze how local/regional government should respond to the national design policy. Based on the investigation and analysis of the winners of the "Guangdong Governor Cup Industrial Design Competition", this paper discusses how industrial design competition as a part of the design policy to support the development of industrial design. After making a comparison with the design policy of the Yangtze River Delta area, this article tries to enhance and perfect the current policy path.

keywords: industry competitiveness; design policy; Chinese manufacture; design industry

Introduction

The industry competitiveness is the core symbolization of the competitiveness of a nation. Industrial policy is the main method for the government to actively intervene the economic activities, and the effect of which is directly related to the competitiveness of
the industry. Industrial policy itself is a comprehensive policy system, of which “the core is to promote the reasonable transition of the structure of the industry” (Li Boxi, 1990). There are many ways to realize the optimization of industrial structure by policies, and design policy is one of the feasible paths. As a method to make macroeconomic regulation and control for the government, the effectiveness and importance of design policy has already been widely admitted.

With the increasing attention to the economic innovation and the development of design in modern society, governments of nations all around the world are investing more and more on the research on the Design Industrial Policy, for its method of formulation and implementation. After the WWII, the design industry in Japan has prospered due to a series of industry promoting policies by Japanese government, such as establishing the Japanese Industrial Design Promotion Organization (JIDPO) and founding up G-mark Design Award. Since then, the Japanese brand began to capture the global market swiftly. Being a country that possesses a long history of design culture, British government had issued a series of policies aiming at greatly supporting and assisting design after it had realized the importance of design to its economic development. This has significantly promoted the development of British industrial design. Around the WWII, Finland has shaped its national image by design exhibition and exhibition design. Design has a very high position in Finland and it has been pushed as a political means of its nation. In the end of 20th century, Finnish government once more played an important role in the development process of Finnish design by issuing the policy “Design 2005”. For Korea, its former president Kim Dae-Jung has published “Declaration of Design Era of 21th Century” in 1998, and claimed that building Korea through design will be realized by his three 5-year plans. This has stimulated the innovation of Korean enterprises such as Samsung, Hyundai, LG, and Daewoo, and has established Korea’s leading position in design area. All the examples above indicate that the governments play an important and vital role in the development process of design. They have pushed and promoted the development of design and its related industries in many countries, and made profound influence on the prosperity of global design industry.

In a macro-background of the three turns of Chinese design policy, taking the design policy of Guangdong province as an example, this article will analyze how local/regional government should response to the national design policy and the result from it. Based on the investigation and analysis of the winners of the "Guangdong Governor Cup Industrial Design Competition", this paper discusses how industrial design competition as a part of the design policy to support the development of industrial design. After making a comparison with the design policy of Yangtze River Delta area, this article tries to replenish and perfect the current policy path.

Three Turns of Chinese Design Policy

In 2006, Industrial Design made its debut on the “Summary of 11th 5-Year Plan”. In the following years, Chinese government has issued all kinds of policies to fully support the development of industrial design. Two waves of design policies have formed during 11th 5-Year Plan period and 12th 5-Year Plan period, and China is now in the process of the third wave of design policy. (Figure1)
In 2006, industrial design has been issued in the “Outline of 11th Five-Year Plan” for the first time, being stated as “develop professionalized industrial design”. At that time, the development of Chinese industrial design was still not professional or normative, and this is why the government mentioned to develop “professionalized” industrial design. At the meantime, the understanding to industrial design was still at the stage of discussing the function, structure, form, and package of the product. The main object to industrial design was still industrial product and the core of industrial design was as equal to the product design. This understanding stays on the 1980’s definition of industrial design by International industrial design organization.

During the 11th 5-Year Plan period, pushing the establishment of industrial design park was the important method of Guangdong government to promote the development of design industry. In 2008, Shenzhen joined the UN’s global innovative city network, and has been granted the name of “Design Capital”. Depending on its strong economy and modern urban infrastructure, Shenzhen has always been developing its creative industry which is driven by design. In September 2010, Guangdong Industrial Design City was formally founded in Beijiao, and became the largest planned industrial design industry base in China. This created a positive driving effect to the industries and cities in Pearl River Delta area.
12th 5-Year Plan period (2011-2015): From comprehension to integration

The 12th 5-Year Plan period was the critical period to build well-off society in an all-around way, and the mainline at that time was still to speed up the shift of economic development mode. In 2011, “Outline of 12th 5-Year Plan” mentioned to “promote the shift of industrial design from appearance design to high-end comprehensive design service”. On 26th Feb 2014, the State Council published “Several Suggestions on Pushing the Integrate Development of Culture Creativity and Design Service with Related Industry” (Guofa〔2014〕N0.10). This is the first time that a systematic document on the integrate development of culture creativity and design service with related industry has ever been issued. This time, the connotation of industrial design has been shifted and would no longer be limited by product.

During the 12th 5-Year Plan period, the integrated development of industries has become the focus of people’s attention. In the December 2013, a strategical cooperation agreement was signed between Hair Group（http://www.haier.com）and Alibaba Group（http://www.alibaba.com），to mutually improve the respective disadvantages of internet resources technology and logistic field, and to establish a product service system that covers the whole nation from sale, logistic and installation. In December 2014, Xiaomi Tech（http://www.mi.com）and Midea Group（https://mall.midea.com）became capital partners, in order to share the platform and user resources and jointly develop the new products that face the future. These examples of the development of changing from industrial comprehension to industrial integration verified the positive feedback from the market to the government’s design policies.

13th 5-Year Plan period (2016-2020): Driving innovation

Public entrepreneurship and innovation became the new driving force to the development of design industries during the 13th 5-Year Plan period. Depending on its leading technologies and cutting-edge products, Shenzhen DJI（http://www.dji.com）has grown up to the world top level independent R&D and manufacturer of UAV flying platform and image system. In September 2015, Didi Chuxing（http://www.xiaojukeji.com）and Yutong（http://www.yutong.com）started to cooperate to create the eco-system of internet buses. And again in January 2016, Didi and CMBC（China Merchants Bank）jointly announced their strategic cooperation in all fields including capital, payment and settlement, finance, service and marketing. This is also the first time that a commercial bank enters the mobile payment scenarios field by cooperating with a mobile internet company. Starting from communities, the cross-border E-business company -- XiaoHongShu（http://www.xiaohongshu.com）made its transformation to shopping review community and its sales has broken 700 million within half year. From the above we can see that, whatever it is the technological innovation that breaks the wall between industries, or the user need oriented business innovation that breaks the traditional organizational boundaries of different industries to create sharing economy, they all have manifested the driving force of various and symbiotic industrial innovation in the social environment of public entrepreneurship and innovation.

The aforementioned three turns of design policy have presented the changes of industrial design in China, which include three appearances. The shift of the connotation of design:
from designing product itself to the integrated development of design service and its related industries. The shift of the method of design: from the integration of product factors to the integration that cross the boundary of different discipline and different fields. And the shift of the value of design: from promoting added-value to driving innovation. All these shifts are the result of mutual influence and dynamic adjustment between design and industries.

**Guangdong Government: Gradual Promotion of the Development of Design in a “Point – Line- Surface” Way**

Guangdong province has the trend-leading position as one of the birthplace of the innovation business of Chinese industrial design. The Reform and Opening-up in the late 70s last century has founded the footstone of manufacturing industry to the Guangdong economy. When embracing the advanced idea of industrial design from developed countries and taking the lead to develop industrial design, Guangdong has formed its unique mode and presented outstanding results.

Guangdong province possesses the largest share of economic volume and the fastest speed of economic development in China, and manufacturing industry is the main part of its industry system. The structure of Guangdong industry is, at the moment, shifting from industry leaded to double-wheel driven by advanced manufacturing industry as well as modern service industry. In 2015, the R&D investment of industrial enterprises above state designated scale in Guangdong province occupied as much as 5.16% of the total industrial value-added. The increasing proportion of invested R&D resources shows that the industry pays enough attention to innovation. Being the pioneer of Made in China, when actively responds to the national policies, Guangdong government also correlate to the characteristics of industrial structure of its own. It utilized design as the driving force for the optimization and upgrading of industrial structure and realized the shift from a province being “big” in manufacturing to being “strong” in manufacturing. Under the guidance of national design policy, the development of design and industry in Guangdong province has been gradually promoted in a “Point – Line- Surface” way.

**11th 5-Year Plan period (2006-2010): To develop design industry from breaking through household appliance industry**

During the 11th 5-Year Plan period, the industrial growth has dropped to the lowest point since the Reform and Opening-up due to the impact from international financial crisis. Confronting this difficult time, Guangdong government has actively pushed the shift of mode the economic development. The “Government Report” in 2007 mentioned “to make breakthrough from household appliance industry, and to lead industry extend to the whole process from design, R&D, manufacturing, sale, and service”. In this way, the government hoped to accelerate the adjustment and upgrading of the industrial structure. During the 11th 5-Year Plan period, the structural adjustment of Guangdong industry has gained obvious progress. In 2010, the gross output value of the traditional dominant industries that are related to household appliances, such as electrical and mechanical industry and equipment manufacturing industry, has occupied 0.36% more in the total industrial output value of Guangdong compared to year 2005. This indicates that, in the national environment of design professionalization, the policy in Guangdong province that
leading the industrial development by breaking through its traditionally advantaged household appliance industry has attained quite a success.

12th 5-Year Plan period (2011-2015): Design as the line to string the healthy development of industry

At the beginning of the 12th 5-Year Plan period, the Guangdong economy was transmitting from high speed growth to medium high speed growth. The industrial value-added has increased from 2126.996 billion in 2010, to 3025.949 billion in 2015. With the increased 898.953 billion, it has realized the great step from 2000 billion to 3000 billion. During the 12th 5-Year Plan period, under the guidance of the design policy that to develop design industry from breaking through the household appliance industry, the production of domestic electric fan, electric cooker, microwave oven, and audio system in Guangdong province took around 90% of the total production in China, and the production of domestic gas cooking appliances and gas water heater accounted for a half.

In 2011, as the transitional point of the 12th 5-Year Plan period, the Guangdong province government report stated that “to push the development of industrial design, to build national level exemplary base of industrial design industry, and to lead the healthy development of the industry.” The reported also emphasized to “implement dual-system education mode with the cooperation between school and enterprise and the action plan of hundred schools and thousand companies; to launch industrial design competition”, and “to launch the pilot project of the professional qualification certificate of industrial designer”, hoping to promote the professionalization of design, to enhance the public awareness of design, and to improve the reserves of skills and technologies. Two documents have been issued one after another in 2011 and 2012, “The guidance on accelerating the development of cultural creative industries in Pearl River delta region”, and “Several opinions on promoting the development of Science and technology service industry”.

By the end of 2015, Guangdong Economic and Information Commission brought forward the “new four modernizations” strategy of industrial design in the 13th 5-Year Plan period, which is “designing of industry, industrialization of design, professionalism of talents, and internationalization of development.” The commission hoped to push the creative development of “Design +”, with the main line of promoting the industrial transformation and upgrade and leading the development of advanced manufacturing industry. Design, as a line, will connect the cooperation between institutions and push the development, and finally accelerate the shift from “Made in Guangdong” to “Created in Guangdong”.

13th 5-Year Plan period (2016-2020): Design as the surface to cover the innovation eco-system of all industries

During the 13th 5-Year Plan period, the “3rd industrial revolution” based on digitization, intelligentization and informatization will accelerate its process around the world. As a big province of manufacturing, Guangdong has actively responded to the strategy of “Made in China 2025” and issued a series of documents to make a series of corresponding implementation plans for the 13th 5-Year Plan, such as “Guangdong Intelligent Manufacturing Development Plan (2015-2025)”, “Work Plan of Guangdong industrial transformation and upgrading”, and “Three-year implementation plan for tough battle of
Guangdong industrial transformation and upgrading (2015-2017). It hopes to make design as a surface to cover the innovation eco-system of all industries, to push the deep integration of informatization and industrialization, to promote the independent innovation abilities of the industry, to enhance the efficiency of resource utilization, and to optimize the industrial structure.

Take Shunde as an example. In the spatial arrangement and design-industry integration arrangement of Shunde innovation design, the government focused on the development plan and orientation of Shunde region, with the consideration of three dimensions of industry, territory, and humanity. By centering the “Design +” as the core strategy, the government has arranged and built the innovation eco-system of the integration of design and its related industries from multiple dimensions, such as “Design + Intelligent Manufacturing”, “Design + Finance”, “Design + Internet”, “Design + Technology”, and “Design + Startups”.

Up till this, Guangdong government had completed its development path of design policy in a “Point – Line- Surface” way, that is to push the design industry from making household appliance industry as a starting point to lead the development of design industry, to making design as a line to string the healthy development of industries, to, finally, making design as a surface to cove the innovation eco-system of all industries. Thusly, the pattern of design development that is led by the government has eventually formed.

**Measures of Guangdong Government to Promote the Development of Design Industry**

Design policy is one of the main components of the driving innovation to the industrial transformation and upgrading. It has to be structural, institutional, and systematic. By analyzing the three 5-Year Plan periods, this article tries to construct the system of the promotion of design industry in Guangdong and how this system can promote the four-modernization development of the design industry in Guangdong (Figure 2), including strategic level, consulting and information level, and execution and organization level. Figure 2 shows the three levels of Guangdong's design policy and the subject, measures and design task of each level. Moreover, it illustrates how to achieve the “new four modernizations” strategy of industrial design.

![Figure 2 Measures of Guangdong Government to Promote the Development of Design Industry](image-url)
**Strategic Level: planning the development mode of design industry**

Strategic level is the decision maker of the whole system. Being in the center position of the system, this level makes the policy, issues the related politic subjects, considers the establishment of the policy goal, and designs the detailed policy plan (Chen Zhenming, 2003). The top level work of Guangdong provincial government includes the making of policies, the promotion of Guangdong Industrial Design City, establishing and developing of the design colony of Guangdong-Hongkong-Macao design corridor, pushing the gathering of design industry, strengthening and perfecting the IPR system, and the political and financial orientation of providing platform and technic support.

**Consulting and information Level: constructing the development path of design industry**

In the middle is the consulting and information level. Being as the nervous system of the policy system, this level provides timely, accurate and suitable information for the making, execution, evaluation, and supervision of the policy (Chen Zhenming, 2003). By implementing the standard roadmap and guide, this level plays a role of industry management that serves, coordinates and supervises the industrial design industry and manufacturing industry. In Guangdong, Guangdong Industrial Design Association (GDIDA) acts as the bridge between the government, companies and schools. By presenting the research report of the industries as the basis for the government to make related industry policies, GDIDA has promoted the issuing and implementation of those policies. Its service has reflected the wishes and demands for the innovation of enterprises, protected the fair competition of design industry, supported the economic and technic communication and cooperation of both domestic and abroad, greatly popularized the knowledge of industrial design using the social resources, and promoted the development of industrial design career in Guangdong province. The activities it undertook, such as “Governor Cup Industrial Design Competition” and “Guangdong Industrial Design Week”, made design a lever for the development of industries, changing design from accompanying industry to leading industry, pushing the connection between companies and design results, and promoting the industrialization of design results.

**Execution and Organization Level: implementing the construction of design industry**

The bottom level is the execution and implementation level of policies that constituted by institutions. This level converts policy plans to policy benefits. It is realistic, comprehensive, detailed and agile. In Guangdong province, the main executive units are schools, design companies and design training bases. Establishing the company’s design training base can promote the cooperation with schools. The industry-university-research mode could strengthen the construction of design related disciplines, and push the revolution of design education and the innovation of talent education. Besides, the company itself can implement fundamental, general, and perspective design research, establish all kinds of cooperation with overseas design institutions, and import foreign design experts and scholars to China to conduct project cooperation, and teaching and training activities. Being invested and co-build by Dongguan City People’s Government and Guangdong University of Technology, Guangdong South China Institute of Industrial Design (GDSCIID) is a typical design innovation service institution that belongs to the basic
level. Taking innovation design as its measures, it promotes the design innovation of regional products and the construction of independent domestic brands by design services, design consulting, and product development and incubation.

Focusing on the main line of industrial structural adjustment, transformation and upgrading, Guangdong has established its development idea of “strong province of design”. It has issued the “new four modernization” development strategy of “designing of industry, industrialization of design, professionalism of talents, and internationalization of development”. And it has formed the strategic system of design development that is strategically guided by the government’s design policy, connected by the coordination and communication led by GDIDA, and implemented by the development of high schools, companies and design institutions.

**Case Study: “Governor Cup” Industrial Design Competition levers the Industrial Development**

In the policy system of Guangdong industrial design, the GDIDA in the middle level has fully played its role for connection, and realized the levering effect of design to the industry by all kinds of measures such as the “Governor Cup” industrial design competition.

Guangdong “Governor Cup” industrial design competition is the first design competition in China that is entitled by the name of the government. It is held every two years and has already held eight terms in succession. It has also inspired subsequent “Mayor Cup” in Guangdong and other “Governor Cup” in other provinces. Today, “Governor Cup” has become a normalized platform for the “public innovation”. It motivates the partisanship of the companies, design institutions, schools and independent designers from the whole society, exploits the design creativities and independent innovation, stimulates the innovative energy of the society, creates the good environment of respecting original and advocating innovation, and thusly, promotes the “new four modernizations” of design and its related industries in Guangdong.

This article has investigated awarded companies and personal by questionnaire investigation that has won the product award and concept award in the 5th (2010), 6th (2012), and 7th (2014) “Governor Cup” by questionnaire. The result of the investigation shows that the awarded works has created huge business value and economic benefit. We released the 39 questionnaires by internet and finally called back 36 questionnaires available. The survey included Skyworth, Fiyta, Midea and other enterprises; Newplan and LKK and design teams from Guangzhou Acmemy of Fine Arts, Guangdong University of Technology and other universities. The results from these three terms have applied 620 patents for invention, 751 appearance patents, and 1136 utility model patents; and their direct economic benefit has reached as high as 5.908 billion RMB.
Conducting companies to establish its innovation system, and enhance its innovation ability

Figure 3  For enterprise, the influence brought by “Governor Cup”

According to Figure 3, among all, the lifting of company’s popularity by “Governor Cup” is the most apparent one (47%). Besides, the production value is increased (28%) and the user reputation is gained (23%). The companies are strongly willing to participate “Governor Cup”: on one hand, good design work should be approved by the public and experts; on the other hand, participating the competition can prove the design ability of the company and increase the company’s value added. Moreover, the competition is also significant to the promotion of the innovation system and innovation ability of the company.

Conducting the establishment of scientific process system
The competition has established a scientific evaluation system that can help the research and design process of a company to be more scientific. The evaluation system of this competition has added the judging standard of “process evaluation”, which not only concerns the “result”, but also the rationality of its “process”. This will effectively reflect the rationality of the project and the innovation and R&D abilities of the company. “Process Evaluation System” stimulates and conducts the companies to pay attention to the process of its R&D, and promotes the companies to make its R&D and design process more scientific and regulated. The investigated companies highly approved the “Process Evaluation”. They believe that in the innovation design, the serious and scientific process, research and method can effectively enhance the efficiency of innovation, help the designers to find the rational and valid design innovation point or breakthrough in a shorter time, and guarantee the quality of innovation.

Promoting companies to pay attention to design and enhance their innovation ability
By gradually recognizing the reputation and potential effects that can be brought by the competition, companies will pay more and more attention to design. Not only the personals and companies that won the “Governor Cup” will be financially awarded, there are many other measures being made to encourage and stimulate innovation.
Actively participating design exhibitions and competitions. For example, Skyworth has been granted the national industrial design center. For many times they participate the domestic and overseas design exhibitions and competitions every year, and periodically, they implement and publish their design advanced research projects.

Making regulations, strengthening the design R&D. Haige Communications invests tens of millions into the R&D of new products. Guangdong Xinhui CIMC Special Transportation Equipment Co., Ltd. has upgraded its design software and has built a 3D design platform. Zhongshan Longcheng Daily Products Company has proposed the detailed implement and award regulations aiming at industrial design in its “Measures for the management of scientific research project and funds” and “Measures for the management of research and patent”.

Establishing research center, encouraging industry-university-research cooperation. The companies can establish its design R&D center and build long-term and broad technic cooperation with schools, research institutions and consultants. For example, the kitchenware department of Media Group has established its user experience research room and comparison room.

Being international and improving internationalized vision. The company will import outstanding designers from domestic and abroad, invite experts to make communication, and learn from international design idea. In the meantime, the company also encourages splendid young designers to go further study and visit abroad. For example, Dongguan TANITA holds inner training program as well as sends technicians to Japan for further education.

**Pushing the development by breaking through enhancing the industrial design level**

The competition has significantly pushed the industrial innovation by promoting the transformation and upgrading of traditional industries through concept innovation, technology integration and leading industries. Among them (Figure 4), “leading industries” has the most influential effect. By designing new products, developing new technologies, and exploiting new fields, it has brought forward the new modes that promote the development of the industries.

![Figure 4](image_url)  *The influence of industries brought by “Governor Cup”*
Promoting the interaction and connection between design and manufacturing, and pushing the original innovation of the industry

On the aspect of industrialization of the awarded works, there are still places to be improved. From the investigation (Figure 5), we have learned that many design works cannot be industrialized, 37% of them are because of the lack of technological support, and another 37% of them are because of the lack of industrial connection. For example, the biscuit type coffee machine “Slow Life” designed by EASE Design (Guangzhou) has won the prize in the 6th “Governor Cup”, but did not industrialized because of the problem of industrial connection. The “Application of OLED or LED Light Resource” designed by Zhangxin in Art and Design School, GDUT, faces the same difficulty.

Pointing to this problem, “Governor Cup” provided the “Design + Finance” connection fair after the competition to industrialize the result from the competition. It aims at, but not limited to the outstanding concept design and product design from “Governor Cup”. By importing the resources like venture capital funds, crowd funding incubation platform and brand enterprises, it provides an opportunity to make face-to-face communications with the original designers or design team and promotes the industrialization of the results from the competition. Moreover, it also provides the design tasks trading center, which organizes all kinds of activities to introduce the design results, and push the good design and good innovation to the market.

Advocating originality, and improving the IPR protection of industrial design
Through the conducting of the participation from companies, the competition has created a good environment that protects originality and IPR. During the evaluation period of “Governor Cup”, the Provincial Economic and Information Commission has held the forum that invited the provincial education department, science and technology department, cultural department, department of culture, broadcasting, television, press and publication, intellectual property office, and provincial finance office, to discuss the improvements of IPR services and clarify the property ownership. GDIDA has fully played its role as the industry association to make the industrial IPR strategy, which advocates
from the inside of the industry the respect of knowledge, talents, and rights, and the value of integrity and win-win. Newplan industrial design company added IPR Legal Specialist in its position system.

Furthermore, “Governor Cup” and all other related competitions have also provided a platform of communication and learning for designers, and helped the designers in enterprises to study from outside. The significance and influence of “Governor Cup” have reached beyond the scope of an innovation design competition, to one of the most important measures to push the development of Guangdong industry.

Comparison: the Feature of Industrial Design Development in Yangzi River Delta Region and Pearl River Delta Region

After analyzing the three levels of Guangdong design policy and the results from “Governor Cup”, this article makes horizontal comparison with the design policy in Yangzi River Delta Region, and tries to find some referential experience and lessons. With its first-mover advantage from Reform and Opening-up, Pearl River Delta Region first brought industrial design into China. However, Yangzi River Delta Region has its late-mover advantage; the fast development of its industrial design has benefited a lot from the economic needs in recent years. As the two economic areas that possess the fastest increase speed and best investment environment, the innovation development modes of Pearl River Delta Region and Yangzi River Delta Region has attracted the close attention of many scholars.

Represented by Shanghai City (Hu), Jiangsu Province (Su) and Zhejiang Province (Zhe), Yangzi River Delta Region features rich cultural heritage, advanced education, and high openness. It has a rather longer experience of modern manufacturing industry, which provides better survival and development environment for industrial design as both a cultural creativity industry and a modern service industry. Through the research and analysis of Shanghai City, Jiangsu Province and Zhejiang province in Yangzi River Delta Region, we have found that because of the strong demand from manufacturing industry and the need from the manufacturing service industry itself, the local governments actively advocate the development of industry, implementing detailed measures to push the industrial transformation and upgrading by making industrial design as the innovative method.

Attention from the government and the collaboration from departments. The attention of industrial design from Su, Zhe, and Hu are all on the top-level design. Their industrial plans are featured by the solid fundamental works, clear development emphasis, and the deployed implement of policies. The major leaders directly coordinate the design related departments of the government, and build the collaboration system for the functional department. The clear division of work and functions formed joint force to guarantee the efficient implement of related industry policies. What’s more, within the joint system of these three city/provinces, their competent department and statistical department have created the corresponding industrial design indicator system and statistical accounting method.

Ramming foundation and emphasizing ideas. The emphasis on the idea of design innovation exists not only in the decision and execution level of the government, but more
importantly, in the body of independent innovation: the companies and the whole society. These three city/provinces have paid a lot of attention on the fundamental research of design, on the relevance of design, and on the formation of new mode and new business. They have raised their own development strategy according to their on respective characteristics and have established the corresponding political supporting systems.

**Integrating resources and focusing on key points.** During the process of pushing the development of local industrial design, Su, Zhe, and Hu emphasize on integrating all kinds of resources in a focused manner. These three city/provinces have successively cooperated with Ministry of Industry and Information Technology, Ministry of Culture, Ministry of Science and Technology, the Chinese Academy of Engineering (CAE), and China Industrial Design Association (CIDA) on the aspects of industrial design activities, importing subjects, and building research institutions and service center. The local governments have invested a lot to support the national-level big projects to be landed on their own regions.

**Connecting industries and establishing benchmark.** Industrial design is now being delicately forged as the important content of innovation industry. The industrial connection that realizes its value is mainly reflected on its service for the Yangzi River Delta Region, the whole nation, and even the whole world. Shanghai S.Point Design is now the biggest design service provider for Siemens around the world; and Shanghai MOMA Design has served a bunch of local featured industries and helped the creating of local brands under its idea of “design helps the development of towns”.

**Import talents and cultivate eco-system.** The abundant cultural heritage, the outstanding education resources, the high-speed economic development and the construction of innovation eco-system make it possible for design talents to gather in this area. Southeast University, Jiangnan University, Nanjing University of the Arts, Zhejiang University, China Academy of Art, Tongji University and Shanghai Jiaotong University have, in succession, gained the qualification of educating doctors in industrial design field. This formed a striking contrast to Guangdong province, in which no high school has gained the comparable qualification yet.

Compare to the Yangzi River Delta Region, the economic development in Guangdong province, which depends largely on the manufacturing industry, is facing huge pressure for its transformation and upgrading. It is confronting new mode, new business and their resulting new opportunities and new challenges. For foundation, up till today, Guangdong still doesn’t have a data monitoring and indicator statistic system that is based on the industrial development and being widely admitted by the public. For coordination, each region, each field, and each department works for self without an integrated and coordinated system. For public services, the platforms are scattered, the efficiency is low, lacking of fundamental research and generic technology research. For resource integration, the level of internationalization is not high enough, and seldom national level project is landed here. For attracting talents, the construction of cities and its soft environment dropped behind, leading to the shortage of high-end talents. For the high education and professional education of design, none of its high schools has gained the doctor educating qualification, which makes the design employees unwilling to pursue further education.
Conclusion

Institution construction promote the development of design industry

The development of industrial design industry in Guangdong Province can not be separated from policy. Guangdong Provincial Government in the formulation of design policies, financial system and the protection of intellectual property rights plays an important role. Although the current policy system is not perfect and comprehensive, but Guangdong Province has built a macro-environment which government, institutions and related social organizations are actively creating. In the comparison of design policy between Guangdong Province and the other area in Yangtze River Delta, it is found that for Strategic level of GuangDong Provence, it is crucial to perfect the planning and coordinating system and integrate resources. For Consulting and information level, it is crucial to build a data monitoring and indicator statistic system that is based on the industrial development and being widely admitted by the public. Moreover, increasing fundamental research and generic technology research and educating high-end talents are important tasks. (Figure 6). At this point, Guangdong Province design policy-driven industrial development strategy system is gradually improving, and also to speed up the development of China’s design industry strategy, providing a better solution.

Figure 6  Design policy in Guangdong still needs to be improved

The enlightenment for the development of Chinese design industry

Providing successful case of integration of design with industry

Guangdong Provincial Government in combination with its own industrial structure characteristics is using industrial design as an approach to promote developments of design and industry step by step and to achieve the upgrade and optimization of industrial structure. The industrial design in Guangdong Province is swapping enterprise independent for a new situation that enterprises take charge but guiding by government,
industry integration and working together with different party. And it has got great success in China and the whole society. Guangdong Province used to be a ‘big industry province’, but now it has been becoming a ‘powerful industry province’. It provides successful cases and experience for combining design and relevant industries together.

Exploring a development pattern of Chinese design policy
In recent years, the Chinese government’s emphasis on the design industry has increased, and some policies have been introduced to promote the development of the design industry. However, in general, the development of China’s design industry is not yet mature and requires further efforts. The Industry Design Development System built by Guangdong Province includes: strategy level which the government belongs to, consulting and data level for enhancing and execution, organization level for basic research organizations and companies. It not only provides finance and consulting service to design industry but also supports relevant industries for promoting design development and explores new patterns for Chinese design policy by publishing new policies and setting up industry guiding departments. At area execution level, different area needs to build its own design policy system basing on its own development foundation and conditions. And in the macro-environment of industrial relocation and industrial transformation, different area should let design play a role in promoting industries development to achieve innovation in different area.

References


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