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## **Special Issue:**

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## **State Council Issues Guideline on Developing Makerspaces and Promoting Mass Innovation and Entrepreneurship**

The State Council has issued the Guideline on Developing Makerspaces and Promoting Mass Innovation and Entrepreneurship (Guideline). The Guideline states that embracing the new trends of mass innovation and entrepreneurship in the Internet age, accelerating the

development of new-type entrepreneurship service platforms such as makerspaces, and fostering a favorable environment for innovation and entrepreneurship are important measures for advancing China's Innovation-driven Development Strategy and adapting to the new

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normal of economic development, and will play a significant role in stimulating the creativity of the public and developing new engines of economic growth.

The Guideline clarifies that efforts to promote mass innovation and entrepreneurship must adhere to the market orientation, strengthen policy integration, increase openness and sharing, and innovate service models, with the focus on eight major tasks.

Firstly, build a number of low-cost, convenient and open makerspaces, which combine online and offline resources to provide innovators and entrepreneurs with favorable spaces for work, networking and resource sharing.

Secondly, lower the threshold for innovation and entrepreneurship by deepening commercial system reform, facilitating startup registration, and providing makerspaces with subsidies for expenses on property lease, broadband network and public software.

Thirdly, encourage R&D personnel and graduates to start businesses by 1) accelerating pilot reforms of R&D achievement use, disposal and benefit management of central-level public institutions and improving the entrepreneurship stock option incentive mechanism for R&D personnel and 2) introducing graduate entrepreneurship guidance plans and providing places, public services and financial support for graduates to start their own businesses.

Fourthly, support public services for innovation and entrepreneurship by 1) supporting the development of service platforms and organizations for SMEs, promoting the openness and sharing of S&T facilities, and strengthening e-commerce infrastructure construction; and 2) providing fast tracks for small and micro-sized

enterprises in patent review.

Fifthly, strengthen the role of fiscal funding in guiding social capital through the market mechanism, fostering angel investors, and supporting the development of small and medium-sized technology startups.

Sixthly, improve the entrepreneurship investment and financing mechanism by 1) piloting Internet equity crowdfunding; 2) regulating and developing regional equity markets for SMEs; and 3) encouraging banking and financial institutions to provide financial services for technology-based SMEs.

Seventhly, expand innovation and entrepreneurship activities by 1) continuing to organize relevant competition and training events such as the China Innovation and Entrepreneurship Competition; 2) putting in place a sound entrepreneurship tutorship system; and 3) encouraging enterprises to establish open innovation platforms serving mass entrepreneurship.

Eighthly, advocate an innovation culture where pioneers are encouraged and failures tolerated and vigorously foster the entrepreneurial spirit and the maker culture.

The Guideline emphasizes that governments and departments at various levels should attach great importance to promoting mass innovation and entrepreneurship, actively implementing various policies and measures, substantially increasing capital investment, carrying out entrepreneurship pilot projects in areas with favorable conditions, encouraging the exploration of new mechanisms and policies, and creating a favorable environment for innovation and entrepreneurship.

(Source: Science and Technology Daily, March 12, 2015)

## **Premier Li Keqiang: Drive Mass Innovation and Entrepreneurship**

From January 4 to 6, 2015, Premier Li Keqiang made an inspection tour in Shenzhen and Guangzhou. During the tour, Premier Li had an in-depth understanding of the latest progress of reform and opening up in Guangdong. He said China faces many challenges as its economy

steps into the "new normal" phase. In this context, it is necessary to remove barriers hindering the initiative of the people, the vigor of the market, and social creativity, push forward systematic reforms, strike a balance between steady economic growth and necessary adjustment

in economic structure, achieve better quality and greater coordination in reform, and drive the economic development at a medium-to-high growth rate towards medium-to-high end and the elevation of people's living standards towards a higher level, he added.

Premier Li visited Chaihuo Makerspace, Qianhai Webank and Huawei Technologies Co., where he was briefed on the status quo of creative manufacturing, financing services for small and micro-sized enterprises, and business management innovation. He said that in the face of the complicated and serious domestic and international economic situations and the decline of traditional growth drivers, China will promote market-oriented mass innovation and entrepreneurship to provide a new driving force of the country's economic development. In particular, the emphasis should be

placed on making the most out of system and mechanism innovation, speeding up financial reform, developing private banks and inclusive finance, promoting the concentration of productive factors on promising new products, new technologies, new industry formats and new business models, supporting entrepreneurship by all "makers", and turning myriad small and micro-sized enterprises into a powerful and constantly growing economic force.

Premier Li highly recognized socio-economic development in Guangdong, and encouraged the province to play an exemplary role in sustainable growth, and lead the nation in upgrading the quality and performance of economic development.

(Source: Science and Technology Daily, January 7, 2015)

## **Liu Yandong: Create Favorable Environment for Mass Innovation and Entrepreneurship**

In her recent study tour in Beijing and Tianjin, Vice Premier Liu Yandong emphasized the need to comprehensively implement the Innovation-driven Development Strategy, deepen system and mechanism reforms of power delegation and function transformation, support low-cost, convenient and open makerspaces, and stimulate public creativity to provide a driving force for the country's stable economic growth, restructuring and livelihood improvement.

During the tour, Vice Premier Liu visited a number of entrepreneurship service organizations, creativity industry bases and technology companies, including Innovation Works, Angel Crunch, 3W Coffee and 36Kr in Zhongguancun in Beijing, and Youth Venture Zone, Youth Innovation & Entrepreneurship Base of Nankai University, Cheer Market and TROILA, Inc. in Tianjin, where she met with entrepreneurs and representatives of venture capital companies and listened to their ideas and suggestions on innovation and entrepreneurship. Vice Premier Liu gave full affirmation of the remarkable achievements of the two cities in developing the technology service industry, promoting mass innovation

and entrepreneurship and supporting SMEs.

Vice Premier Liu said that in the present stage to build a moderately prosperous society in an all-around way, promoting mass innovation and entrepreneurship has become a new driving force in maintaining China's economy at a medium-to-high growth speed and upgrading it to the medium-to-high end, and it also provides a great opportunity to release the talent dividend and help individuals achieve their dreams. It is important to grasp the important opportunities of the new technology revolution and industrial transformation, adapt to the trend of mass innovation and entrepreneurship, vigorously develop the technology service industry such as technology transfer and technology financing, improve supporting policies concerning premises, network, capital and talent, reduce the cost, and provide low-cost and high-quality service platform and a favorable environment for innovation and entrepreneurship. Measures will be taken to further reform the administrative approval process, give full scope to the role of the market mechanism, optimize innovation and entrepreneurship management and service, improve in-process and post-event supervision, and

facilitate and support activities of market participants. Measures will also be taken to effectively leverage national innovation demonstration zones and high-tech development zones to aggregate advantageous resources, promote the flow of innovation and entrepreneurship factors, support SMEs to follow the development path of “specialty, excellence, uniqueness and novelty” to grow bigger and stronger, and turn mass innovation and entrepreneurship into a new engine of economic growth. Moreover, efforts will be made to guide young

people to have right attitudes towards entrepreneurship, increase support for entrepreneurship, reduce the barrier to innovation and entrepreneurship, and help a greater number of visionary and ambitious youth to put their talent to good use. Finally, it is also of great importance to carry forward the innovation spirit of daring to be the first and not fearing failure, promote successful cases of startups, and foster a robust innovation culture.

(Source: Science and Technology Daily, April 16, 2015)

## **Wan Gang: Mass Innovation and Entrepreneurship Drive Social Transformation**

Minister of Science and Technology Wan Gang recently made a study tour on mass innovation and entrepreneurship in Hefei.

After visiting the quantum communication program of the University of Science and Technology of China and the NEV project of JAC Motors, Wan Gang chaired a symposium on mass innovation and entrepreneurship. At the meeting, Wan Gang pointed out that “mass innovation and entrepreneurship” represents a profound reform to drive social development, with significance comparable to the reform initiated more than three decades ago. He added that “mass innovation and entrepreneurship” is not a catchy slogan but the umbrella term for a package of reforms and policies to release the creativity of the private sector.

Minister Wan emphasized that promoting mass innovation and entrepreneurship is a new engine supporting the medium-to-high growth of China’s

economy and plays an important role in promoting the transformation of traditional industries and the fostering of new business models. From the great number of startups mushrooming from mass innovation and entrepreneurship will certainly emerge a good number of “small giants” that will upgrade the entire industrial structure to the medium-to-high end. Therefore, importance must be attached to mass innovation and entrepreneurship as an important means to implement the Innovation-driven Development Strategy. Specific measures include 1) improving understanding and forming consensus; 2) integrating entrepreneurship and innovation resources and policies and vigorously developing new-type entrepreneurship service organizations such as makerspaces; and 3) accelerating transformation of government functions and strengthening the decisive role of the market in resource allocation.

(Source: Science and Technology Daily, April 21, 2015)

# **MOST: Develop Makerspaces and Facilitate Mass Innovation and Entrepreneurship**

With the comprehensive deepening of reforms, expansion of opening up, and implementation of the Innovation-driven Development Strategy in recent years, China has witnessed adjustment of the international science and technology innovation landscape. The aggregation of innovation factors such as technology, talent and capital and the substantial improvement in entrepreneurship service infrastructures and market environment have led to a new massive movement of "mass innovation and entrepreneurship". In 2014, China had over 1,600 incubators, providing services for more than 80,000 startups and employing 1.75 million people; 115 national high-tech development zones home to more than 500,000 registered enterprises, including 13,000 in the Zhongguancun Science Park alone; and more than 1,000 venture capital companies with a combined capital of more than RMB 350 billion. In the same year, a total of nearly 300,000 R&D findings were translated through technology markets, with the technology contract value arriving at RMB 857.7 billion.

As China is implementing the Innovation-driven Development Strategy and its economy stepping into the "new normal", it is of necessity to accelerate the pace of mass innovation and entrepreneurship and drive economic growth.

## **I. Mass innovation and entrepreneurship in China has taken on four new characteristics:**

1. Transition of entrepreneurship service from government-dominated to market-based: The development of the modern market system has produced a large number of market-oriented professional startup incubation organizations which provide a strong capital support for innovation and entrepreneurship.

2. Transition of innovators from "minority" to "majority": With the emergence of new technologies and the increasing openness of the market environment, innovation and entrepreneurship are no longer confined to the elite but are possible for ordinary people, and there have emerged four new groups of entrepreneurs, including post-'90 entrepreneurs, executive-turned entrepreneurs, scientist

entrepreneurs, and overseas returnee entrepreneurs.

3. Transition of entrepreneurial activities from internal organization to open coordination: Large enterprises bring together innovators and entrepreneurs by establishing open innovation platforms. With accelerated movement of innovation and entrepreneurship factors worldwide, there are growing cross-border entrepreneurial activities.

4. Transition of entrepreneurship concept from technology supply to demand orientation: Satisfying user experience and personalized needs become a major starting point of innovation and entrepreneurship. On the basis of technology innovation, there have appeared more innovative business models which transform the way products are supplied and consumed.

## **II. New-type incubators become a new major force in the technology service industry**

Since 2009, nearly one hundred new-type startup incubators have mushroomed in Chinese cities with a strong innovation and entrepreneurship atmosphere such as Beijing, Shenzhen, Wuhan and Hangzhou, the most prominent among them including Innovation Works and Garage Cafes. These new-type incubators with different characteristics which integrate various innovation and entrepreneurship factors have incubated new models, new mechanisms, new services and new cultures and have played a positive role in increasing enthusiasm for innovation and entrepreneurship. These incubators are roughly divided into five types: 1) investment; 2) training and mentorship; 3) media extension; 4) professional service; and 5) maker incubation.

## **III. Develop makerspaces and build a new economic engine under the "new normal"**

The CPC Central Committee and the State Council attach great importance to mass innovation and entrepreneurship. Since 2014, Premier Li Keqiang has made important instructions on mass innovation and entrepreneurship on different occasions. He emphasized that mass innovation and entrepreneurship represent an inexhaustible "gold mine" of creativity and wealth and reforms must be vigorously pushed to reduce interference with innovation activities

and enable every entrepreneur to chase their dreams by providing a favorable environment, thus promoting social mobility and justice while building a new engine for China's future economic growth. Vice premier Zhang Gaoli and Vice Premier Liu Yandong have also made relevant instructions and set forth explicit requirements on mass innovation and entrepreneurship.

In spite of the constant improvement of the innovation ecosystem, mass innovation and entrepreneurship still faces some problems, including 1) relatively backward entrepreneurship infrastructures and high cost of innovation and entrepreneurship from such aspects as premises and services; 2) inefficient startup financing channels, with angel investment and crowdfunding lagging behind the development of innovation and entrepreneurship; 3) difficult access by ordinary entrepreneurs to governmental funding, with most startups trapped in the vacuum of market malfunction; and 4) regional imbalance in innovation and entrepreneurship development, with the public awareness yet to be improved.

Facts have shown that the solution to the above-mentioned problems is to develop a number of low-cost and convenient entrepreneurship service communities which take into account the characteristics and meet the needs of mass innovation and entrepreneurship, i.e. makerspaces, which provide innovators and entrepreneurs with spaces for work, networking, and resource sharing.

Developing makerspaces doesn't mean a lot of infrastructure construction, but means optimizing business models and operating mechanism of the existing service organizations by drawing upon the models of new-type incubators such as Garage Cafe, 36Kr and Angel Crunch in order to leverage the aggregation effect of entrepreneurship service organizations to enable entrepreneurs to share experience, knowledge, ideas and facilities with each other and form an open entrepreneurship ecosystem characterized by "one for all and all for one", "mutual help" and "user

participation". In this respect, it is important to adhere to the principle of government taking the lead and the market playing the principal role, give full scope to social forces, release the system effectiveness of innovation and entrepreneurship policy integration and "interconnectivity", effectively utilize the favorable conditions of national innovation demonstration zones, national high-tech development zones, university-based science parks, universities and research institutes, and further reduce the cost and barrier of entrepreneurship.

Main measures to support the development of makerspaces include: 1) Expand the models of existing startup incubators such as Makerspace and Innovation Works to combine online and offline resources, integrate incubation with investment, and provide small and micro-sized enterprises and individual entrepreneurs with low-cost, convenient and open service platforms; 2) Strengthen policy support by, for example, simplifying startup registration formalities, providing appropriate subsidies for property lease, broadband network, and public software of makerspaces, and providing low-cost workplaces based on idle buildings such as factory workshops; 3) Improve the startup investment and financing mechanism by leveraging the role of government's startup investment guidance funds and fiscal policies, providing support for seed stage and startup SMEs, developing angel investment, improving Internet financing means such as crowdfunding, developing regional equity trade market, and encouraging financial institutions to develop relevant products and services such as technology financing guarantee and intellectual property pledge; and 4) Build a favorable innovation and entrepreneurship ecosystem by improving the entrepreneurship mentorship system, supporting relevant activities such as entrepreneur training camps and competitions, and fostering the maker culture.

(Source: Ministry of Science and Technology, February 6, 2015)