Asia-Pacific
Economic Cooperation

Local Innovation Ecosystem Best Practices

APEC Small and Medium Enterprises Working Group

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FOREWORD

Dear APEC economies readers,

"Women, SMEs and Inclusive Growth" is one of the APEC priorities in 2019. Increasing women's participation is critical. SMEs contribute to economic growth, with their share of GDP ranging from 20% to 50% in most APEC economies. Inclusive Growth focuses more on local economy revitaliza-tion. And that is to say, the Local Innovation Ecosystem Initiative proposed by Chinese Taipei, the Philippines, Russia and Thailand has been moving on the right track of the global development trend.

In 2019, Chinese Taipei and the three other co-proposing economies hosted four Local In-novation Ecosystems Forums to build collaborative platforms. The platforms provided enormous opportunities for public and private stakeholders to develop the innovation ecosystem process. The establishment of an innovation ecosystem is widely adopted as a strategy for eliminating the economic development gap between metropolises and local townships. The local innovation eco-system is believed to be able to stimulate more innovation, empower the workforce of local town-ships and revitalize the local economy.

To expand the promising impact of the Local Innovation Ecosystem Initiative in the APEC re-gion, this report provides best practices for creating innovation, building capacities, multidiscipli-nary collaboration and contributing to local economies. We believe that knowledge dissemination will equip SMEs and the public sector in the APEC economies with a friendlier environment to build local innovation ecosystems and unleash their potential for creating more sustainable, innovative, and inclusive growth toward a shared future.

Sincerely yours,

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CHAPTER 1

INTRODUCTION AND TRENDS REVIEW

Statement of the Problem

According to a study by the McKinsey Glob-al Institute, 50 cities account for 8 percent of the global population, 21 percent of world GDP, 37 percent of urban high-income households, and 45 percent of headquarters of firms with more than $1 billion annual revenue (Manyika et al., 2018). A similar or even more significant phe-nomenon has been unfolding in the Asia-Pacif-ic region. The World Bank estimated that the urban populations in the Asia-Pacific region would reach 2.38 billion in 2050, or 77 percent of the total population, which means that more resources and more opportunities are flowing into urban areas. Boon and bane, urbanization has significantly driven the economic growth but also led to economic inequality. As a result, how to revitalize local township economy has become crucial. It has been theoretically and practically proven that creating local innovation ecosystems can help develop opportunities for SMEs or start-ups.

Common knowledge is that, a “township” suffers with poverty, low-paying jobs, disad-vantages against women and lack of childcare, education resources and labor. These represent strong demands for breakthrough. Female labor force participation, childcare or other economic inequality related challenges could be, to some extent, resolved by SMEs through the function-ing of an innovation ecosystem. The concept of an innovation ecosystem has been explored and researched for decades, and its definitions vary with different scholars. Jackson (2011) de-fines an innovation ecosystem as *the complex relationships that are formed between actors in-cluding the material resources and human capital or entities that participate in ecosystem in order to enable technology development and innovation. Innovation ecosystem also comprises knowledge and commerce for the purpose of enhanced com-petitiveness (Oh et al. 2016).*

In alignment with the Joint Ministerial State-ment of 2017 APEC Ministerial Meeting, the 2017 APEC SME Ministerial Statement and Da Nang Declaration endorsed in the 25th APEC Econom-ic Leaders’ Meeting, with concerns over the im-portance of promoting economic integration, sustainability and inclusive growth in the APEC region, which led to the proposal of the APEC Local Innovation Ecosystem Initiative. The Local Innovation Ecosystem Initiative is also a response to the 2018 APEC theme-Harnessing Inclusive Op-portunities, Embracing the Digital Future, which promotes the establishment of innovation eco-systems to fulfill SMEs’ development potentials.

As elaborated above, from birth to matu-rity, an innovation ecosystem requires several phases to take shape. Chinese Taipei’s initiative on the Local Innovation Ecosystem designs three dimensions to make it as complete as possible. The first dimension is capacity build-ing and knowledge accumulation; the second dimension is to assist in building network asset and economic asset (Katz & Wagner, 2014) that are required for the forming of urban-rural in-novation ecosystems in the hope that SMEs are empowered to help revitalize the local econo-my in the APEC region. The third dimension is to boost the economic development in inno-vation ecosystems. When the industrial value chains within the APEC region are connected, the influence of the initiative will be expanded.

This study focuses on the first dimension of the APEC Local Innovation Ecosystem Initiative, which is knowledge accumulation and capacity building. To build capacities, firstly, it is impor-tant to let the public know what innovation and social entrepreneurship are; secondly, consulta-

tion and training should be provided to help people understand how to innovate; thirdly, there should be an environment that sparks the exchange of ideas; lastly, resources like funding are needed to support entrepreneurs. The role an innovation ecosystem could play was also addressed. Best practices were selected from the innovative start-ups participating the APEC Local Innovation Ecosystem Forums held in Chinese Taipei, the Philippines, Russia and Thailand and were analyzed in later chapters.

Innovation Ecosystem and Clusters' Potential Benefits

Geographic concentration is observed in innovation and industry growth (Lyons, Miller and Mann, 2017). Thus, an innovation ecosys-tem cannot do without the process "clustering." Some economists define clustering as a chan-nel in which small firms benefit from the econ-omies of scale. A cluster can be understood to mean a group of innovation actors in one spe-cific industry, clustering at key locations; while, an ecosystem is a network of many players from different fields that are directly or indirectly con-nected to each other (PARK INNOVAARE, 2018).

Strong clusters spark innovation through dense knowledge diffusion (Muro and Katz, 2010), and a formed innovation ecosystem can play the major role as a diffusion medium by means of promoting collaboration between firms of various professions as well as provide firms with access to research labs and profes-sional personnel (Martin Neil Baily & Nicholas Montalbano, 2017). Innovation ecosystems allow the creation of start-ups and welcome all kinds of industries to enter, to connect with each other, to work out ways to collaborate, to differentiate themselves to compete, and eventually to inspire innovation. In turn, increased collaboration between firms and other participants in one ecosystem, such as research labs or professional individuals, accelerates the knowl-edge dissemination that will lead to a virtuous cycle. Furthermore, innovation ecosystems can create jobs for local residents.

Before building a local innovation ecosystem, the limitations of township development cannot be neglected: the dearth of large scale of business capability, the dearth of population density and over-reliance on a single industry (Lyons, Miller and Mann, 2017). Consequently, SMEs play an inevitable role in energizing local economy. In other words, localized needs of a township are more possibly taken care of by SMEs and start-up companies.

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MODEL ANALYSIS

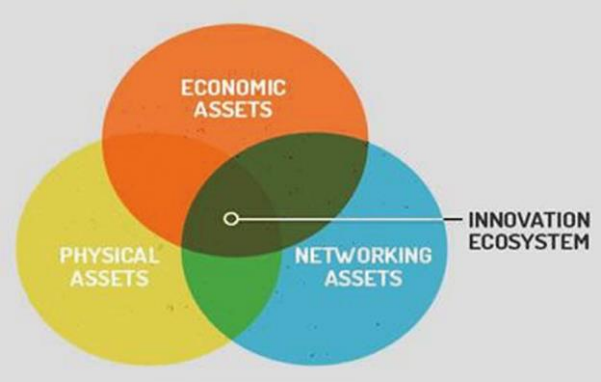
CHAPTER 2

MODEL ANALYSIS

Foundations to Build Innova-tion Ecosystems

The frameworks used to analyze clusters and innovation ecosystems are illustrated by the Brookings Institution's Metropolitan Policy Program, which suggests that innovation eco-systems are built around three types of assets: physical assets, networking assets, and eco-nomic assets. No single group of assets can form an ecosystem but the interaction of all three can. As illustrated in the figure below, the overlapping area provides the foundation for creating an innovation ecosystem.

Figure 1.



Source: Bruce Katz and Julie Wagner, The Rise of Innovation Districts, Brookings 2014

The economic assets are the firms, insti-tutions and organizations that drive, cultivate or support an innovation-rich environment (Bruce Katz & Julie Wagner, 2014). Bruce Katz and Julie Wagner further divide the economic assets into three categories: *innovation drivers, innovation cul-tivators and neighborhood-building amenities.*

Innovation drivers can be research-oriented companies or startups that develop new tech-nologies like household robots, digital services, or mobile APPs to meet certain needs. Universi-ties are no-doubt a big magnet that attracts tal-ents to study and conduct researches. They also serve as a pool of new knowledge pouring out innovative ideas into fields. Some industries cre-ate innovation, such as media, graphic design or landscape architecture. Entrepreneurs are also a powerful innovation driver.

Innovation cultivators are the organizations that support firms and individuals that stand out with their ideas in forms of incubators, technolo-gy transfer offices or job training centers to help entrepreneurs and start-ups mature.

Neighborhood-building amenities include medical offices, restaurants, coffee shops or retail stores where cross-group interactions and view-point collisions occur.

The physical assets are more than just buildings, bridges, or roads. How could a street play a role more than what it should play? How about serving as a city lab for smart light poles? Or the street pavement can absorb rainwater for

storage? Open spaces could be used as co-working offices, entertainment venues or affordable areas for start-ups. The functions of infrastructure might be transformed to stimulate innovation.

The networking assets are the relationships between players, such as firms, start-ups, universities, and entrepreneurs, that have the po-tential to achieve the goal of generate sparkling ideas. Formal and informal meetings, workshops, or training sessions are some of the ways to achieve such goal by bringing together the play-ers from different teams.

Given that there exist difficulties in interactions between different industries or fields, the networking assets could build both strong and weak ties, suggested by Granovetter, a leading scholar on networking. Strong ties occur be-tween people or firms with similar professions. Higher levels of trust, willingness to share de-tailed information, and willingness to solve prob-lems together are the main characteristics in strong ties. On the contrary, weak ties might sim-ply provide access to new information or new contacts for enterprises and individual profes-sionals that are not within certain networks. Ob-viously, the networking assets that build strong ties are to strengthen relationships among sim-ilar fields; the networking asset that build weak ties focus on building cross-sector relationships (Bruce Katz & Julie Wagner, 2014).

Success Factors

An innovation ecosystem requires various components to be established with vigorous industrial clusters serving as necessary fore-runners. It is also widely acknowledged that clusters contribute to economic performance, productivity and innovation. As a result, an eco-system can take advantage of the fruits born by clusters. Based on the Brookings' Metro pro-gram, Martin Neil Baily and Nicholas Montal-bano (2017) listed eight factors to describe the characteristics of a successful cluster or an inno-vation ecosystem. This study employed these success factors, which are also compatible with individual enterprise analysis, to derive best practices from the demonstrating start-ups that participated in the fora held in Chile, Chinese Taipei, Russia and Thailand. The eight success factors suggested by Martin Neil Baily and Nich-olas Montalbano (2017) are listed below:

1. *Core competency.* Each cluster must have one or more competitive strengths. In oth-er words: do what you are good at.
2. *People.* A successful industrial cluster re-quires strong leadership, qualified re-searchers and a skilled workforce.

3. *Culture.* Is there a business and research culture that encourages idea sharing? Does the lifestyle attract professionals to enter the cluster?
4. *Business capabilities.* Innovative ideas can-not be implemented and practiced unless business skills lead the way.
5. *Sophisticated demand.* It is crucial to find a market for innovative products and servic-es. Ideally, the market comes from within the cluster. Otherwise businesses should focus on the domestic or global markets.
6. *Access to funding.* Financial support is re-quired for start-ups as they need offices, labs and salaries.
7. *Infrastructure provision.* Physical assets and public amenities such as highways, build-ings, and transportation are important for a cluster to exist.
8. *Regulatory environment.* Local government agencies that hinder permit application processes, delay or prevent the formation of a cluster.

Understandably, not all the success factors may exist in every cluster, and the combinations of them could still be considered as start-ups' goals. In order to achieve the goals, possible best practices are repeatedly tried and exam-ined. Under each success factor dimension, best practices were found in the demonstrating start-ups attending these four Local Innovation Ecosystem forums. The responses on the survey questionnaires delivered to and received from the demonstrating teams were brought into the analysis and discussions.

CHAPTER ❸

BEST PRACTICE ANALYSIS:
SOCIAL INNOVATION

CHAPTER 3

BEST PRACTICE ANALYSIS: SOCIAL INNOVATION

Best Practice Selection and Categorization

To align with the 2019 APEC Local Innovation Ecosystem Initiative, four Local Innovation Ecosystem Forums were organized respectively in Tomsk, a Russian city characterized by its tech-economy, Bangkok, who has the ambition to be an Asian startup hub, Taipei, a vibrant city to embrace and promote innovative ideas to connect with each other, and Manila, one of the fast-growing startup ecosystems world-wide. The fora served as cross-border platforms on which entrepreneurs, startups, MSMEs and policy makers exchanged their knowledge on innovation to encourage entrepreneurship, business development, and revitalization of local economy.

Forty-eight innovation enterprises from ten APEC economies took part in the show-case session in the fora whose fields included agriculture, women's economic empower-ment, childcare and local tourism, which all correspond to the demands in the rural areas in the APEC region. The teams showcasing were scored based on their *business model, innovative ability, presentation skill* and *contributions to local development.* This study further selected the ones that work more in line with the APEC spir-its: sustainability, innovation, inclusiveness and women power. Based on the attributes of busi-ness, these teams were divided into the *social innovation* group and the *cluster development* group for analysis.

Social innovation can be characterized as innovation that prioritizes addressing socie-ty or community related issues. *An innovation is an idea, practice, or object that is perceived as new by individuals or other unit of adoption* (M. Rogers, 2003, p.12). *Cluster development* aims to stimulate local township economic growth. In the best practice study, it pays more attention to the needs derived from economic disparities due to the urban-rural gap.

This chapter focuses on the social inno-vation group and deploys the success factors, suggested by Martin Neil Baily and Nicholas Montalbano (2017), in the hope to derive the best practices.

Best Practice Analysis

Core competency-*developing competitive strengths*

- Best practice 1- Legal Innovation (Mexico)

To improve the quality, efficiency and transparency of legal services, Legal Innovation built a second-layer of profession, digital ser-vice, that distinguishes it from other law firms. Legal Innovation developed a digital ecosys-tem with a cloud-based software allowing legal counsel to process services faster and more effi-ciently. Specifically, a legal-tech business model runs through integrated workflows, encrypted process, case tracking, key performance indica-tors, big data analysis, electronic files with digi-tal signature and secure authentication process. The combination of law and technology has not only transformed the way legal services are provided but also pioneered the legal industry digitally.

- Best practice 2- WomanUp (Russia)

Having the capability of developing on-line courses such as innovation management, project management or the theory of inventive problem solving, WomanUp extended its ser-vices to empower women who want to be their own boss. WomanUp has a good command of education and consulting in various fields, in-cluding marketing, project management, tech-nology transfer and student entrepreneurship.

- Best practice 3- Start Inc. (Chinese Taipei)

The idea that links time bank and problem solving is groundbreaking, which echoes the saying “time is money”. Start Inc. is a social en-terprise engaging in developing sharing econ-omy in rural communities and it tries to apply sharing economy to time banking where time serves as the currency. Every product delivered by Start Inc. aims to solve multiple problems. This time bank 2.0 mobile application collects questions or demands from users everywhere for other users to respond. Once a question is answered or a demand is taken care of, the transaction is established with time as the cur-rency. When you meet someone’s need, you earn time coin(s) and you can use them to pay for your own requests in the future. For example,

teaching English for three hours a week earns me a 3-hour time coin, and I use a 30-minute time coin to buy bread provided by another user or partner business. It's a brand-new ver-sion of sharing economy.

- Best practice 4- MSMB (Indonesia)

Climate change deviates the cycle of farming that seriously troubles farmers nowadays. Mitra Sejahtera Membangun Bangsa, or MSMB, is an agricultural technology startup that began with an agricultural technology named RiTx to help Indonesian farmers. The knowledge of agriculture, such as sowing, cultivation, irrigation, fertilizing, reaping or post-harvest products management, counts the most in this agricultural innovation. The capability to develop agricultural-software and agricultural-hardware, including soil/weather sensor, drone sprayer, or water discharge sensor, is a boost to the business expansion.

People-building *strong leadership, highly quali-fied researchers and a skilled workforce*

- Best practice 1- WomanUp (Russia)

To combine multi-professions, to make them collaborate with each other, and to make them operate as one entity require solid management and strong leadership. The founder of WomanUp, Ms. Natali Ababij, is a career entrepreneur. She started her very first business as a student ten years ago. Ms. Ababij specializes in marketing and as an entrepreneur, she creates new projects every year. Therefore, she fully understands the difficulty for a woman to commence her own business, and that's why she founded WomanUp to assist other women who share the same business ambition.

- Best practice 2- Legal Innovation (Mexico)

Digitally transformed legal services require experts from both sides and the strong leadership at Legal Innovation nails it. One of the co-founders has practiced law in both private and public sectors for twenty years. The founder holds two degrees in Commercial Law and International Public Law, and engaged in advanced studies such as electronic communications, electronic signature and e-commerce legal framework. A trendy legal service was then created by a lawyer with innovative and digital ideas and technology expertise.

- Best practice 3- Kiddocare (Malaysia)

In addition to strong leadership, highly qualified workers absolutely matter. However, finding qualified workers and establishing vigorous human capital are tasks for any startups. As to building up a skilled workforce, Kiddo-care is good at upgrading its contract workers to professional partners. Initially, the mobile babysitting service helps parents find reliable and certified babysitters. Later on, this startup child care company trains its own babysitters through a series of designed education programs abiding by official standards. Through the child care training programs, a babysitter can transform herself/himself into a profession-al caregiver, professional nanny, and finally an operation partner. A clear career growth path is

paved for women or full-time mothers.

- Best practice 4- Start Inc. (Chinese Taipei)

The CEO had practiced sharing economy in a local town when he came up with the idea to extend or connect his profession to time banking. Experts of business operation and technology development were invited to join the team.

The chief operating officer of Start Inc. is a veteran in marketing and project manage-ment. The CEO masters the sharing economy. The chief technology officer has a great com-mand in researching and developing e-com-merce platforms, such as ads cloud. The three co-founders do what they do the best in the three fields respectively in this innovation busi-ness.

- Best practice 5- MSMB (Indonesia)

High tech depends on content knowl-edge to run. The management team of Mitra Sejahtera Membangun Bangsa, or MSMB, is re-search-rich. The agricultural knowledge-sharing platform was founded by a farming technology lecturer at Gajah Mada University, a top univer-sity in Indonesia. The head of Marketing and In-vestor Relations has solid agricultural econom-ics background and has two-year experience in the academia.

Culture-*supporting idea sharing/attracting tal-ented people*

- Best practice 1- IMPCT Coffee (Chinese Taipei)

The team-up started with a students' business contest requiring robust research ca-pability and lively discussion. The idea-sharing culture has continued from the very beginning. They believe that trade can bring about posi-tive results has physically impacted the world. Holding onto the core value, this start-up at-tracts those who share its belief to join the team as co-workers or business partners.

- Best practice 2- MSMB (Indonesia)

Since technological invention requires condense brainstorming to make it happen, this agricultural technology company welcomes project cooperation with farmers, financing in-stitutions or other agricultural technology com-panies. MSMB, an innovation-driven startup, requires constructive and frequent idea sharing to foster R&D in order to precisely meet the spe-cific market needs.

Business *capabilities-possess skills to develop companies*

- Best practice 1- Kiddocare (Malaysia)

A new and innovative service needs ex-citing publicity to step in the existing market. Kiddocare takes advantage of the impact of so-cial media. Advertisements or marketing con-tent are running on Facebook, Instagram or other online platforms to reach potential cus-tomers and career mothers in urgent need of childcare. In turn, positive reviews circulating on social media help attract more customers. Likewise, at the childcare supply side, potential babysitters are reached and recruited through

social media. Kiddocare has a long-term business growth plan that allows competitors to become partners. Currently, the services provided by the mobile babysitting platform to some extent replace other industries' business such as daycare centers, professional nannies, insurance, baby products, or even medical services. Kiddocare plans to combine them all to a one-stop platform for every need of children from 0-9 years old.

- Best practice 2- WomanUp (Russia)

Various limitations stand in front of wom-en intending to start their own business, such as the lack of community support, business partners and knowledge. WomanUp skillfully transformed these limitations into business opportunities. It also has business-savvy people to manage its annual projects. For example, from June to October, it's their fundraising season; from August to December, it's time for the platform refinement; from September to February the following year, it works hard to attract partners for acceleration. This way, both short-term and long-term objectives are taken care of orderly and business can run smoothly.

- Best practice 3- IMPCT Coffee (Chinese Taipei)

Current business models may be suitable for a social benefit driven start-up. IMPCT Coffee adopts "impact trade model" to transform daily consumptions into contributions to where the goods come from. IMPCT Coffee purchases single estate-grown coffee beans to make sure it always sells high-quality coffee. The impact occurs when the revenues directly flow into the farmers' pockets and the earnings are used to build schools. This is when the rural women are empowered with economic capabilities and the poverty cycle is broken. The business performance is affirmative and is revealed in numbers and local changes. For example, 25% of the revenue is used to aid the poor. IMPCT has built up to 7 schools in countries that grow coffee beans, such as Honduras, Guatemala and El Salvador.

- Best practice 4- Legal Innovation (Mexico)

Legal Innovation has transformed the generally considered snobbish industry into a service-centered business. Customer-lawyer re-lationships and mutual trust are stressed. Ser-vice fees are no longer charged by hour and are guaranteed with a fixed fee for basic services. This new legal business model tries to practice law in a more humane way.

Sophisticated demand-*finding a market*

- Best practice 1- Kiddocare (Malaysia)

In Malaysia, 32.4% of career women quit their jobs due the lack of reliable childcare service, which is a huge loss for the female workforce and the Malaysian economy. In addition, according to a report in 2018, the Malaysian children from 0 to 14 years old account for 23.8% of the population, more than a quarter of them less than 5 years old. The gap between the demand and supply for babysitting is large. Kiddocare has precisely positioned its market and employed new technologies to develop

this promising business.

- Best practice 2- WomanUp (Russia)

SMEs account for 20% of the Russian GDP. Among them, 65% were founded by women. 53% of Russian women have the intention to start their own business. WomanUp sets its sights on attracting the women who desire to start their own companies. The name of the start-up itself is a strong appeal and it has a clear market positioning. Evidently, a platform that teaches, counsels and unites women to foster entrepreneurship is highly demanded.

- Best practice 3- Legal Innovation (Mexico)

Legal Innovation sees the fact that 90% of Mexican SMEs do not have access to legal ser-vices and the legal industry is slow to catch up with digital transformation. In addition, imper-fect or asymmetric information has long exist-ed between clients and attorneys. In response, a tech-legal service platform was innovated to deal with of these issues.

- Best practice 4- MSMB (Indonesia)

MSMB's agricultural technology develop-ment echoes the research results on climate change and agricultural economics. Crops' life cycles have deviated from the normal pattern, which further throw the planting schedule into disarray. More seriously, low-income econo-mies, which are mostly in the subtropics, will lose larger shares of their economic output due to climate change (Ryan Nunn et al., 2019). In-donesia, located in the area most vulnerable to climate change, is in urgent need of adjusted, precise and flexible farming technologies.

- Best practice 5- IMPC Coffee (Chinese Taipei)

Quite different from the practices above, IMPC Coffee was not created out of urgent needs from the consumption market but as the entrepreneurs' attempt to improve the life of coffee bean farmers and contribute to local. The real demands come from the supply side. The founders heard the cry-out of the poorest cof-fee bean farmers and noticed customers' good intention. They also are concerned of the eco-nomic disparity in rural communities. With the existing coffee drinking population, the will-ingness to do something good while spending money becomes a potential market.

Access to funding-*requiring financial support*

- Best practice 1- IMPC Coffee (Chinese Taipei)

Where to look for funding is the first chal-lenge. Competing to win financial support is a way to start a business. The team of IMPC Cof-fee was assembled at business school in Taipei. These business school students took part in the Hult Prize Workshop to showcase their innova-tive ideas on operating a social enterprise with a new trade model and ended up winning the prize. IMPC Coffee, then, was brewed upon the funding.

- Best practice 2- MSBS (Indonesia)

To create an innovative technology takes much funding in R&D. The creation of RiTx by MSBS gained financial support from the Indo-

nesian government agencies, including the Ministry of Farm, Ministry of Industry, Ministry of Communication and Information, and Ministry of Villages and Underdeveloped Regions. The collaboration projects also involve international organizations such as Asian Development Bank, and private companies providing agricultural advice and market access.

Infrastructure provision-*infrastructures allow-ing the development of startups*

- Best practice 1- Start Inc. (Chinese Taipei)

Start Inc. chose to land in a place close to The Hsinchu Science Park that has a vibrant start-up culture, great Internet access and in-frastructure. This self-claimed time bank 2.0 was founded and tested in Hsinchu where the con-ditions for developing startups are mature.

CHAPTER 4

BEST PRACTICE ANALYSIS: CLUSTER DEVELOPMENT

CHAPTER 4

BEST PRACTICE ANALYSIS: CLUSTER DEVELOPMENT

Best Practice Selection and Categorization

The best practices were examined by their *business model, innovative ability, presentation skill* and *contributions to local development.* This study further selected the ones that work more in line with the APEC spirits: sustainability, innovation, inclusiveness and women power. Based on the theories of the research project, the best practices are divided into the *social innovation* group and the *industrial clustering* group for analysis. *Cluster development* means to stimulate urban and rural economic growth, and, in the Best Practice study, it pays more attention to the needs derived from economic disparities due to the urban-rural gap.

This chapter focuses on the industrial clustering and deploys the success factors, suggested by Martin Neil Baily and Nicholas Montalbano (2017), in the hope to derive the most significant elements that make a best practice.

Best Practice Analysis

Core competency-*developing competitive strengths*

- Best practice 1- UMORIE (Malaysia)

The battery technology is turning to the next chapter where graphene might be a game changer and Malaysia's abundant palm oil was found to be a new source of graphene. It is widely believed that, theoretically, graphene batteries could increase the battery life cycle by 20 times and increase the charging speed by 12 times. Universal Mobile Accessories (UMORIE) specializes in electrical and electronic engineering and is conducting R&D on super batteries adopting graphene nanotechnology.

- Best practice 2- New Creative Standard (Thai-land)

Every year New Creative Standard upcycles unsold tanned leather worldwide, about 120,000 ft^2 or 48,000 pieces, to produce sustain-able products with the input of tribal residents. Positioning itself as a player in the fashion in-dustry, New Creative Standard possesses art design as its core strength. Faced with other art design competitors, telling stories about its brand is another skill.

- Best practice 3- Lirmi Chile SPA (Chile)

With the current education system, it takes too much time for teachers to design curriculums by themselves, forcing teachers to sacri-

fice their family time. Lirmi Chile SPA established a digital curriculum management program that upgrades the quality of teaching, learning, cur-riculum planning and the communications be-tween schools and parents. Since the founder is a science teacher who knows the education system inside out, including its shortcomings, and also suffers the dearth of educational re-sources, he was able to figure out how to fix education related problems with digital inno-vations.

- Best practice 4- Perception of Chiayi (Chinese Taipei)

To elevate a local industry to the interna-tional level, the communication skill in foreign languages play a significant role. Perception of Chiayi, a bilingual tour guide team, uses English as the tool to connect Chiayi and the world. Unlike other travel agencies that mainly serve local tourists, Perception of Chiayi has the lan-guage capacity to enable its business to reach overseas markets. Furthermore, Chiayi's local cuisine, cultural activities and history are pack-aged as its value proposition to reach the inter-national tourism market.

- Best practice 5- Star Herb Pharma (Thailand)

To promote local agricultural products, this differentiated food/beverage company utilizes its solid knowledge in herbal medicine, phar-macy and nutraceutical to produce food and beverages in the hope to enhance peoples' health.

People-*building strong leadership, highly quali-fied researchers and skilled workforce*

- Best practice 1- New Creative Standard (Thai-land)

The founders deploy their professional

knowledge of fashion design and marketing to create the fashion brand La Mitra, and employ tribal women and craftsmen as skilled work-force to manufacture fashion products. The management team includes a business advisor who worked with more than 20 start-ups. The role of researcher is somewhat played by the business advisor.

- Best practice 2- Lirmi Chile SPA (Chile)

In order to address the challenges in teach-ing and learning, the inclusive team of Lirmi Chile SPA started with a group of experienced teachers. The co-founders also recruited skilled engineers and R&D professionals to develop their digital curriculum management program.

- Best practice 3- Perception of Chiayi (Chinese Taipei)

Local tour guides usually have difficulty communicating with foreign languages. The tour guides of Perception of Chiayi can speak fluent English, and one of the co-founders is equipped with the capability of management shown in team building. Despite strong lead-ership, the decision-making process of Percep-tion of Chiayi relies more on work specializa-tion. For example, if an assignment is marketing centered, the marketing team would shoulder the responsibility. Academic researchers are not necessary, but the research and development on tourism is ongoing.

- Best practice 4- QRNetwork (the Philippines)

This start-up intends to popularize the use of QR code in the health care industry in local towns. Professionals in technology, health care and communication are required. One of the co-founders earned a master degree in busi-ness and science before using it to lead the entire technology team, which includes mobile developers and a system engineer. The compa-ny's decision-making process primarily starts with strong leadership.

- Best practice 5- Star Herb Pharma (Thailand)

Star Herb Pharma aims to promote local natural food and enhance people's health. The company began with two people, one pharma-cist and one engineer. The founder is a phar-macist entrepreneur. Even though the founder plays the main role in leading all the projects, group discussion is central to its decision-mak-ing process. Two engineers are responsible for the stability of the manufacturing system, and a pharmacist shoulders the work of R&D.

- Best practice 6- UMORIE (Malaysia)

Using palm oil to produce super batteries, UMORIE contributes to palm farmers and the battery's future. With a lot of achievements in technology design, competitions and teaching, the founder of UMORIE has been working on matching innovation and business. The founder of UMORIE tries to serve as a strong and con-tinues to develop new innovative technologies.

Culture-*supporting idea sharing/attracting tal-ented people*

- Best practice 1- Perception of Chiayi (Chinese Taipei)

As a tourism firm that intends to bridge the local culture and international market, Percep-tion of Chiayi encourages practical experience sharing and needs native residents' points of views. This young and diverse team is open to collision of thoughts.

- Best practice 2- QRNetwork (the Philippines)

The application of QR code to personal medical history requires a lot of communication with local people who may not possess the related knowledge. The task to introduce this service to patients and the associated parties such as hospitals propels idea sharing within the management team.

Business capabilities-*possessing skills to devel-op companies*

- Best practice 1- Lirmi Chile SPA (Chile)

Lirmi Chile SPA's business capability was proved by its sales growth. The profit had grown from $0 in 2013 to $948,904 in 2018 and was projected to exceed one million dollars in 2019. First, Lirmi Chile SPA sets its eyes on the schools, from kindergartens to universities, in Latin America. Secondly, it looks for teachers facing challenges in course planning. Finally, the largest group of students and parents all become customers and benefit from this learn-ing program.

- Best practice 2- New Creative Standard (Thai-land)

New Creative Standard does fashion design and is good at telling stories, but these are not enough to really help energize the tribal economy. It acquires skills in investment management, marketing and banking. These capa-bilities work out for the firm to grow and make better lives simultaneously. It has numerous marketing plans, such as working with celeb-rities, opening pop-up stores, or taking part in exhibitions and trade fairs.

- Best practice 3- Perception of Chiayi (Chinese Taipei)

In order to develop bilingual tours, the collaborations with NGOs providing local activities and local stores providing food, transportation or accommodation are included in its operation. With solid marketing and sales background, Perception of Chiayi develops its own business model: (1) recruiting and training bilingual tour guides; (2) promoting cultural tourism for cultural continuity; (3) commercializing the tour service to become a distinctive industry.

- Best practice 4- Star Herb Pharma (Thailand)

Healthy food and beverages need healthy business. The pharmaceutical profession is the foundation of business capability. A competent pharmacist is equipped with the knowledge of medicine, food, chemical substances, dietary supplements and natural substances so that healthy food of high quality is made. Multi-skills are necessary for commercial competence, especially the communication skill. The founder's experiences in the mass media and speaking instruction trained her well in public speaking and business presentation. This soft skill is nec-

essary in marketing.

Sophisticated demand-*finding a market*

Best practice 1- Lirmi Chile SPA (Chile)

Lirmi Chile SPA first saw teachers' need to efficiently design curriculums and started work-ing on a digital solution. Due to the educational environment, some teachers do not know how to effectively evaluate their students' progress and therefore have difficulties determining what/how to teach. What is more annoying is trivial matters piling up, forcing teachers to sac-rifice their lunchtime and family time. The digi-tal curriculum management can save teachers' personal life and give students a better learning environment.

- Best practice 2- New Creative Standard (Thailand)

New Creative Standard's original intention to enter the fashion industry was not to target at consumer market but to revitalize the tribal economy in Thailand where women and crafts-men need trainings and jobs to change their lives. New Creative Standard explores markets both at home and abroad to support cluster development.

- Best practice 3- Star Herb Pharma (Thailand)

The demand for establishing Star Herb Pharma is not rooted in the demand for eating Thai snacks and drinking seasoned coffee, but derived from the commitment to promote local agricultural products, take care of farmers and further enhance customers' health.

- Best practice 4- Perception of Chiayi (Chinese Taipei)

Chiayi faces development challenges like youth drain and an aging population. The de-mand to revitalize the city through energizing the tourism industry is heard. However, the lack of English tour guides and tourism busi-ness models made room for this young team to strive and make a difference.

- Best practice 5- QRNetwork (the Philippines)

In local industrial clusters, especially in the Philippines, high-tech is very far to reach for most people. However, some daily life prob-lems do not really need high-tech solutions. QRNetwork promotes the QR code, an easy to learn and relatively simple technology, to use and solve complex problems.

- Best practice 6- UMORIE (Malaysia)

The demand for safe driving and the im-patience to wait for battery recharge create the opportunities for innovative R&D. Universal Mo-bile Accessories, or UMORIE, see further beyond this. The agriculture sector contributed 8.2% to the Malaysian GDP in 2017; oil palm was a ma-jor contributor to the GDP of agriculture sector at 46.6 %. Nonetheless, the $60 billion industry faces hard times. In early 2019, the EU planned to ban the palm oil import from Malaysia while India announced to raise the Malaysian palm oil tariff rate to 30% due to environmental con-cerns. Palm oil and the oil palm farmers most likely will struggle with this ban. With the po-tential super battery market, oil palm farmers

probably have found their new way out.

Access to funding-*requiring financial support*

- Best practice 1- QRNetwork (the Philippines)

Social benefit driven start-ups usually lack financial sources. However, the access to obtain funding requires efforts and international organizations are powerful boost for the creation of a start-up company. QRNetwork joined the healthcare-innovation contest held by the Asian Development Bank and won one-time equity seed funding of $5000. The Philippine government's grant and the patent filing might also bring in financial support.

- Best practice 2- Star Herb Pharma (Thailand)

Star Herb Pharma did not receive public funding when founded. Nevertheless, it later gained financial support for marketing from the Business Incubation Center of National Sci-ence and Technology Development Agency of Thailand. Since Star Herb Pharma's products are considered innovative and are partially supported by the government agency, the slotting fee was waived by some leading supermarkets.

Regulatory environment-*hindering or green-lighting development*

- Best practice 1- QRNetwork (the Philippines)

QRNetwork endeavors to use simple technologies to help local people organize their own medical histories. A patient's medical history is recorded in QR code that follows that person whenever or wherever he or she needs medical help. The code can also transfer patients' information from one hospital to another. Certainly, this convenient innovative service raised the concern for privacy violation. However, the Philippine Government approved this innovation because the medical information recorded in these QR codes is encrypted and only healthcare facilities are allowed to modify the data.

CHAPTER 5

FINDINGS AND DISCUSSION

CHAPTER 5

FINDINGS AND DISCUSSION

The findings presented in this chapter re-veal the characteristics the best practices have in common or are unique to the social innova-tion group and the cluster development group respectively. The similarities and differences of best practices within a success factor and cross-factors were discussed. Some success fac-tors cover more best practices, but some only have few. Possible explanations were also ad-dressed.

Social Innovation

The best practices for building *core com-petency* usually require more than one core competence. Legal Innovation combines law and digital technology in its innovative service. WomanUp masters both business consulting and online courses development and the fu-sion of the two becomes a promising business to empower women. Start Inc. uses the con-cept of time banking to develop more possi-bilities for sharing economy. MSMB develops agricultural machines and software to combat the impacts of climate change on farming. It is interesting to mention that innovative services and products, in this digital era, mostly are cre-ated in the form of platform where professional knowledge and techniques collide.

Apparently, best practices are relatively easier to be found in terms of *people.* In other words, *people* is an inevitable success factor to operate business. According to the defini-tion by the Brookings' Metro program, *people* stands for strong leadership, skilled workforce and highly qualified researchers. However, the findings reveal that best practices do not nec-essarily require the integration of the three ele-ments. Some best practices are presented with strong leadership such as WomanUp (Russia) and Legal Innovation (Mexico); some best prac-tices are shown in their research capability like MSMB, an Indonesian agricultural technology firm; there are still some that are good at con-verging multidisciplinary professionals. Last, the best practice of *people* at Kiddocare, a Malay-sian childcare startup, stands out with its career growth path that is designed to create highly qualified babysitters.

Most of the best practices for finding *so-phisticated demand* show precise market posi-tioning. If there had not been the study show-ing that 53% of the Russian women have the attempt to start their own business, WomanUp would not have been founded. Kiddocare sees that 32.4% of Malaysian career women have to choose between continuing their careers or be-

ing full time mothers. Legal Innovation focuses on 90% of Mexican SMEs with limited access to legal services. Quite differently, IMPC Coffee is not a consumption market-oriented company, and the focal point of its business is to contrib-ute to the rural areas where its coffee beans are grown.

As illustrated in Chapter 3, a successful start-up must not only have innovative ideas but also be equipped with business skills. Four best practices for gaining *business capabilities* were selected, including cleverly utilizing social media, orderly managing annual projects, implementing new business models and improving the customer-lawyer relations to enhance legal services. The analysis of best practice suggests that *business capabilities* are skills being cultivated and accumulated along entrepreneurs' career path. For example, the founders of Kiddocare had been working at manage-ment positions before they started the mobile babysitting platform. The establishers of Woman UP had tremendous experience in business consulting, marketing, project management or technology transfer. When the idea of creat-ing a startup to empower the Russian women popped up, they reorganized these existing capabilities to design a new set of business models to connect the community support, potential partners and knowledge for women to venture into the start-up world.

The best practices for creating the *culture* that supports idea sharing and is attractive to talented people are relatively implicit. The culture of idea sharing itself may be the reason a start-up company like IMPCT Coffee is created. Another explanation could be that idea sharing is happening all the time whether in office or cross-disciplinary meetings. Most importantly, *culture* is naturally developed within an organization and is not an objective that a start-up company would prioritize.

The best practices for possessing *access to funding* display various possibilities. Social enterprise or start-up contests provide a platform for an innovative idea, new product and ener-getic team members to gain public exposure. More importantly, win or lose the contestants would have the exposure to the media, cus-tomers, potential partners or investors, who are potential sources of funding. Alternatively, a start-up founder could make the best use of his/her social networks to seek financial sup-port from government agencies or internation-al organizations like Asian Development Bank.

However, neither applying for a grant nor hav-ing high media exposure promises funding or any kind of support.

As to *infrastructure provision* and *regulatory environment*, they are not the success factors SMEs or start-ups can acquire by practicing. Infrastructure and regulation are in the hand of the public sector. Nevertheless, a company can choose a place that is friendly to starting business to set up its office or to test its innovative services like Star Inc., the only best practice selected for *infrastructure provisions.*

The findings, lastly, in the social innovation group show that the best practices for building *core competency* and acquiring *people* are correlated. Because *core competency* depends on *people*. A company that acquires highly qualified researchers, skilled workforce and strong leadership is much easier to build key skills for the company's development.

Cluster Development

A perspective different from the social innovation group was adopted to analyze the best practices of each success factor in the cluster development group. The connection to clustering effects, local advantages linked with global markets and local needs are the focal point. Consequently, the findings turned out to be somewhat different from those in the social innovation group.

First of all, the best practices for finding *sophisticated demand* can be divided into two types. According to the definition of *sophisticated demand*, innovative products and services must find a market, ideally from within that cluster. Lirmi Chile SPA positioned its market at the teachers facing challenges in teaching, curriculum planning and personal life; Univer-sal Mobile Accessories puts its eyes on the potential of palm oil-super batteries; QRNetwork aims to popularize the QR code usage in health care for the local industrial clusters; Perception of Chiayi develops bilingual tours to revitalize local economy and tourism. These best practices lead to clear market positioning and make sure markets' needs fully are met by innovative products and services delivered. On the other hand, some start-ups were not created to take care of the market needs or demands but to achieve entrepreneurs' ideals to make a difference. For example, New Creative Standard's market does not lie within the rural tribal cluster but the whole Thailand and overseas. The earnings from big cities such as Bangkok, Singapore and Taipei flow to the Akha tribe whose women and craftsmen are employed to make fashionable handbags with "La Mitra" label. Star Herb Pharma is similar in following ways: the earnings gained from selling spiced coffee and Thai snacks are used to benefit farmers and promote local agricultural goods. In addition, the passion to introduce one's hometown to the world can create a new market where local cultures, histories, historic relics, art or food attract international tourists.

The best practices for building core *competency* are displayed in different forms. Some

start-ups, like Universal Mobile Accessories, specialize in electrical and electronic engineering, capable of technically developing innovative products to extend and expand business. Some start-ups are skilled in making good use of knowledge. Take Perception of Chiayi for example. Speaking English is not an exclusive ability but English communication turns to be a com-petitive business tool when employed in local tourism that previously did not pay much at-tention to this skill. Furthermore, art design was adopted by New Creative Standard to transform unsold tanned leather into fashion bags.

Another surprising finding is that there might exist correlation between *access to funding and regulatory environment.* The best practices for both these success factors were found in QRNetwork's business operation. In order to eliminate the controversy of privacy violation, this innovative service involving personal medical history had to stay consistent with related laws and even endure strict scrutiny. A governmental institution that permitted the launch of the controversial innovative service might be more open to provide support. QRNetwork did receive a grant from the government of the Philippines and tried to file for patent. As imagined, the efforts on digging into piles of regulations and dealing with public servants did provide them the *access to funding.*

The recruitment of skilled workforce is highlighted in the best practices for acquiring *people.* The skilled workers in industrial clusters are the tribal residents who possess the craftsmanship and the weaving skill passed down for hundreds of years in Thailand. And this trib-al characteristic is just to the fashion start-up's taste. Having skilled workforce is especially im-portant in tech start-ups: Lirmi Chile SPA recruit-ed digital development engineers; QRNetwork looked for mobile developers and system engi-neers; Universal Mobile Accessories needs a sol-id technology team to innovate super batteries. Strong leadership is usually provided by found-ers who themselves are the masters of those professional fields, such as the founders of QR-Network, Universal Mobile Accessories, Perception of Chiayi and Star Herb Pharma, though the strong leadership is relatively implicit from the perspective of an outside observer. As to highly qualified researchers, this role can be played by founders, skilled workers or the R&D teams.

Implementing financial discipline is one of the best practices for possessing *business capa-bilities.* Lirmi Chile SPA, developing curriculum management programs, keeps a close eye on its cost management and sales growth to make sure that the profit increases every year. The business performance is more clearly shown with the fact that the curriculum management programs have reached 900 schools in South America, benefiting at least 45,000 teachers and 380,000 students. Marketing is another practice widely and greatly adopted. Marketing professionals gain solid ground in the fields of fashion design, local tourism and food/bever-age industries.

The best practices for creating the *culture* of idea sharing are mainly found in start-ups that essentially need to deal with interpersonal communications. Perception of Chiayi welcomes the voices not only from the inside but also from local residents to better discover possibilities for its business development. QR-Network's task is disseminating the knowledge of QR code in local towns, which requires idea sharing to figure out solutions for innovation diffusion.

CHAPTER ❻

CONCLUSIONS

CHAPTER 6

CONCLUSIONS

This report aims to provide best practices for SMEs in local towns to discover more op-portunities in social innovation and industrial cluster development. The current study thus adopted the analytical framework suggested by the Brookings Institution (2014). This analy-sis started from the structure of an innovation ecosystem, which is built on the convergence of the economic assets, the physical assets and the networking assets. To establish a local inno-vation ecosystem, the economic assets should be mainly accumulated by SMEs and start-up companies. Then, the success factors depict-ing the essence of a successful cluster or an innovation ecosystem were deployed to derive best practices from the demonstrating teams. The Local Innovation Ecosystem Initiative is to promote the establishment of local innovation ecosystem, helping SMEs develop more busi-ness opportunities in local towns. The findings of the best practices would serve as references for the SMEs in the APEC region to play a key role in revitalizing township economy.

Implications of the Findings to Local Innovation Ecosystem

Core competency

Refers to the best practices in the social innovation group and the cluster development group. A start-up firm or a SME has to acquire more than one competitive advantage so that it can have strong knowledge base to innovate. One or more concepts collaborating with digi-tal technology, as seen in many best practices, can become an innovative service or product, such as the mobile phone apps providing le-gal services, babysitter matching or curriculum management. Some best practices show pro-found technical innovation capability and can create new innovative products based on the experience from previous innovative products. For a SME, it may not initially have the capability to innovate. However, a cluster of SMEs special-izing in different areas is able to boost synergy.

People

It is believed that a strong leader or strong leadership is crucial to the creation of an inno-vation cluster. Likewise, the best practices sug-gest that it is skilled workforce that determines a start-up's success. A strong leader, in best practices, should be an expert himself or herself in certain field so that he or she would know how to organize an enterprise specializing in that field and direct its development. The best

practices in the social innovation group mainly show strong leadership, such as the founder of WomanUp or Legal Innovation. The best practices in the cluster development group, however, provide another picture. The tribal residents producing fashion bags for New Creative Standard, or the engineers developing digital curriculum program for Lirmi Chile SPA are the skilled workers that translate their leaders' innovative ideas into services and products. The findings imply that an innovation cluster, which includes a group of SMEs and start-up companies, requires strong leaders to coordinate innovative ideas and skilled workers to bring them to fruition. This way, an innovation can be practically converted to job opportunities and revitalize local economy.

Culture

Though there are few best practices for supporting idea sharing, it is certain that idea sharing is common within a company, especially within the SMEs putting much effort on conveying new thoughts to laggards in knowledge, according the answers collected from interviews and questionnaires. As to the other aspect of culture, it is a life style that attracts talents, depending on whether a company plans to expand its business scale and how inclusive a start-up's management team is. Lifestyle does not seem to play a crucial role in a single enterprise. However, lifestyle may be a determining factor for an innovation cluster.

Business Capabilities

Due to the lack of material and financial resources, the best practices emphasize the importance of digital applications in SMEs. Innovative services are mostly provided on digital platforms like mobile phone apps that take less money and less people to make and such innovation is more doable for a start-up company. Social media marketing is also more practical and effective in promoting innovative services, which is successfully conducted by Kiddocare. Another finding that business capabilities are accumulated is a reminder to SMEs that it is ineffective for an enterprise to abandon what it is already good at and start over to innovate something completely new. Likewise, a cluster or an innovation ecosystem should be built on a pre-existing physical and economic base. Apart from the business-oriented capabilities, communication skill is emphasized by many best practices. SMEs ought to find an effective way to communicate with their current and poten-

tial customers, especially when the innovative services and products are novel to the public within an innovation ecosystem.

Sophisticated demand

Whether it is profit-oriented business entities like Universal Mobile Accessories or social enterprises like IMPCT Coffee, market positioning weighs heavily with business development. Echoing the commitment to narrow the economic development gap between metropolis and local townships, sophisticated market positioning can bring living resources and opportunities to the people in need. Kiddocare tar-gets career women's childcare need and at the same time creates babysitting jobs for people living in local towns. IMPCT Coffee allows the coffee drinking population to contribute to the economies that grow coffee beans. New Creative Standard expects fashion product buyers to revitalize the tribal economy. Consequently, finding sophisticated demand does not only require discovering new markets within a cluster or an innovation ecosystem but also meeting the needs from the outside.

Access to funding

Financial support is absolutely important to start an innovative business. The best prac-tices imply that the "access" to funding some-what depends on how much effort an en-terprise would like to put on reaching out to potential funding sources. Platforms for media exposure, social enterprise contests for winning prizes, governmental cultivation and training programs and international organizations are some of the possible sources of funding. Some start-up companies receive funding from more than one source, like QRNetwork.

Corresponding to the three types of assets on which an innovation ecosystem is built, the best practices of core competency, people, culture, business capabilities, sophisticated de-mand and access to funding can consolidate the economic assets, which can be under SMEs' control. However, in forming a whole innova-tion ecosystem, the government, central or lo-cal, must step in.

Implications of the Findings to Policy

The last two success factors are discussed in this section, **infrastructure provision** and **regulatory environment.** Though, ideally, individual entrepreneurs or enterprises can choose location that provides perfect infrastructure and regulation, that is usually not the case for the SMEs who would like to contribute to the local economy. The physical assets, one of three elements for building an innovation ecosystem, rely on the public sector. Looking at the aspect of infrastructure, it takes government authori-ty to install Internet in local towns; roads and highways connecting urban and countryside can only be constructed by domestic projects. In order to promote the establishment of a local innovation ecosystem, governmental agencies can work on improving the regulatory environ-

ment, attracting investment or providing the influx of funding.

Challenges and Suggestions for Future Research

In addition to the economic and physi-cal assets, networking assets is what the APEC Local Innovation Ecosystem Initiative tries to build. The forums connected SMEs, start-up companies, large firms, scholars, experts and government officials from 19 economies in-cluding non-APEC members. Over 50 SMEs and start-up firms were invited or recommended to demonstrate their practices for business opera-tion, management, innovation or contribution to local economic development, from which the best practices were selected. This book aims to extend the influences of this initiative to greatly resonate within the APEC region and implement capacity building, the first dimen-sion, another cornerstone of this initiative. The challenge now is to track the best practices, due to geographic hindrance. The suggestion for extensive study is to follow up the teams that presented their business models at the four forms. The methods to follow-up can be e-mail-ing survey questionnaires. The questionnaires may include the following questions: (1) the amount of venture capital funding raised after the APEC local innovation events; (2) number of staff members before/after the APEC local in-novation event; (3) annual revenue before/after the APEC local innovation event; (4) has local economy been revitalized, and why or why not. The feedbacks received from the follow-up sur-vey along with the findings of the Best Practice analysis are expected to provide constructive insight for continually promoting the establish-ment of innovation ecosystems.

In addition, the start-ups and SMEs con-ducting the best practices reveal that the boundaries between industries are getting more and more blurred because of new tech-nologies. For example, a law firm develops dig-ital platforms or a technology start-up compa-ny provides health care-related services. Thus, a cross-border ecosystem is exactly meant to encourage and foster industrial integration to create more opportunities for SMEs.

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APPENDIX A.

Demo Team List

APPENDIX A.
Demo Team List

	Economy	Team		Economy	Team
1	Chile	Lirmi Chile SPA	25	Chinese Taipei	Start Inc.
2	Indonesia	PT. Mitra Sejahtera Membangun Bangsa	26		The Shu's Pottery
3		PT Indo Natura Gemilang Abadi	27		Ideabus Technology
4	Malaysia	Kiddocare	28		IMPCT Coffee
5		UMORIES	29		Perception of Chiayi
6		PantangPlus (Win Quarters)	30		Daqing Royal Nest
7		Lean In Malaysia (Egon Zehnder)	31		Smart Fish
8		EasyParcel Group	32		Origin Agriculture
9		CheQQme	33		Yuanlin Food
10	Mexico	JW Legal Innovation	34		Mogather
11	Peru	Le Qara	35		Micro Innovation Technology Incorporation
12	Philippines	GSM Bags & Footwear	36		COMMA
13		QRNetwork	37		Happiness Time
14		Cropital	38		LC Saxophone
15		Galansiyang Forestry Support Services	39		Plus One Innovation
16		BAMBUHAY	40		Fair Friend Group
17		myBOSS	41		Zhuo Ye Cottage Indigo Dyeing House
18	Russia	DIVISION Video Production	42		Toii
19		WomanUp	43	Thailand	PMW INTERNATIONAL
20		Mirabilis	44		New Creative Standard
21		Ferment	45		Star Herb Pharma
22		Sibirskiy Znakhar	46		ORN-ING FROZEN FRUITS
23		Victory School	47		SiamRise Travel
24	Chinese Taipei	Shanmu	48	Vietnam	Viet AI Media and Trading Joint Stock

APPENDIX B.

SMEs Local Innovation Survey Sheet

APPENDIX B.
SMEs Local Innovation Survey Sheet

SMEs Local Innovation Survey

Name of SME: Email: Contact Person:
1. The connection between your company and local industrial clusters/local supply chain?
2. The challenge you have encountered in operating business, and the strategy applied to overcome the challenge.

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