

OPEN ACCESS

Establishment of a Platform for Supporting the Start-Ups of Outstanding Ideas under the Creative Economy: 6-Month Challenge Platform Program for the Creative Economy

Jun Seok Seo

Executive Director of the Future Strategy Division at INNOPOLIS Foundation, Korea

Abstract

This paper reviews the 6-Month Challenge Platform Program, a short-term intensive start-up supporting program in Korea, which will be launched late 2015 to promote economic growth by taking new ideas and transforming them into new products and start-ups in connection with the Creative Economy Town¹ and the Creative Economy Innovation Centers² under the Creative Economy Policy.

Keywords

6-Month Challenge Platform Program, Creative Economy Innovation Center, Creative Economy Town


1. INTRODUCTION

In order to resolve the high unemployment rate, which has become a serious problem after going through Europe's economic crisis and the emerging nations' economic downturn, the world is focused on developing new industries and start-ups. The Korean government is also trying to overcome the difficult economic situations through creating new business opportunities. For example, it is establishing the Creative Economy ecosystem that allows the outstanding ideas of individuals to be developed into a company's new prod-

ucts or start-up companies, enabling job creation and economic growth. Additionally, as part of the plan to establish the Creative Economy ecosystem, the Korean government has been collecting innovative ideas from its citizens since the second half of 2013 so that these ideas can be realized through the systematic support of the online Creative Economy Town and the offline Creative Economy Innovation Centers. The Creative Economy Town was established to serve as a platform to materialize ideas that can realize the Creative Economy by freely proposing and developing these ideas with online participation from diverse economic entities such as Korea's citizens and companies. In other words, in order to ensure the commercialization of ideas proposed by individuals, the Creative Economy Town aims to be an open-type innovation platform that pursues the innovation of collective intelligence, and where experts from different fields donate their knowledge and provide mentoring on commercialization, start-ups, science and technology, and investment.

*Correspondence to : Jun Seok Seo (Ph.D)
Executive Director of the Future Strategy Division at INNOPOLIS Foundation, Korea
4-27 Doroyong-dong, Yuseong-gu, Daejeon 34125, Korea
E-mail: junseok@innopolis.or.kr

World Technopolis Review
Copyright©World Technopolis Association

 This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0>) which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

¹ <https://www.creativekorea.or.kr/>.

² <http://ccei.creativekorea.or.kr/main.do>.

Major services of the Creative Economy Town are delivered through the following:

- ① Propose creative ideas: Submit an idea or a business item to the Creative Economy Town
- ② Mentoring from experts: Give advice on the proposer's idea so it can materialize and the services can be realized
- ③ Provision of information to support the commercializa-

tion of the idea: Support the idea that has been selected through the mentoring process by applying for intellectual property rights and providing financial support to cover the expenses of producing test products

- ④ Experience the best practices of the Creative Economy: Introduce the best practices for commercialization in connection with various start-up incubators

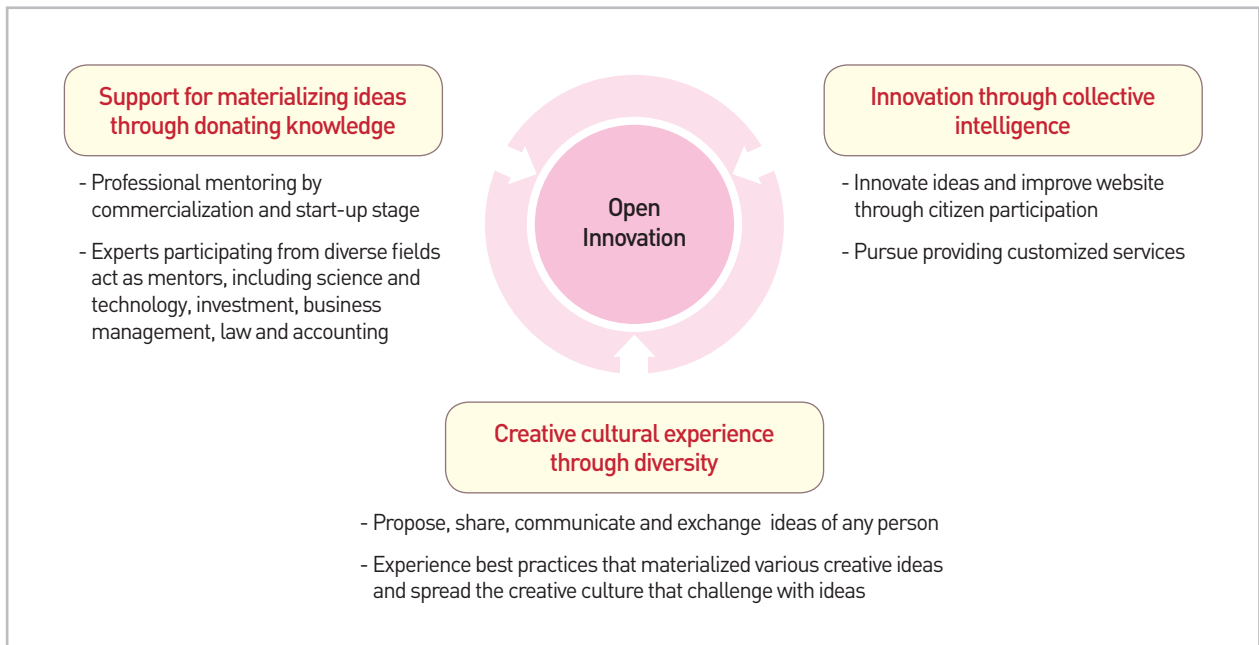


Fig. 1. Characteristics of the Creative Economy Town

Source: Internal reference data of the Ministry of Science, ICT and Future Planning

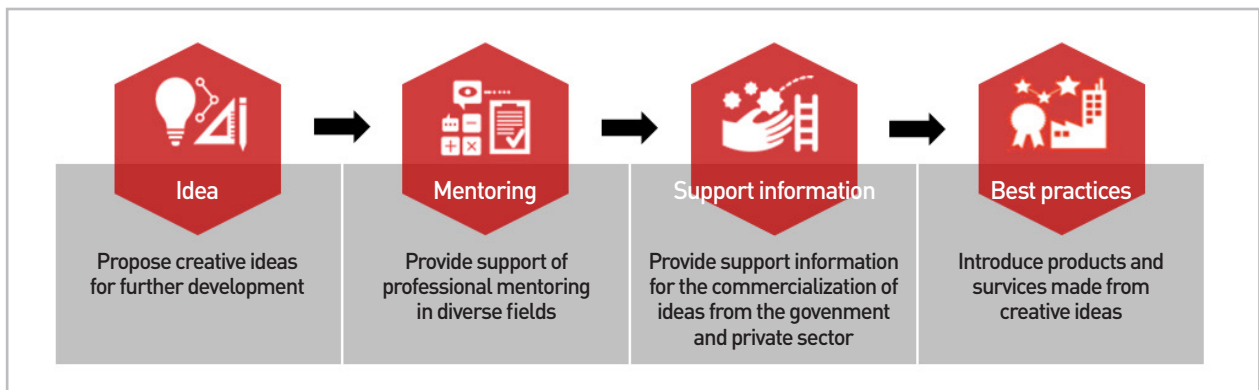


Fig. 2. Concept of the Creative Economy Town

Source: Internal reference data of the Ministry of Science, ICT and Future Planning

However, since the Creative Economy Town has limits as an online service system during the idea materialization stage (e.g., converting the ideas into test products on the site), the Creative Economy Innovation Centers were established offline to provide support.

This paper examines the soon-to-be implemented 6-Month Challenge Platform Program, by investigating the best practices of innovative idea commercialization. We also study the Creative Economy Town and Creative Economy Innovation Centers that will be set up in different regions as the implementation strategies for commercializing the ideas that are being ambitiously implemented by the Korean government.

2. LITERATURE REVIEW

The economic value of an innovative idea has no meaning unless that idea is materialized and commercialized as a business model (Chesbrough 2004). However, the possibility of success is very low; only one out of several thousand ideas becomes a product, and most innovative ideas fail to be commercialized. Much of the research points out that three factors—customers, technologies, and strategies—play important roles in successfully manufacturing and starting up new innovative ideas.

Griffin and Hauser (1993) use the expression “the voice of the customer” to describe customer demand. They argue that the voice of the customer should be reflected in the full cycle of product development, including R&D, manufacturing, and management. These customer demands are reflected in various methods for ideation. The representative methods are focus groups and surveys (Goffin et al. 2012). Since customers are not used to turning their ideas into proposals, companies

conduct surveys to identify the customers’ thoughts and develop them into new ideas through focus groups. Along with focus groups, brainstorming is used to create innovative ideas (Nijssen and Frambach 2000). Focus groups should consist of about four to nine customers, while brainstorming can be most effective when experts (e.g., engineers, customers, and consultants) take part. These group ideation methods are successful only when four rules are followed during the debate: (i) others’ ideas cannot be criticized, (ii) there must be an atmosphere for free discussion, (iii) the group should come up with as many ideas as possible, and (iv) there must be efforts to improve and reproduce the proposed ideas (Thompson 2003). Schmitt et al. (2001) studied the effectiveness of an individual decision-making approach and a group decision-making approach for identifying the demands of customers and exploring new ideas. They determined that the group decision-making approach conducted in teams is more effective than the individual decision-making approach with one person. However, even though Griffin and Hauser (1993) emphasized the role of customers in developing products and services, they questioned the effectiveness of group ideation methods because they are costly.

Technology is the second factor that is important for creating innovative ideas to develop new products and services. Everyone knows that technology plays an important role in new product development. A technology can be developed through the incremental method, the disruptive method, the continuous method, or the discrete method; however, here we look at the technologies that indirectly support the innovative ideation process instead of technologies that have direct impacts on the functional improvement of such products. The most effective technologies used in supporting the new ideation process are the Internet and information and communication technologies

Table 1. Studies on the role of customers in product development

Author	Year	Content of thesis
Griffin & Hauser	1993	To focus on the “Voice-of-the-Customer” component of Quality Function Development
Nijssen & Frambach	2000	Determinants of the adoption of new product development tools by industrial firms
Schmitt et al.	2001	the effectiveness of an individual decision-making approach and a group decision-making approach
Thompson, Leigh	2003	Improving the creativity of an organized work group
Goffin et al.	2012	The most commonly used techniques, focus groups and surveys (including both interviews and questionnaires), have significant limitations

Source: Listed according to authors

Table 2. Studies on the role of technologies in product development

Author	Year	Content of thesis
Hameri & Nihtila	1997	Distributed New Product Development Project Based on Internet and World-Wide Web: A Case Study
Ettlie & Pavlou	2006	Technology-Based New Product Development Partnerships
Hoyer et al.	2010	Consumer co-creation in new product development
Kawakami et al.	2011	"Factors Influencing Information Technology Usage for New Product Development: The Case of Japanese Companies

Source: Listed according to authors

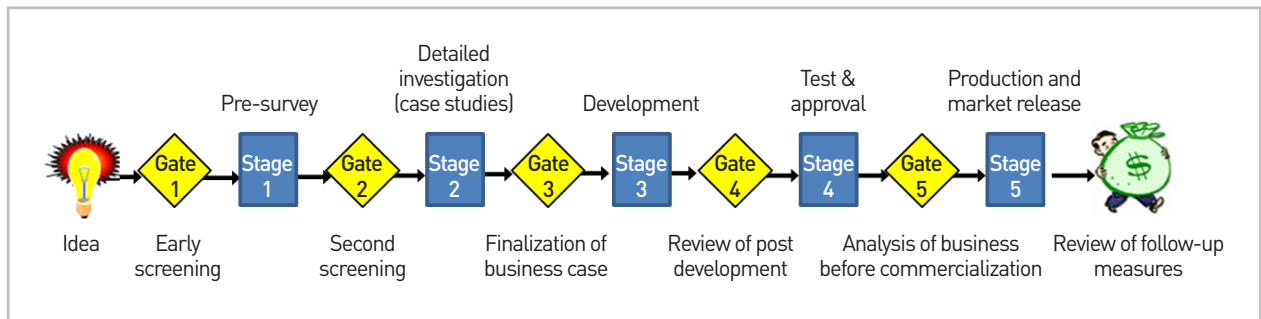


Fig. 3. Stage-gate method for idea development

Source: Coopers (1996)

(ICTs) (Hameri and Nihtila 1997; Ettlie and Pavlou 2006). ICTs help companies share reliable knowledge faster to allow product development (Ettlie and Pavlou 2006). Therefore, the development of ICTs resulted in reducing the uncertainty about product development, while also improving the efficiency of knowledge management and the ability to utilize it actively for product development. Additionally, the Internet greatly contributed to product development among the ICTs (Hameri and Nihtila 1997). In order to develop innovative products and services, companies are required to collect the opinions of many people from diverse fields (The Economist, July 6, 2013). Moreover, when a company has work sites in different locations, the Internet is now the most effective means of exchanging opinions and delivering information. As a result, the Internet has made significant contributions to improving performance of the product development process. Hoyer et al. (2010) determined that ICTs allowed customers to be active participants in companies' technology development.

The third important factor for creating innovative ideas that develop into new products and services is strategy. Spanjol et al. (2011) claimed that strategic directions have significant effects

on new and creative ideation. They also said that market research should be conducted together during the creation of innovative ideas, and it was found that the realization of ideas into products could be strengthened based on technologies. Henard and Szymanski (2001) pointed out that strategies play important roles in actual proof analysis, which determines why certain products are more successful than others. Furthermore, the factors to consider when establishing such strategies should include supporting the initial resources for new product development, determining the time for market entry, and utilizing the synergy effect of marketing and technologies. Zinger and Maidique (1990) analyzed that the most important part of the five major factors in new product development is the project strategy. It was proven empirically that strategy needed to be considered throughout the whole process of development.

In order for the commercialization of ideas to be more than just the development of products or services, ideas should be implemented strategically and systematically at an early stage in order to be developed into a comprehensive form of start-ups. To speed up the process and improve the success rate, Cooper and Kleinschmidt (1987, 1996) pointed out the importance of

the ability to improve companies' processes for creating innovative ideas and implementing them. If these processes are not implemented properly, it may result in huge expenses. Cooper and Kleinschmidt (1996) mentioned that there were two methods for the successful development of innovative ideas into new products: do projects right and do the right projects. These can be achieved through the stage-gate process.

3. 6-MONTH CHALLENGE PLATFORM PROGRAM

The Creative Economy, which is being implemented through the online Creative Economy Town and the offline Creative Economy Innovation Centers that will be established in 17 cities and provinces across the nation, is the core of the

Table 3. Studies on the role of strategies in product development

Author	Year	Content of thesis
Cooper & Kleinschidt	1987	New products: what separates winners from losers?
Zinger & Maidique	1990	To understand the factors that differentiated successful from unsuccessful product development efforts.
Cooper & Kleinschidt	1996	Winning businesses in product development: the critical success factors
Henard & Szymanski	2001	Why some new products are more successful than others
Spanjol et al.	2011	An analysis of the role of establishing strategic directions for the ideation of new products

Source: Listed according to authors

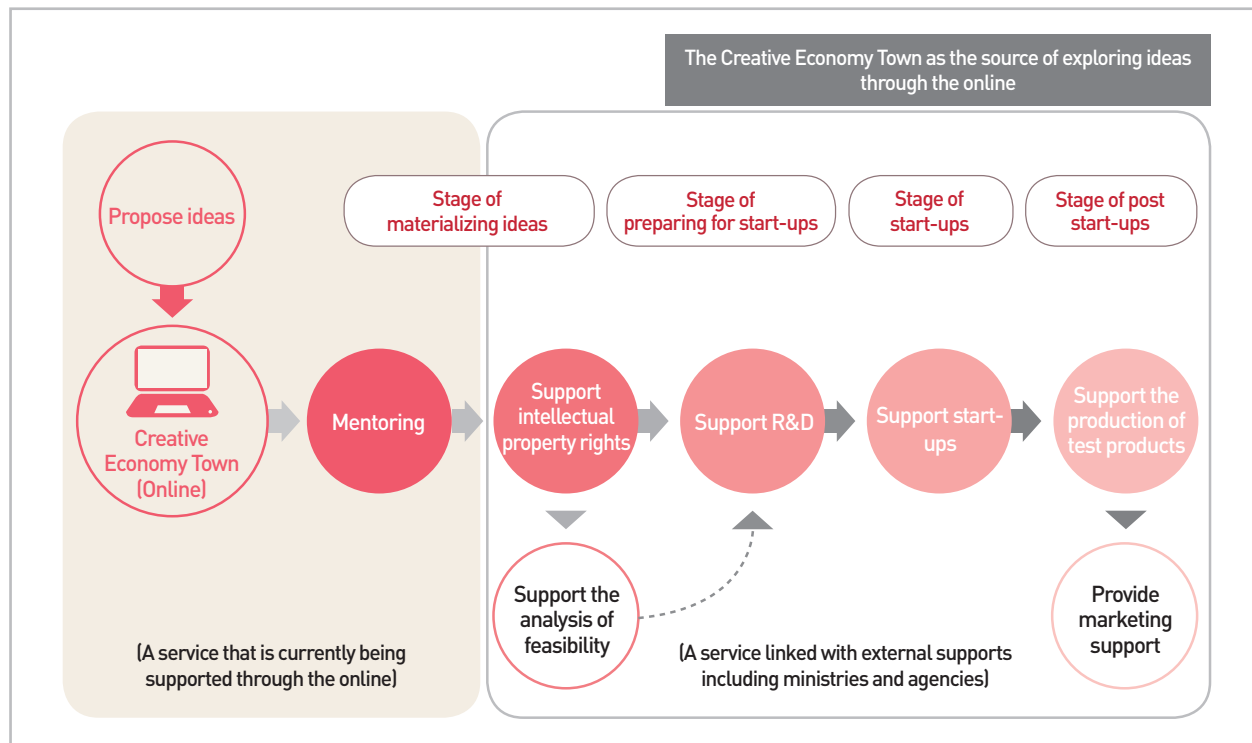


Fig. 4. Support system and scope for the commercialization of ideas through the online Creative Economy Town

Source: <https://www.creativekorea.or.kr>

economic policies implemented by the Korean government to generate jobs and achieve economic growth. The Creative Economy Town and the Creative Economy Innovation Centers allow all citizens that have ideas for commercialization and start-ups to make suggestions easily and provide various supports to turn their outstanding ideas into products and services. The Korean government also prevents these selected innovative ideas from being forgotten, with plans of implementing the 6-Month Challenge Platform Program as a short-term intensive support program to realize commercialization as early as possible.

The 6-Month Challenge Platform Program is an open accelerating program that selects outstanding ideas among all those submitted to the online Creative Economy Town and the offline Creative Economy Innovation Centers and supports start-ups and growth by intensively developing these ideas for six months until commercialization. The program's basic implementation plan is divided into four areas as follows.

First, this program serves as a mediatory organization that provides a platform to support and accelerate the commercialization of ideas. It selects ideas that are collected on the online Creative Economy Town, the offline Creative Economy Innovation Centers, and the idea contests held by the Korean gov-

ernment. Moreover, this program makes alliances with external incubators that are operated by other governmental agencies and private organizations to support the commercialization of outstanding ideas.

Second, this program provides professional services that support the selection and materialization of outstanding ideas. The materialization of ideas can be very important until they are commercialized. During this process, the concept is verified to prove the marketability and development of the product. However, depending on the type and characteristics of the business ideas, that concept may be implemented differently. Additionally, during the process of materializing ideas, this program helps start-ups make decisions by providing professional consulting and mentoring services, such as developing and implementing business models, applying for and registering intellectual property rights, and preparing business plans.

Third, this program provides M&A opportunities by conducting marketability tests and attracting investments for the commercialization of ideas, while also conducting tests to verify the possibility of entering global markets. Once these outstanding ideas have proven their marketability and innovation by going through the materialization process, the program

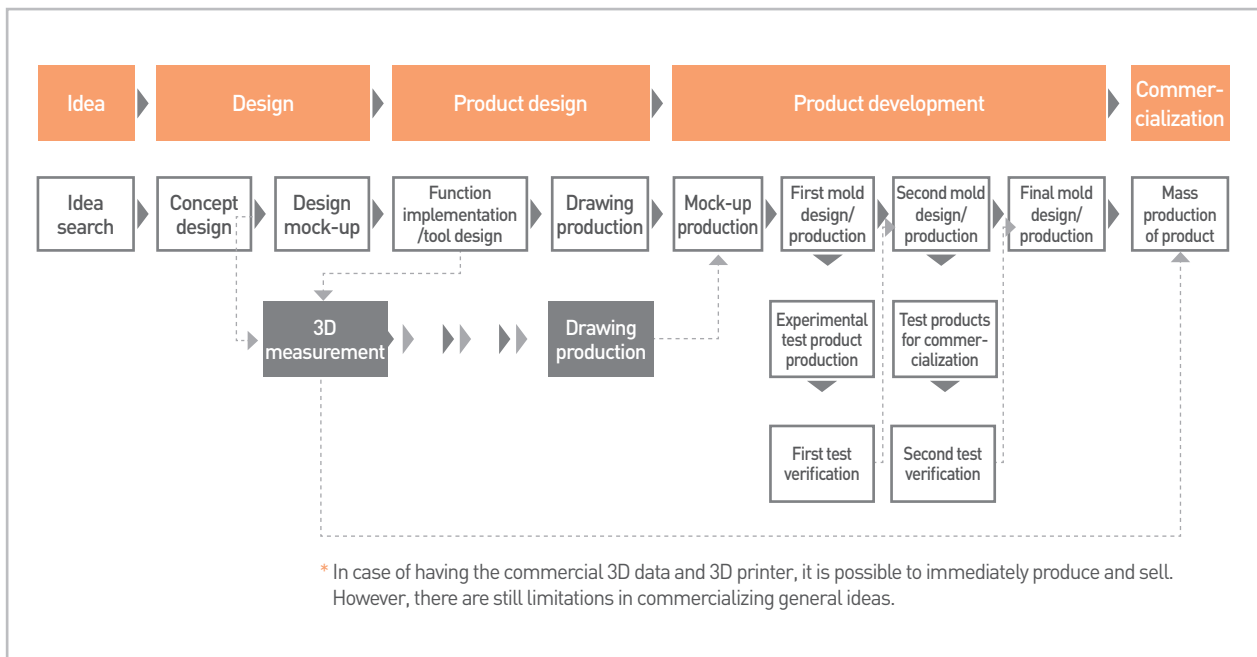


Fig. 5. The process from creating ideas to commercialization

Source: Internal reference data of the Ministry of Science, ICT and Future Planning

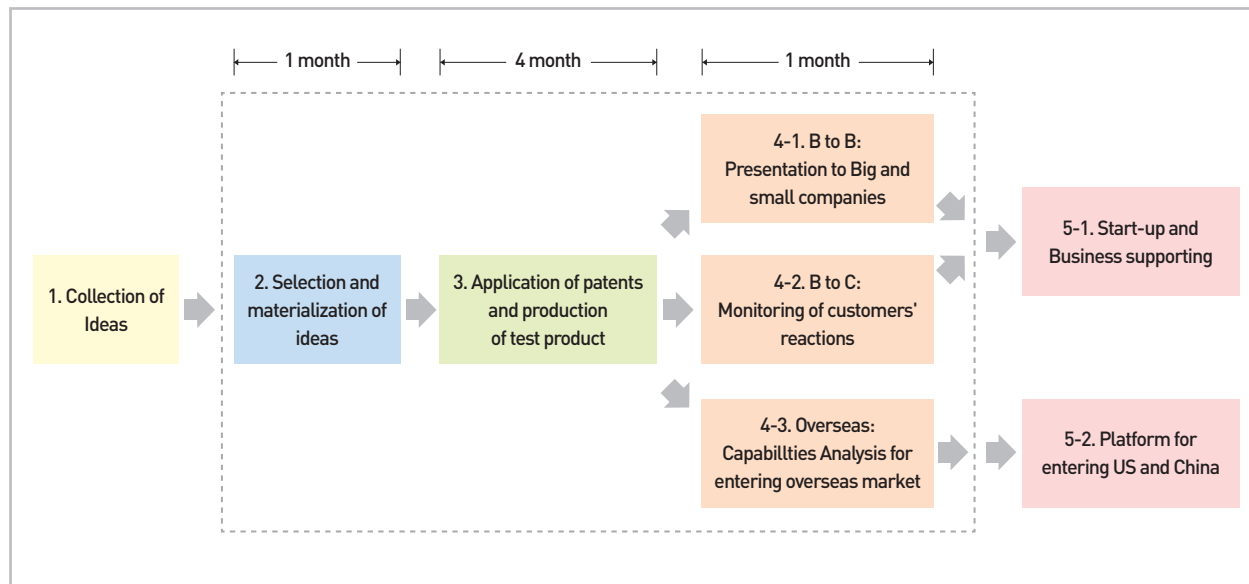


Fig. 6. The main process for 6 Month Challenge Platform Program

provides M&A opportunities, introduces investors from large companies or medium-sized companies in Korea, or verifies the marketability through monitoring the customers' reactions to provide feedback for the company to improve the product or service. Moreover, the program provides opportunities to conduct tests on the possibility of entering global markets through the diagnosis of global capabilities.

Lastly, when the person who proposed the idea decides to start a new business, the program provides related services by setting up a support system for follow-up measures, including supporting start-ups and commercialization afterwards or associating with global platforms when making an entry into the global market.

In accordance with the basic implementation directions explained before, the 6-Month Challenge Platform Program develops support systems for the commercialization of ideas by the life expectancy stage of the start-ups through close cooperation with relevant institutions, while also coming up with best practices of start-ups through their intensive six-month care. In other words, the first month is spent materializing the outstanding ideas selected from all the ideas gathered through diverse channels. During the next four months, the selected ideas are developed into products or registered as intellectual property to receive legal protection. Lastly, the final month is spent verifying the marketability of the product through diverse channels including large companies. The ideas that have

been verified through this intensive program will lead to start-ups, followed by entering global markets, and attracting investments.

4. CONCLUSION

In order to end the economic recession and the increasing unemployment rate, the Creative Economy will be a new economic growth model that creates new products and jobs through the commercialization of new ideas from individuals. Moreover, the 6-Month Challenge Platform Program that will be implemented late 2015 is different from the past business start-up support programs in many ways. First, the short-term support programs are generally private accelerating programs based on the premise of quota investment. However, this program is an open accelerating program conducted by the Korean government without the premise of quota investment. Second, this program provides opportunities to introduce products that were made from ideas under the government's support systems to large companies or medium-sized companies. Generally, privately owned businesses or small- and medium-sized enterprises are not given opportunities to consult with large buyers like conglomerates. Third, this program is not provided unconditionally, without taking into consider-

ation of the possibility of success, making it stand out from the general governmental programs. In other words, this program decides on the possibility of success in the market before the start-up or mass production of ideas, ensuring social costs and resources are reduced by preventing business suspensions.

However, there are several preconditions that should be established in order to ensure the success of this program. First, this program should establish cooperative relations with relevant institutions and designate operating agencies with a lot of experience to ensure comprehensive operation, with financial support for operational expenses provided separately. Additionally, the operation of this program should take place continuously over a long period. If the support is provided over a short period, large companies or medium-sized companies might take participation as a mere formality. Large companies and medium-sized companies should take part in this program as a long term business helper for SMEs and start-ups in order to promote the public interest, rather than expecting any actual results.

REFERENCES

- Chesbrough, H. W. (2004) "Managing Open innovation," *Research Technology Management* 47(1): 23-26.
- Cooper, R. G., and Kleinschmidt, E. J. (1987) "New products: what separates winners from losers?" *Journal of product innovation management* 4(3): 169-184.
- Cooper, R. G., and Kleinschmidt, E. J. (1996) "Winning businesses in product development: the critical success factors," *Research Technology Management* 39(4): 18-29.
- Ettlie, J. E., and Pavlou, P. A. (2006) "Technology-Based New Product Development Partnerships*," *Decision Sciences* 37(2): 117-147.
- Goffin, K., Varnes, C. J., van der Hoven, C., and Koners, U. (2012) "Beyond the voice of the customer: Ethnographic market research," *Research-Technology Management* 55(4): 45-54.
- Griffin, A., and Hauser, J. R. (1993) "The voice of the customer," *Marketing science* 12(1): 1-27.
- Hameri, A., and Nihtilä, J. (1997) "Distributed New Product Development Project Based on Internet and World-Wide Web: A Case Study," *Journal of product innovation management* 14(2): 77-87.
- Henard, D. H., and Szymanski, D. M. (2001) "Why some new products are more successful than others." *Journal of marketing Research* 38(3): 362-375.
- Hoyer, W. D., Chandy, R., Dorotic, M., Krafft, M., and Singh, S. S. (2010) "Consumer cocreation in new product development," *Journal of Service Research* 13(3): 283-296.
- Kawakami, T., Durmuşoğlu, S. S., and Barczak, G. (2011) "Factors Influencing Information Technology Usage for New Product Development: The Case of Japanese Companies*." *Journal of Product Innovation Management* 28(6): 833-847.
- Nijssen, E. J., and Frambach, R. T. (2000) "Determinants of the adoption of new product development tools by industrial firms," *Industrial Marketing Management* 29(2): 121-131.
- Schmidt, J. B., Montoya-Weiss, M. M., and Massey, A. P. (2001) "New Product Development Decision-Making Effectiveness: Comparing Individuals, Face-To-Face Teams, and Virtual Teams*," *Decision sciences* 32(4): 575-600.
- Spanjol, J., Qualls, W. J., & Rosa, J. A. (2011) "How Many and What Kind? The Role of Strategic Orientation in New Product Ideation*," *Journal of Product Innovation Management* 28(2): 236-250.
- The Economist, Schumpeter (2013) *Back to the drawing-board; Design companies are applying their skills to the voluntary and public sectors.* available at: <http://www.economist.com/news/business/21580444-design-companies-are-applying-their-skills-voluntary-and-public-sectors-back>
- Thompson, L. (2003) "Improving the creativity of organizational work groups," *The Academy of Management Executive* 17(1): 96-109.
- Zirger, B. J., and Maidique M. A. (1990) "A model of new product development: an empirical test," *Management science* 36(7): 867-883.

GENERAL REFERENCE

- Joint alliance with relevant ministries and agencies (2013) *The Realization Plan for the Creative Economy.*
- Korea Institute of S&T Evaluation and Planning (2014) *A study on the plan to support the commercialization of outstanding ideas to realize the Creative Economy: 6-Month Challenge Platform Program.*

HOMEPAGE

Creative Economy Town. (www.creativekorea.or.kr)

Ministry of Science, ICT and Future planning, Korea. ([http://
english.msip.go.kr/english/main/main.do](http://english.msip.go.kr/english/main/main.do))

Received April 06, 2015

Revised November 10, 2015

Accept December 14, 2015