

Summary

[Title] Entrepreneurship and Innovation in Korean Startups

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- **Participants: Sunwoo Kim · Jungwoo Lee · Seungjae Lee**

STEPI's annual 「Monitoring Entrepreneurship」 analyzes the activities of the government sector related to entrepreneurship by monitoring the private entrepreneurial activities in Korea, which faces the era of popularization of entrepreneurship. The "2017 Korea Entrepreneurship Monitoring" has shifted its research direction from the status analysis to the effectiveness analysis. In particular, this report focuses on the entrepreneurship and innovation activities in Korean startups.

First, based on the literature review, we developed the conceptual framework for entrepreneurship and innovation activities of startups. The innovation process of 'Ideation - Solution - Action - Realization' presents core elements of entrepreneurial capabilities and innovation capabilities of startups for their better performance.

Second, we conducted the survey for 370 Korean startups to investigate their innovation activities and entrepreneurial efforts, after developing a questionnaire which is based on our conceptual framework. As a result, in the innovation dimension, the number of technology-motivated startups is more than that of market-motivated startups. In addition, the focus of business model innovation was a profit model and the performance of products or services. On the other hand, in the entrepreneurship dimension, as motivations, previous experience of entrepreneurs and a deep understanding of products or services are important. In addition, entrepreneurs focused on the feasibility of product or services, profitability, and growth potential, not problems and solutions.

Third, the empirical test for examining the relationship among entrepreneurial capabilities, innovation capabilities, and the performance of startups shows a clear

evidence for their affirmative correlations. Higher entrepreneurial capabilities lead higher innovation capabilities, and ultimately create much more financial performance.

Fourth, we conducted three interviews of entrepreneurs who lead startups in different industries and technological fields. The questions, which are derived from our conceptual framework of entrepreneurship and innovation of startups including 4 phases of 'Ideation - Solution - Action - Realization', were very helpful in understanding real problems of the startups' innovation process.

Finally, we suggested solutions in terms of public policy for promoting innovation activities and increasing entrepreneurial capabilities of Korea startups. Our logical thinking, which interconnects real problems and political implications, contributes to the establishment of better public policies for enhancing the level of national entrepreneurship.

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Summary

[Title] Impact Analysis of Government Startup Support Programs

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The "2017 Korea Entrepreneurship Monitoring" has shifted its research direction from the existing status analysis to the effectiveness analysis. In particular, this report focuses on the analysis of the effectiveness of the government's startup support project.

In this volume, we tried to raise the effectiveness of the government's startup support project and suggest the government's role and task for the development of startup ecosystem. To this end, we diagnosed the present status and problems of the government's startup support, analyzed the effects, and presented the directions and policy tasks of the new government's startup support policy.

First, in 2017, the Korean government's budget for startup support increased by 6.8% over the previous year, KRW 615.8 billion(excluding political finance, financing, and guarantees), and was supported through 70 projects of seven ministries. Compared with the previous year, funds for commercialization support increased the most, and funds for R&D decreased the most. The previous government announced 15 major initiatives for startup including 'The Establishment of a Venture and Startup Ecosystem', 'Measures to Stimulate Investment', 'Strengthening of Startup Support System', 'Establishment of University Startup Support System'. The new government established in July 2017 proposed 'The Creation of a New Entrepreneurial Country that supports innovation' as one of the top 100 national affairs. Korea's entrepreneurial ecosystem has quantitatively expanded for a short period of time but has not achieved an overall growth in the entire entrepreneurial ecosystem. Government funding for entrepreneurship has also increased, but it is concentrated in the early

stage startup companies, and there is still a great deal of doubt among stake-holders about efficient resource allocation.

In this study, the effectiveness of government's startup support project was examined. The results of this study are as follows. First, Considered the effects of the government's startup support are the survival and growth of the startup companies, The two hypotheses are as follows. 1) Government's startup support will affect the survival of startup companies. 2) startup companies' economic performance after government support will increase. The subjects of the analysis were three projects with the large budget in commercialization phase among the startup support projects. As a result, the government support for the startup affects the survival of the company for a certain period, but it did not lead to the growth of the company. Furthermore, a qualitative analysis was performed to complement the limit of quantitative analysis. As a result of surveying the perception of entrepreneurial activities by gender, age, region and experience of establishment of business to the people over 20 years old, 39% of entrepreneurs have experience of support from the government and their satisfaction was high in the order of R&D support, facilities & space support and commercialization support. The public gave the lower than neutral level score for the government's active efforts to revitalize entrepreneurship in the past two years(3.67 points), and for the level of government policy to support entrepreneurship activities(3.54 points).

The seven tasks that were derived from the results of the study are as follows. 1. Clarify definition of startup support project. 2. Strengthen the government's monitor of implementation of major initiatives. 3. Establish DB of government's startup support beneficiaries and encourage utilization. 4. Develop performance indicators for government startup support. 5. Transit to open regulation that accepts innovation. 6. Provide continuous startup funds to enable scale-up. 7. Enhance the role of the government in entrepreneurial ecosystems.

The roles and tasks of the trampoline-type government are as follows: 1. Make entrepreneurship education mandatory. 2. Bring up female entrepreneurs. 3. Bring up innovational entrepreneurs through 'public venturing'. 4. Protect the technology and human resources of startup. 5. Improve the system for participation in the enterprise venture capital market.

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Summary

[Title] Discovery and Proliferating Young Innovators: Report on 2017 Young Innovators Talk

- **Project leader: Jungwoo Lee**
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In the era of 4th industrial revolution, entrepreneurship and innovative startups are highlighted as driving force of economic growth. For this reason, ‘Young Innovators’, who are exploring the new future with creative ideas rather than following the conventional ways, are coming into the spotlight. As a bridge of public and private sectors, Entrepreneurship and SME Research Center at Science & Technology Policy Institute (STEPI) has held the 'Young Innovators Talk (YIT)' events over 25 times since 2013 to discover successful nascent and early-stage entrepreneurs as young innovators and to disseminate their innovative business models and experiences to future entrepreneurs, policy makers, researchers, academic professionals, and young people who are interested in innovation and entrepreneurship.

This project is a comprehensive case study consisting of 3 main components; 1) discovering young innovators and conducting pre-interviews with them, 2) providing presentation and networking opportunities through the YIT events, 3) analyzing survey results and doing research on the types of business models.

In 2017, the YIT has been held 6 times with 14 young innovators and 797 participants focusing on glocal(global+local) startups such as outbound of domestic startups and inbound of international brains. Continuously reducing the gap of people’s perception on entrepreneurship and startups among different ages, gender, and regions, we have held special YIT events for youths and parents in Sejong, for career break women in Jeju, and for ASEAN and Korean young people in Seoul. Furthermore, the project creates synergy effect through industry-academy collaboration such as joint planning and operation of the YIT

with the Sejong City, Presidential Committee on Young Generation, Korea University, Jeju National University, Bestian Foundation, and ASEAN-Korea Centre. Additionally, we expanded the dissemination channel by selecting 30 young innovators among previous YIT speakers and publishing a book on their startup stories titled “Young Innovators in Korea” in May 2017.

This report also analyzes the survey results of 145 YIT participants on their perception of entrepreneurship and startup activities. As a result of comparing the data in 2016 and 2017, the participation in and experience of startup activities has increased. In addition, startup ecosystem in Korea has developed, and governmental policies for entrepreneurship and startups have become more effective.

For the development of the project, we set future plans for the YIT as follows. First, it is necessary to differentiate the YIT from externally similar events in private sector by discovering early stage entrepreneurs, disseminating best practices to various audiences, and collecting field opinions and contributing to developing policies. For example, through in-depth discussion among industry, academy, public & private professionals and practitioners, the YIT can be developed as a form of policy forum drawing out startup related issues and policy alternatives by gathering local voices. Second, it is needed to focus on doing case studies and drawing out policy implication rather than just holding events. Third, it is significant to shed new light on startups which participated in the YIT and to do tracking survey on their outcomes. Fourth, we will continue the collaborative relationship with the young innovators discovered by the YIT with establishing ‘STEPI Young Innovators’ membership and professional pools. Finally, it is planned to reinforce the role of online networking platform by sharing related materials through STEPI website, social networking services, and ‘Entrepreneurship Korea’ magazines.

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