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School of Economics and Management & School of Management

Beijing, China & Hangzhou, Zhejiang, China

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The rise of China as an economic power over the last few decades has been the subject of much scholarly and popular discussion. However, in recent years even China’s own leaders have expressed concern as to the sustainability of its remarkable pace of economic growth.1 As recently as February of this year, a joint research report by a team from the World Bank and the Development Research Center of China’s State Council recommended that, among other things, China should accelerate the pace of open innovation in order to attain its vision of becoming a high-income nation by 2030. In particular, the report notes that “[t]he speed with which advanced technologies diffuse and the capacity to innovate will be keyed to the availability of a vast range of technical and soft skills, for example, management, research, design and production, effectively harnessing IT support, and marketing and customer relationships.”2

As many other nations around the world can attest, developing such innovation is easier said than done. China’s national innovation development system, however, already has a head start in this regard in the form of a network of research institutes tied to top-flight university-based business schools throughout the country, whose efforts are devoted to various aspects of promoting innovation. The two most significant of these institutes are the Research Center for Technological Innovation (RCTI) at Tsinghua University’s School of Economics and Management (SEM) in Beijing, and the National Institute for Innovation Management (NIIM), based at the School of Management of Zhejiang University in Hangzhou, the provincial capital of Zhejiang Province.

Foundation and Mission

Tsinghua and Zhejiang Universities were both among the first nine universities selected by China’s Ministry of Education for the “985 Program.” This program, which was begun in May of 1998 and has subsequently expanded to include nearly 40 universities, is intended to give the top Chinese institutions a resource boost, with the goal of promoting a group of “world-class universities for the 21st century” within the country.3 While both the RCTI and NIIM have existed in some form prior to the establishment of this program, the development of their current incarnations was supported in part by 985 Program funding. The Ministry of Education has designated both as national Key Research Bases.
The RCTI was founded in 2000, with a mission to provide theoretical and operational support for China’s national innovation strategies through high-quality research and international cooperation, while the modern form of the NIIM developed over time from the consolidation of several smaller institutes at Zhejiang University. Dr. Zheng Gang, Program Director of the Master of Global Innovation Management (MGIM) at Zhejiang’s School of Management, says that the NIIM’s primary mission is to function as a research platform to cultivate excellence in the field of innovation management. He also notes the close working relationship the NIIM has with the RCTI, as the two have different, though complementary, areas of emphasis. Being based in a business-friendly city like Hangzhou, he says, it is natural that the NIIM is primarily focused on company-level research, while the policy-level focus of the work of the RCTI is well-suited to their location in the national capital. Both the RCTI and NIIM similarly fulfill their missions through a variety of activities, including research, instruction, outreach and dissemination.

Building Innovation through Research

The RCTI primarily serves as a national “think tank” on topics relating to its five primary research groups, which include: the Management of Technological Innovation Research Group, the Management of Hi-Tech Entrepreneurship Research Group, the Technology Strategy and Policy Research Group, the Innovation and Entrepreneurship Practice Laboratory, and the Sustainable Innovation Laboratory. The center also works hand-in-hand with Tsinghua University’s International Technology Transfer Center (ITTC), which works to help Chinese firms commercialize technologies and products for both Chinese and international markets. The RCTI maintains numerous databases that contain the various research projects and publications of its staff.
One of the primary strengths of the NIIM lies in its research, according to Dr. Zheng, in line with the mission for the institute to serve as a producer of practical knowledge in the area of promoting innovation in Chinese companies. He notes that the NIIM is well-known for its case research on local firms and entrepreneurial ventures, and that its peer-reviewed academic research in Chinese innovation management has contributed to the development of innovation policy at both the central and local government levels. NIIM also maintains a number of research databases, such as the Chinese Enterprise Innovation Case Database and the Chinese Innovative Economy Database, to organize and store the fruits of its labor.

Similarly to the RCTI, the NIIM operates six thematically based sub-institutes, which include: Global Manufacturing and Innovation; Innovation Management and Policy; Service Innovation and Development; E-Commerce and Emerging Industries; Innovation and Management of Nonprofit Organizations; and Knowledge, Patents and Standards Strategies. Each of these sub-institutes has three to five professors and/or doctoral researchers whose interests coincide with its theme, according to Dr. Zheng, working to produce original research that serves the mission of the NIIM under the coordination of the NIIM’s central administration.

In 2007, the NIIM began expanding the national innovation network within China by establishing a remote branch at the University of Electronic Science and Technology of China (UESTC) in Chengdu, the capital city of Sichuan Province. A year later, a second NIIM branch was established at the Ningbo Institute of Technology of Zhejiang University (NIT) in Ningbo, Zhejiang Province. These remote branches of the NIIM coordinate their local efforts with those of the main institute in Hangzhou, says Dr. Zheng, and carry out research in accordance with NIIM standards and objectives.

**Building Innovation through Instruction**

In addition to research, both the RCTI and the NIIM conduct a number of courses and programs for graduate students at both master’s and doctoral levels, in key disciplinary studies. The faculty of the RCTI and its predecessors at Tsinghua SEM have trained more than 500 graduate students, including 50 PhDs, over the last 30 years. Moreover, the RCTI has developed curricula for nearly 30 graduate-level
courses in innovation and entrepreneurial management, all fed directly from the research undertaken by the center.9

The NIIM faculty run several specialist master’s programs, as well as overseeing doctoral student research, according to Dr. Zheng. He says that the institute hosts two to four post-doctoral research stations as well. Dr. Zheng goes on to state that the NIIM has trained over 200 master’s, PhD, and post-doctoral researchers over its lifetime, many of whom go on to bring the value of their education to careers in industry and government. The NIIM also maintains a Chinese Thesis Database for Innovation Management to store the results of their students’ research efforts.

Building Innovation through Outreach and Dissemination

In addition to their research and teaching programs, the RCTI and the NIIM also conduct a number of activities aimed at outreach and dissemination of their work. Dr. Li Jinzhen, Assistant Director of the RCTI, says that on October 18, 2004, the 2nd international conference of the Global Network for Economics of Learning, Innovation, and Competence Building Systems (GLOBELICS)10 took place in Tsinghua University, organized by the RCTI, attended by over 100 foreign researchers and 103 Chinese researchers. He likewise notes that on November 9, 2012, the 10th GLOBELICS International Conference took place in Zhejiang University, organized by the NIIM. Dr. Li says the conference has raised the publicity and awareness of China’s technological innovation in the world.

Both the RCTI and NIIM have hosted several annual conferences of other such organizations as well, including the International Symposium on Management of Technology (ISMOT),11 and workshops of China’s Innovation Circles and Academy - a Network on Learning, Innovation and Competence Systems (CICALICS, China’s national network of GLOBELICS).12 Dr. Li recounts that a special guest professor of the RCTI, Dr. Bengt-Åke Lundvall, has promoted the CICALICS network based in the RCTI, and that the RCTI has built up this platform for international academic interactions from 2005 to the present.

The NIIM hosts several annual forums with broad national audiences, including the Chinese Innovation Forum for Young Scholars, the Zijin Innovation Forum, and the Enterprise Forum for Indigenous Innovation. In addition, the institute holds a twice-monthly Innovation Management Forum, which is more focused on firms and audiences local to the Hangzhou area. Dr. Zheng also states that one goal of the NIIM is to increase the current level of its consulting activities with Chinese firms and government agencies, with the aim of building alternate revenue streams and becoming more self-sustaining over time.

Both the RCTI and the NIIM have worked to integrate themselves into the international research community, to the benefit of their missions. The Sustainable Innovation Laboratory at the RCTI is
affiliated with the Base of the Pyramid (BOP) Learning Lab network of the Johnson Graduate School of Management at Cornell University, giving the center access to resources and research from around the world. Additionally, according to Dr. Li, since 2002 the RCTI has been the institutional representative from mainland China that participates in the Global Entrepreneur Monitor (GEM) project. The GEM project, initiated jointly in 1999 by London Business School and Babson College, aims at bringing together the most distinct and outstanding innovation researchers from all over the globe to study the relationships between innovation, entrepreneurship and economic growth in a comparative, cross-national fashion. RCTI has been contributing its research results as part of the ‘Global Entrepreneur Monitor (GEM) China’ every year since, Dr. Li says.

The NIIM hosts three joint research centers with national and international organizations. These include the Global Manufacturing and Innovation Management Joint Research Centre with Institute for Manufacturing (IfM) at Cambridge University, and two centers focused on Innovation Management and Sustainable Competitiveness: one with the Haier Group, and one with the China Marine International Containers (CIMC) Group, Ltd. The Haier Group’s center provides a platform for development of Total Innovation Management (TIM) theory and practice, the construction of Enterprise Innovation Systems (EIS), and R&D manager training, while the CIMC Group’s center focuses on implementation and evaluation of technological innovation management.

The international audiences these organizations reach allow such research and dissemination activities to have impact both within and beyond China, states Dr. Zheng, by opening the conversation about innovation management in the Chinese context to CEOs, opinion-makers, governments and academics alike. Ultimately, as the World Bank-Development Research Center joint report indicates, “[t]he success of China’s innovation policy will depend on how effectively all branches of the research and innovation network (research institutes, universities, central and local governments, state and private enterprises) function together and how these efforts are leveraged internationally through global networks.”

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End Notes


