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ORIGINAL RESEARCH

The Success Factors of Korean Global Start-Ups in the Digital Sectors Through Internationalization

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Abstract
With the growing importance of start-ups in building a sustainable national economy, both the Korean government and scholars are demonstrating growing interest in strengthening the competitiveness of start-ups. The Korean government has promoted a number of initiatives, but there are also a growing number of critics who argue that government regulations are obstacles to the efficient operation of start-ups and their competitiveness enhancement. Many of the preceding studies on Korean start-ups have emphasized the critical factors of survival and growth, including entrepreneurship, innovation, and technology. However, these factors do not guarantee market success. In addition to technological capabilities, a good set of strategies are needed. This paper investigates *how* Korean global start-ups scale-up their businesses and gain success through global strategy. Specifically, this paper adopts the ABCD model and global value chain strategy to analyze the success factors of fast-growing Korean start-ups that operate in the ASEAN digital sectors. This paper argues that the growth of Korean digital start-ups through internationalization has not been directly accelerated by government support but rather to avoid government regulations. Moreover, the four strategic factors of the ABCD model facilitated their entry and success in the ASEAN market by developing a cooperative relationship with local firms for efficient operations on a cross-border network.

Keywords Success factors · ABCD model · Global value chains · Korea · Start-ups · Digital sector · Internationalization · ASEAN

Introduction

Start-ups have been considered a new engine to boost economic growth and create jobs in both advanced and developing countries. Since the 2008 global financial crisis, such an approach has become even more attractive (OECD 2013; Lee 2017). In this context, the Korean government has shifted national agenda toward nurturing start-ups since the 2010s to spur economic growth and overcome the country's difficulties such as the dominance of large conglomerates or *chaebol*, rapid aging, and youth unemployment. The Park Geun-hye administration initiated policies under the titles of "creative economy" and "economic democracy" that formed the two pillars of her administrative agenda, aimed at fostering start-ups and domestic innovation. Recently, the Moon Jae-in administration launched the Ministry of SMEs and Start-ups. This was established by President Moon as a historical event that will change Korea's economic policy paradigm from *chaebol*-led growth to SME-led growth. Furthermore, over the 3 years between 2015 and 2017, the Korean venture funds with public and private finances for backing the start-ups grew by three times from US$3 billion to US$9 billion. In this regard, Korea has been the country with the highest government support per capita for start-ups in the world (Forbes 2018).

However, this substantial support from the Korean government has generated relatively few successful tech start-ups in reality (Financial Times 2019). Korean start-ups are often less willing to scale-up to receive government support, and they are mainly focused on low-productivity businesses

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such as retail and food & beverage (Moon 2016; OECD 2016). Yet, many start-ups in advanced and some emerging countries, such as China, have grown into corporate giants and further created new industries (Lee and Kim 2019a). Many scholars and researchers have attempted to examine the reasons and problems behind the underdeveloped Korean start-ups to figure out the determinant factors that can improve the productivity and competitiveness of start-ups.

Previous studies (Jones and Kim 2014; Lee 2015; Han 2017; Kim and Kim 2019; Lee and Kim 2019a) have mainly investigated the role and effectiveness of the Korean government's support system by emphasizing how start-up's access to finance can be improved and how the government provides a stable regulative environment. Studies such as Im et al. (2016) have suggested that the government should develop innovation clusters to help foster the culture of innovation and catalyze the growth of start-ups. However, the growing gap between the intent and outcome of the government's policies has questioned its role in enhancing the competitiveness of start-ups. Hence, in addition to the studies focusing on the external factors, there have been a few studies (Lee 2015; Ko and An 2019; Seo and Lee 2019) that dealt with internal factors such as organizational and individual features which mainly stressed the factors including entrepreneurial capability and differentiation strategy (Lee 2017).

Despite the various reasons that cause low productivity of Korean start-ups, the more fundamental factor behind the shortcomings of these start-ups is, in fact, related to how competitive advantages are created. The previous literature on Korea's start-ups has mainly stressed the importance of the ownership or the development of conventional unique resources which cannot be easily imitated by the rivals. Yet, Moon (2016, 2017) argued that technology and uniqueness do not guarantee market success. Moreover, the recent achievements of a few Korean digital start-ups in the ASEAN region show that internationalization and efficient operations can overcome resource deficiency. In other words, to enhance productivity and competitiveness, the strategies that help firms maximize the value and simultaneously minimize the resource requirements are crucial.

In this respect, this paper offers success factors for start-ups by applying two frameworks as the foundation for analysis—the ABCD framework and global value chains (GVCs). The former framework demonstrates how to effectively utilize the limited resources and improve competitiveness when a firm has similar level of resource endowments or even fewer resources compared to its rivals. The GVC framework stresses the role of internationalization in overcoming disadvantages and enhancing competitiveness by taking advantage of the host economy's locational advantages. This paper takes the examples of Korean digital start-ups in the ASEAN region by applying the two frameworks and provides meaningful implications for the sustainable growth of Korean start-ups.

Literature Review on Success Factors of Start-ups

Ries's (2011) definition of start-ups is widely used in the literature, "a start-up is a human institution designed to create a new product or service under conditions of extreme uncertainty." This definition thus stresses the characteristic of innovation and time pressure bounded to the birth of start-ups. Today, start-ups are regarded as a major driving force of innovation by countries around the world as they adopt emerging technologies to develop new products and business models (Kohler 2016). The term start-ups became popular during the period of the "dot-come bubble" from 1994 to 2000 when a large number of internet-based technology start-ups were growing rapidly (Hellman and Puri 2002). After the 2008 global financial crisis, there has been an increasing trend among advanced countries, such as the United States, Germany, United Kingdom, and Japan, as well as some emerging countries such as China that have actively adopted supportive policies for start-ups as a way to contribute to economic revitalization and job creation (Lee and Kim 2019a).

In the case of Korea, the government's systematic support for start-ups emerged after 1996 when the Korean government established the Small and Medium Business Administration under the Department of Commerce Industry. The scale of the financial budget for start-ups has increased continuously since the 1997 Asian financial crisis, and its quantitative expansion has accelerated since the 2008 global financial crisis (Park et al. 2012). Since the 2010s, the Korean government has focused on start-up programs with universities to resolve the social issue of low youth employment (Ko and An 2019).

The previous studies on Korean start-ups have mainly concentrated on the role and effectiveness of the government in fostering start-ups (Lee et al. 2019). Despite their different focuses, these studies have commonly argued that government support can be effective under certain conditions. For instance, Park et al. (2012) stressed that due to the limited role of government policies to improve the performance of start-ups, it is effective when it seeks to boost the autonomous function of the market mechanisms. Similarly, OECD (2016) pointed to the regulatory and cultural barriers which have limited the improvement in the spread of entrepreneurship and productivity enhancement of start-ups. It suggested that Korean government needs further efforts to foster the entrepreneurial culture and develop market-based financing system.

Lee et al. (2019) assessed the different effects of direct and indirect government policies on technology entrepreneurship. Direct policies refer to measures that actively assist individual firms through grants and subsidies, while indirect policies focus on constructing a good business ecosystem through effective regulations and tax, thereby benefiting the business of all start-ups. This study found that direct government policies lead to negative effects, whereas indirect policies bring positive effects on technology start-ups. On the other hand, Debanes (2017) stressed the importance of building up the government's organizational capacities to foster start-ups and innovation-led growth. This study found that the agenda on the creative economy of the Park Geun-hye administration is backed by the existing operational infrastructure that was aimed at supporting SMEs, and this turned out to be ineffective in creating and nurturing start-ups that emerge under a more highly-sophisticated technological and dynamic business environment.

Compared to the studies examining the external factors of government policies, there are relatively few studies investigating the effects of internal factors, or the necessary competencies at the organizational (start-ups) and individual (founders) levels. Lee (2017) categorized the determinant factors of start-up success into four types: entrepreneurship, innovation, technology, and financial resources. Based on a survey and empirical test, this study found that entrepreneurship in terms of discovering and exploiting business opportunities has been the most important factor toward influencing the success of start-ups, followed by innovation, financial resources, and technology level. Lee (2015) has also identified the important role of entrepreneurship in fostering start-ups. However, Lee pointed to the fact that entrepreneurship in Korea has been deteriorating over the last decade, thereby impeding the effectiveness of government promotion measures. Lee and Kim (2019a) has outlined three factors including entrepreneurship, market orientation, and network as critical elements for business sustainability of start-ups based on the literature review of previous studies.

In a broader context of start-ups from other countries or the start-ups in general, Yim (2008) has analyzed the rapidly growing US start-ups and pointed out that firm-specific innovation ability accompanied by large investments in capital and R&D has contributed to superior performance. Baron and Markman (2003) has argued that the entrepreneurs' social competence, such as accuracy in perceiving others, skills at impression management, persuasiveness, plays a positive role in increasing the financial success of entrepreneurs. Pangarkar and Wu (2013) has investigated the relationship between alliance formation and the performance of Singapore's start-ups. They argued that a larger number of alliances help achieve better performance, because start-ups will be able to access a greater magnitude of skills. More diversified and balanced alliance portfolio could also lead to improved performance. Tresca (2013) has pointed out that most SMEs choose global networks to increase their competitiveness and overcome the limitations of their size and resources.

Previous studies commonly emphasized the importance of entrepreneurship and innovation, but they did not specify how start-ups can effectively seek and exploit new opportunities. Generating new business ideas, finding the untapped market, and developing high technology do not always guarantee market success unless they deliver meaningful consumer values (Moon 2016). Moreover, risk-taking should not be the ultimate goal or fundamental spirit for successful start-ups. Competitive entrepreneurs should seek and engage the business areas with lower investment risks and higher investment rewards. Moreover, previous studies emphasized the *what* factors such as individual's social competence instead of *how* to utilize current limited resources for better performance. Some studies stressed the important role of making partners or networks in improving performance or overcoming the disadvantages of start-ups. However, these earlier studies do not specifically address the *how* factors of integrating existing resources that one owns or easily access in the external market. Another critical limitation of the previous studies on Korean start-ups is that they narrowly concentrated on dealing with fostering the productivity and competitiveness of start-ups within the domestic scope and emphasized the competitive relationship with Korean conglomerates. However, such analysis offers only half of the understanding, which leads to misguided policy formation that Korean start-ups should be protected against large firms through highly regulated and restrictive policies.

Given the above limitations of the preceding studies, this study proposes a framework that analyzes the strategic factors toward enhancing competitiveness with limited resources. Specifically, this paper applies Moon's (2016) ABCD model, a strategic business model developed for systematically integrating the success factors of firms that do not have technology and resource advantages at the initial stage. Moreover, this study expands the scope of analysis from domestic to international dimension by incorporating the concept of global value chains (Moon and Yin 2017; Yin 2017, 2019). The following section will explain the two frameworks in detail.

Methodology: ABCD Model and Global Value Chains (GVCs)

The ABCD Model

The ABCD model was first introduced by Moon (2016) to explain the fundamental sources of Korea's economic success. The model suggests a new approach to enhancing competitiveness. The traditional approach to competitiveness often emphasized the possession or development of unique resources (Resource-based View, Barney 1991; Diamond Model, Porter 1990) that cannot be easily copied by rivals. By contrast, the ABCD model explains how a firm can be more competitive than its rivals, even though it does not have superior resources or is situated at similar or inferior resource conditions. Therefore, according to the ABCD model, competitiveness depends not only on the possession of the superior resources, but also the method of how to utilize and recombine the available resources. The former strategy relates to the *what* approach, whereas the latter one refers to the *how* approach. The ABCD model is composed of four elements as follows.

Agility

This element focuses on the role of speed with precision in enhancing competitiveness. Conventional theory mainly emphasizes the entry speed, such as the first-mover advantages. Yet, due to a shortening product life cycle, the duration of a new advantage becomes more difficult to maintain for a longer period. Therefore, it has become more important for the firms to continuously upgrade their advantages and make sure to keep up with the changing environment. Therefore, not only the entry speed, but also the process speed is critical to maintain one's advantages particularly when uncertainty is high.

Benchmarking

This element stresses learning by adopting industry's best practices, the widely accepted norms in the industry by firms and consumers. This is because compared to self-development, benchmarking the industry's best practices is more effective in terms of cost efficiency and risk reduction, and also helps firms lower industrial barrier when a firm enters a new business field. This strategy is particularly more crucial for start-ups that do not have abundant resources and brand power in the market. Moreover, by learning the industry's current best practices and incrementally improving them further, latecomers can easily and rapidly catch up and even outcompete their rivals. This strategy is also a safe and effective method for start-ups that usually have weaker resource endowments at the early development stage.

Convergence

This factor refers to the combination of various resources from internal or external sources in a synergistic way for creating new advantages. As the multi-function product of iPhone exemplifies, although each element in the product comes from different industries, such as camera and MP3 player, when it is combined through an efficient platform, it can create a huge advantage that is highly synergistic (Lee 2019). This also explains that not all elements necessary for the advantages need to be developed by oneself. They can be acquired through the market or utilized through contractual agreements (Lee 2018; Lee and Kim 2019b). For start-ups, the factor of convergence offers a direction for fast growth, by connecting to the existing platform or recombining existing resources for creating a new product.

Dedication

The last element defined as diligence with clear goal orientation is particularly critical when superior resources are absent or low, which is highly relevant to start-ups and entrepreneurship. First of all, dedication requires firms to rigorously increase productivity through hard-working efforts. This is grounded on the motivational aspects of human resource management or leadership, where firms, or especially the start-ups, must have a certain level of initial input of time and efforts to benefit from the accumulated basis of knowledge and experience. The economies of hardwork are further propelled with the right direction. The accurately targeting industry's best practice for learning and the continuous upgrade of goals have become a critical element for strategy formulation.

In essence, the four factors of ABCD are highly integrated and associative, where agility, benchmarking, convergence, and dedication simultaneously function together to maximize efficiency. For start-ups which face volatile, uncertain, complex, and ambiguous (VUCA) market environment, the ABCD model offers an effective guideline to lower risk and enhance sustainability.

Global Value Chains

The concept of GVCs is the extension of Porter's (1985) value chain framework. Porter's value chain is composed of nine activities which are primary and support activities. Porter's value chain framework emphasizes how the geographical location of the activities is concentrated within the country, whereas the activities are often dominated within a single firm. Therefore, the value chain framework less concerns internationalization. The concept of GVCs extends Porter's value chain from two dimensions. The scope of the location of each activity is extended from domestic to the international level, and the governance or the method of performing these activities is extended from a single firm to a firm's network involving various partners.

In the literature of GVCs, Gereffi (1994) first developed the concept of global commodity chain (GCC), and categorized GCC into two types, producer- and buyer-driven commodity chains, depending on the role of the leading firm in the value chain whether it is a powerful producer or a big buyer. However, as the GCC framework did not adequately specify the variety of network forms, Gereffi et al. (2005) proposed a more complete typology of value chain governance, by extending the network governance into three alternative types—modular, relational, and captive governance. However, this GVC governance type is industry-specific (Morrison et al. 2008), and cannot fully explain the dynamics and evolutionary processes in multi-industry production networks (Yeung and Coe 2015; Yin 2017). Driven by the growing popularity of technological convergence and multi-functional products, a competitive product increasingly requires the inputs and resources from a variety of industries (Moon 2018). Moreover, since the value chain activities are finely sliced into a complex business ecosystem orchestrated by multinational corporations (MNCs), we need to expand the unit of analysis on GVC governance from the industry to the activity level.

For each activity, firms can choose among the three types of governance: trade, foreign direct investment (FDI), and non-equity mode (NEM), with which the firm can effectively allocate the value chain activities and generate higher values (UNCTAD 2013). Therefore, MNCs play the role of coordinating GVCs, by incorporating the appropriate partners (including large and small firms, domestic and foreign ones) into the network. The GVC framework thus provides two implications. First, a firm can enhance competitiveness through internationalization by exploiting the location advantages to one's interests and also through partnership. Most importantly, the new approach to GVCs has changed the paradigm of competition from one single firm to a firm network, or the effective collaboration with all partners involved in the GVC. For example, the competition between Samsung and Apple is not the competition between two single companies alone but between their GVC networks.

Case Study: The Success of Korean Start-Ups in ASEAN Digital Industry

Although ASEAN countries have only recently begun to express keen interest in the development of start-ups, they are moving upward in a surprisingly fast and dynamic manner. This region particularly has strong interest in the business areas closely related to the convenience of everyday life, such as e-commerce, transportation service, and fintech service. In response to the rapidly changing ASEAN digital market, global firms from China, Japan, Europe, and the United States have been pushing ahead to take the lead in this region. Korean start-ups are also demonstrating growing attention to this region, but their market share in the digital industry is still small. So far, about 50% of the Korea's global start-ups have entered the US and Chinese markets as part of their global expansion efforts (K-ICT Born Global Center 2016). However, it should be noted that the more recent survey from Start-up Trend Report 2017 (Start-up Alliance 2018) found that Southeast Asian countries were considered the most desirable destination internationally for Korean start-ups.

Among the ASEAN countries, Singapore has the most well-established ecosystem for start-ups, so many Korean companies consider it as a base for entering other ASEAN countries. There are also start-ups that consider Malaysia as the base for regional expansion into ASEAN. On the other hand, Indonesia attracts growing attention as an alternative location to China for Korean start-ups due to its large middle-class population and strong domestic demand. Hence, not only IT firms, but also a growing number of start-ups from various businesses have entered Indonesia, such as OKHOME which provides a home cleaning service, PT. KREON which is focused on developing games, and Cashtree which creates advertising platforms. The following section shows some examples of Korea's successful global start-ups in the ASEAN region or seeking to enter this region and discusses what factors have contributed to their success in this region. Although the three cases cannot be generalized to all Korean start-ups, they provide useful implications for start-ups operating in the digital sector in particular.

The Success of Althea in the E-commerce Sector

The ASEAN market is expected to experience a 32% increase in the compound annual growth rate (CAGR) for e-commerce spending, rising to about US$90 billion by 2025 (Singapore Business 2018). In particular, the growing demand for Korean fashion and beauty products is a noticeable trend. The ASEAN region is the second only to China as the largest destination for K-beauty exports in the world. The popularity of Korean pop culture and Korean brands in ASEAN thus helps Korean start-ups enter the e-commerce business in this region with a favorable position. The following section explores the successful case of Althea and its global strategy as an example.

Althea is a K-beauty e-commerce platform founded in Malaysia in 2015, aiming to provide ASEAN consumers with authentic beauty products at a lower price and shorter lead time. After its success in Malaysia, Althea expanded to ship directly to other ASEAN countries such as Singapore, the Philippines, Indonesia, and Thailand. More recently, it has also expanded to the US market. To effectively penetrate into the local markets, the company has localized its marketing strategy and adjusted the payment options to fit the local markets. The company is now planning to expand its international operations and increase the number of foreign offices.

According to the company's website, Althea was created with the vision to utilize the digital revolution in delivering K-beauty products to the global markets. In addition to providing customers with a one-stop shopping experience by housing popular K-beauty products, one of the remarkable features of Althea is the firm's introduction of the world's first hybrid cross-border-trading (CBT) system which has allowed Althea to function as an efficient e-commerce platform. Althea, in fact, is the first company which has acquired the sourcing capabilities based in Korea while localizing customer-interfacing activities through its digital platform. This has helped both the firm and its customers benefit from cost savings while enhancing convenience in selection and purchase. By serving online, various customer values such as language, customer support, promotions, and payment options can be effectively localized, which enabled Althea to globalize and scale-up fast.

One of the critical factors that have led Althea to engage in digital retail platform was to solve the problem of expensive prices for K-beauty products when sold offline. More importantly, Althea has recognized that the counterfeit K-beauty products from China have become a serious problem for Korea's cosmetic business and consumers. Althea's platform directly solved these two issues, where consumers could purchase K-beauty products at a cheaper price while being guaranteed with quality and authenticity. These two efforts enhanced customer values and significantly increased the re-purchase rates.

Althea did not stop at simply delivering others' beauty products and began to develop its own cosmetic brand starting with the Petal Velvet Powder. This is an important business transformation for a retail platform such as Althea, because the accumulated data of customer reviews and experiences stored up on Althea's website has allowed the firm to recognize customer needs more directly. Therefore, with the help of the influencers who have played a growing role in spreading the popularity of K-beauty products and techniques (Lee 2019), Althea's first product was sold out within 1 month, and the firm expanded to launch its first skincare line by the end of 2017. As the co-founder and CEO Frank Kang explained, "Althea was able to understand the specific needs of the customers and (Althea) was able to quickly turn that into a product within a month or two. We have deep insights into our customer base that traditional brands simply cannot match" (Ellis 2017/10/26).

Eventually, the business growth of Althea from a digital retailer to a producer of K-beauty has led to US$7 million investments from both Korea and global capital, and these investments are targeted to expanding its private-label products lines while speeding up the scale of globalization. With Althea's experience in delivering to more than 200 countries, this firm was able to differentiate itself from its competitors by localizing to the less-served markets. Until recently, most K-beauty producers have narrowly targeted Chinese or Korean consumers. However, Althea could learn the various color tones and business environments of more diversified markets to enhance the uniqueness of K-beauty while adding a touch of localization. As the data and information on customer behavior increase, CEO Frank Kang set the direction for Althea to become one of the top beauty brands, which has succeeded by reversing its retail platform that spans both distribution and production.

The Cases of Viva Republica and Finger in the Fintech Sector

With the proliferation of e-commerce and smartphones, online shopping has emerged rapidly. In response, IT firms have entered the finance industry, promoting market changes that orientated consumers toward cashless online trading. On the other hand, fintech helps an increase in the efficiency of transactions in e-commerce. Although payment with cash still accounts for the majority of transactions in ASEAN, the electronic payment of ASEAN consumers amounted to US$214.2 billion in 2017, with an average annual growth rate of 13% since 2013 (KOTRA 2018). The ASEAN region is expected to witness a continuous growth of 8% annually by 2020 (KOTRA 2018). The rapid growth of fintech and e-commerce, as well as the loose local government rules and regulations, has increasingly attracted Korean start-ups to enter the ASEAN market. The following part presents two examples of Viva Republica and Finger.

A Korean start-up Viva Republica (hereafter Viva) was first included in the 2017 Fintech 100 announced by KPMG and was ranked at 35, higher than many other US start-ups. The company was one of the most disruptive fintech start-ups in Korea and launched a simple peer-to-peer (P2P) payments mobile app called Toss in 2015, which helps customers enjoy easier access to financial products. With this app, Korea's mobile payments quadrupled in 2015. The fast growth of Toss should be attributed to its transfer service that streamlined the process of identification (ID) verification. Before Toss, Korean users were required to input passwords five times and around 37 clicks were needed to make to transfer US$10. However, with Toss, people now only need one password and three steps to transfer up to US$430 (TechCrunch 2017). After a US$48 million PayPal-backed investment in 2017, Toss was transformed from a simple money transfer app to a platform providing more than 40 types of financial services, including savings/loans, insurance, investment, and credit management. Such a one-stop financial platform allows users to engage in nearly all bank-related transactions from creating an account to purchasing foreign stock, and has significantly enhanced user value and utility. Currently, Viva has more than 10 million registered users which accounts for about 20% of Korea's population.

Its sales have also experienced a substantial growth over the past 4 years, from 99 million won in 2015 to 54,821 million won in 2018 (Korea Times 2019).

In addition to the investment from PayPal in the early development stage, Viva has also received a large amount of investment from other global investors including Silicon Valley-based venture capital firms such as Kleiner Perkins, Ribbit Capital, and Hong Kong-based Asian equity investment firm Aspex Management. These external investments help Viva grow continuously in terms of the scope of both services and geographical location. Given its great success in Korea, Viva is now considering further expansion into the ASEAN market, specifically the Philippines and Vietnam as key locations. The CEO is considering the establishment of foreign subsidiaries in the form of joint ventures with local banks in the ASEAN region, where the speed of growth is fast, and the compatibility with the firm's technology architecture is good (Aju News 2017). Viva also planned to enter the Vietnamese market in the first half of 2019 with its customized financial services, such as an easy-transfer service. Yet, it is unlikely that many of the other Korean fintech firms will go abroad, as they mostly depend on small-scale financial support from the Korean government. On the other hand, in May 2019, Korea's Financial Services Commission rejected Viva's proposal for granting a new internet-only bank due to its concerns over governance and financing.

Another Korean fintech start-up, Finger, was established in 2000 and was the first company to offer mobile banking services in Korea. However, since 2017 Finger has recorded a steep growth due to its structural changes in its business portfolio. Until 2016, its sales have mainly relied on IT-related services such as e-banking solutions, the development of fintech platforms, and system integration. A change occurred in 2017 when Finger launched financial services based on its own fintech platform. Thereafter, sales jumped to 34 billion won from 24 billion won in 2016 (Digital Daily 2018). One of its typical financial service known as Rele Transfer looks to provide small-scale international money transfers for lower fees, compared to the traditional way of transferring money using a bank with SWIFT codes.

Finger so far has five fintech-related affiliates, and the sales from these financial services accounted for 70% of its total sales, while the other 30% of its sales was made from its existing IT-related services. One of the five affiliates is Finger Vina which was established as a foreign subsidiary for the Vietnamese market in 2017. It provides various financial services such as micro-loans to non-credit Vietnamese residents. This is done by cooperating with local financial and non-financial firms, including both Korean and local firms in Vietnam. For example, Finger Vina cooperates with Korea's key banks in Vietnam such as Shinhan Bank and Woori Bank and provides mobile financial platforms. Because of the lack of capabilities among local IT firms, both Korean and local firms in Vietnam favor partnerships with Korean IT firms given their internationally acknowledged technologies and management knowhow as well as their cost efficiency. The company also recruits competitive Vietnamese IT technicians through a cooperative relationship with the Korea-Vietnam Friendship IT College.

Discussion

Analysis with the GVC Framework

The above examples have shown that global start-ups also employ the GVC strategy for an efficient global expansion. Considering the significant locational advantage of the ASEAN region, all three start-ups selected this region as the first target for overseas expansion. First, the entry barriers to the markets of the United States, China, and Europe are relatively high considering the lack of resources and brand awareness of the Korean start-ups. Moreover, the Chinese market is highly influenced by political issues between Korea and China, which lead to high market uncertainty. In this respect, ASEAN can be an attractive market with lower entry barriers. Second, there are a large number of consumers in the ASEAN region who are loyal to Korean culture and brands, which have helped Korean start-ups gain easier entry into the ASEAN market. For example, the ASEAN region is one of the largest markets for Korean cosmetics compared with other foreign regions. Third, ASEAN countries have more smartphone users than traditional Internet users. The region also has the highest ratio of social network usage among Internet users compared to other regions in the world. Such infrastructural development has facilitated the start-up business such as e-commerce and fintech.

In addition, many ASEAN countries have provided strong support for start-ups through various government policies. The government policies of Singapore and Malaysia are noticeable in this regard. The government of Singapore supports not only the start-ups, but also the investors such as venture capitals, and aims to formulate the start-up community. The support policies of the Malaysian government are not limited to its own national boundary, but extend to the entire ASEAN region. In contrast, although Korean start-ups possess high technologies, they are tied up with various regulations and cultural restrictions in Korea. In fact, the growth of start-up investment and the development level of start-up ecosystem in Korea are lagging behind that of ASEAN (KITA 2018). Thus, some Korean start-ups have a keen interest in the ASEAN market.

In Korea, there are extensive regulations that restrict start-up innovation and technology convergence across many key fields. This is particularly related to the fourth industrial revolution, such as artificial intelligence, big data, fintech, and automatic driving. In contrast, the ASEAN region has a lower degree of restrictive policies and regulations for start-ups across many fields of the digital economy, thereby providing a better environment for attracting foreign start-ups. Korea's digital start-ups then internationalize not only to exploit locational advantages but also to avoid the Korean government regulations and restrictions. The CEO of Korean start-up the Woowa Brothers, Kim Bong-jin, once said that "many domestic start-ups use more than half of their resources to address legal regulations. The start-ups in other countries, however, use most of their resources for promoting innovation and providing higher values to consumers" (Dongascience 2017).

Table 1 displays the status of location and partnership in terms of the value chain activities of the three Korean start-ups. For the geographical distribution, Althea is the most internationally distributed compared to the other two start-ups that mainly dispersed one or two activities abroad. In the case of Althea, its Korean office is in charge of the supply chain, operation, and logistics to ensure low operational costs, whereas the overseas offices in Malaysia handle customer services and marketing. Along with the firm's strategy to move all staff and management, such as SNS operations and development, design, and marketing, to Malaysia with twice the average GDP size in Southeast Asia, Althea could greatly increase its local responsiveness in a speedy manner. On the other hand, both Viva and Finger selected Vietnam as the overseas target, because there is no dominant fintech firm in this country, which makes it easier for Korean firms to enter this untapped market. Viva has planned to enter through a joint venture, whereas Finger established a foreign subsidiary in Vietnam, but mainly focused on market-seeking FDI.

In addition to the locational expansion, all of these cases showed a cooperative relationship along the value chain activities to some extent. For Korean start-ups that are domestically oriented and lack international experiences, international partnerships are particularly important for global expansion. Viva's decision to expand into Vietnam was facilitated by the injection of capital resources from the global investors. Finger's financial services in Vietnam should also be attributed to its cooperative relationship with Korean and local firms as well as local IT colleges in Vietnam. Althea can reach global consumers across more than 200 countries online through its digital platform. However, to maintain its strengths in delivering products within a shorter time span and at lower costs, it needs to maintain a smooth relationship with a wide range of both Korean producers and ASEAN logistic firms. Moreover, to better customize its products, Althea needs to reflect the feedback of customers and satisfies the local market demand.

Regarding the governance of the value chain activities, both Althea and Finger have engaged in international businesses through FDI by establishing local offices and NEM by collaborating with a wide range of partners. Althea moved its headquarters from Korea to Malaysia to better serve its main target customers in the ASEAN market, while Finger established its foreign subsidiary in Vietnam to serve local customers. Moreover, except for the ASEAN market, Althea also serves other overseas markets around the world, and pursues an extensive export strategy to realize its market potential. By analyzing the degree of internationalization using the GVC approach, Althea shows the highest degree in terms of both the scope of geographical dispersion and the type of governance structure, and this in turn contributes to its higher international competitiveness.

Analysis with the ABCD Framework

Among the three Korean start-ups, Finger is the first fintech company in Korea with about 20 years of operational experiences. Yet, both Althea and Viva are still young start-ups with less than 5 years of operations, but have already been globally acknowledged. Althea was recognized by Forbes as the largest Korean beauty website in Southeast Asia with an annual revenue run rate of US$10 million. At the same time, Viva was included in the top Fintech 100 announced by KPMG. Their competitive advantages that

Table 1 Location and governance structure of the three start-ups

	Althea		Viva		Finger	
	Location	Partnership	Location	Partnership	Location	Partnership
Inbound logistics	Korea	Yes	–		–	
Operations	Korea		Korea		Korea	
Outbound logistics	Malaysia	Yes	–		–	
Marketing and sales	Malaysia	Yes	Korea		Vietnam	Yes
Service	Malaysia		Korea		Korea	
Procurement	Malaysia		Korea	Yes	Korea	
Technology development	Malaysia	Yes	Korea		Korea	
Human resource management	Malaysia	Yes	Korea		Korea	Yes
Infrastructure	Malaysia		Korea		Vietnam	

play the foundational role for their overseas expansion can be summarized from the four aspects of the ABCD model.

Agility

With the fast advancement of digital technology, start-ups can gain the advantage of speed and precision for services. For example, by adopting a digital platform, Althea could quickly respond to local demand and improve customization. Moreover, compared to offline sales, its online services can provide various language support and payment options, thereby largely enhancing customer convenience in selection and purchase. The company also quickly adopted the demand of consumers into production and released them back to the market. On the other hand, Viva's successful development of its Toss app delivers enhanced value through easier and convenient access to the financial services by requiring less time and process of ID verification for financial transactions.

Benchmarking

These Korean start-ups made efforts and investments in learning existing K-beauty contents when delivering the products of other companies, but they ultimately were able to launch their own products that are more customized to local needs. Such strategy helps the start-ups expand their products and services to numerous markets, whereas traditional firms mostly have targeted Chinese and Korean markets. Furthermore, Viva carefully learned existing easy-transfer providers and paid attention to the details. They later changed the industry standard that required consumers to have a minimum amount of cash in their account. Although this was an incremental improvement, for the start-ups with relatively fewer resources, it was very efficient and less risky strategy for improving their competitiveness.

Convergence

The platforms of these start-ups have the advantage of collecting various resources for improving their products and services by acquiring new data and information on consumers. At the same time, their business ecosystem facilitates them to provide various services in a synergistic manner that further help firms control the cost factors. For example, Viva provides almost all of the bank-related transaction services to maximize customer satisfaction. Finger's fast-growing sales since 2017 should also be attributed to the launch of its own financial service platform and synergy creation among its five affiliates that are focused on different areas of financial services. Such system not only improves the interaction among different product lines but also incorporates partners from diverse regions, thereby contributing to their services and products and overcoming their deficiency in the firm's resource portfolio.

Dedication

These start-ups are very dedicated to learning local demand and have proactively engaged customer value for the development of their products and services. By contrast, the common trait of failed start-ups is that they often launch their business by relying on their own ideas and technology while neglecting commercialization values and marketability. Their digital platform has played a role as the key venue of communicating with customers and finding solutions for improving the convenience of consumer purchase. Moreover, unlike many underdeveloped Korean start-ups that are content with government support and unmotivated to make changes, these successful start-ups have been successful in scaling up in not only the product lines but also the diversity of the market regions (Table 2).

Conclusion

By filling the gap in the preceding literature on Korean start-ups, this paper has approached the reasons and success factors behind Korean start-ups by adopting a global competitiveness approach. Innovative technology and entrepreneurial spirits are often emphasized with regards to the competitiveness of start-ups. However, products or services with destructive innovation but neglecting commercial values will be less likely to achieve success. In this sense, by applying the ABCD model, this paper suggested four factors that can help enhance their commercial values and unique position against traditional firms, and minimize the risks of market entry. Although the areas of strengths along the four factors of the ABCD model of the three Korean start-ups are different, these factors have effectively faciliated their entry into the ASEAN region and further strengthened their competitiveness. On the other hand, with the internationalization through GVC strategy, start-ups can exploit international resources, which can help them overcome their deficiency in the organizational resources and bypass domestic regulations. Among the three cases, Althea's degree of internationalization in terms of GVCs was the highest, which resulted in the most successful case in the ASEAN e-commerce sector. This implicitly suggests that the higher degree of globalization will contribute more to improving firm performance, because the firm can better exploit the locational advantages and benefits from global partners.

Many Korean policy makers and researchers tend to consider the relationship between *chaebol* and start-ups (or SMEs) in the context of competition rather than cooperation.

Table 2 ABCD model and the competitive advantages of the three start-ups

Factors	Features of services offered by the three start-ups	Exemplary cases
Agility	Speed and precision of services Quickly respond to local demand and improve customization	Althea Viva
Benchmarking	Learn existing products/services and make incremental improvement Launch customized products to satisfy numerous markets neglected by traditional firms	Althea Viva
Convergence	Providing various services or products to maximize customer satisfaction Establishing a platform as the interaction between users, consumers, and other partners	Althea Viva Finger
Dedication	Engage customer value for product/service development Dedicated in scaling up the product lines and the diversity of the market regions	Althea Viva Finger

This narrow view leads to inappropriate and ineffective policy direction that protects SMEs and start-ups at the cost of efficient growth of the entire economy, including *chaebol*. Under the GVC framework, however, where no single firm dominates the entire value chain, more cooperation between both large and small firms is desirable. The enhanced cooperation between large and small firms contributes to building a healthy business ecosystem, which further improves the entire economy. This paper has also shown that it is not abundant firm resources, but rather efficient utilization of resources and favorable business environment that are critical for sustainable development of the economy and firms. In this regard, the policy makers have to be very cautious when they try to shift the focus from large firms to small firms (or start-ups) for economic development.

Furthermore, both the external and internal factors are interrelated, as the external factors such as government support will improve the effectiveness of the internal factors when it satisfies the needs of firms and matches the changing patterns of today's business competition. In this respect, the strategic factors of enhancing the competitiveness of start-ups can contribute to the reexamination of the current policy effectiveness. Further studies can also extend the current study by investigating the mechanism of the external and internal factors of strengthening start-ups and the conditions under which the synergistic effects between external and internal factors will be maximized for both firm and country benefits.

Key Questions Reflecting Applicability in Real Life

1. How do start-ups contribute to a nation's economic growth?
2. Start-ups usually have limited resources in human and physical aspects. How can they overcome these disadvantages through digitalization and internationalization?
3. What are the strengths and weaknesses of start-ups and large enterprises? How do these firms co-exist in creating a competitive economy?
4. How should government effectively support start-ups and encourage their growth based on enhanced competitive advantages?
5. How should government view the role of start-ups and large enterprises in generating the economic innovation?

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