

Manual
of the
Korean
Business
Incubator
Model

Supported by





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Table of Contents Guide

Introduction	3
Overview	4
Background	6
Objectives	8
History of Korean Business Incubators	9
Incubator Structure & Operating System	11
Incubator Management Overview	13
Incubator Management — Entrance Process	14
Incubator Occupant Management	17
Incubator Graduate Management	21
Support Services of the Business Incubator	23
Idea and Selection Criteria Guide	24
Responsibilities and Duties	25
Obligations of Various Parties	26
Incubator Development Financing and Funding	27
Government & Business Incubator Relations	29
Activities to Attract Start-up Ideas	31
Governmental Evaluation of Incubators	34
Incubator Connection to the Market	36
Commercialization of Ideas	38
Interview—Yongjae Kim—CEO and Co-Founder, Knowre	40
Interview—Eugene Kim—Co-CEO and General Partner, SparkLabs	41
Interview—Hong-Gyoo Sohn PhD — Yonsei University BI Director	42

Introduction

Nations around the world strive to improve the quality of life of their constituents. They must work to develop and build the economy which creates opportunities for its citizens. Technology, Innovation, and Entrepreneurship are essential components necessary to bring development and additional opportunities to communities. The effective use of science and technology, coupled with the creative ability of innovation will trigger a competitive advantage. Promoting entrepreneurship with emphasis on Technology and Innovation is important.

There must be a balanced strived between the establishment of early stage entrepreneurial activity and the support of these enterprises through existing enterprises and support structures. Startup enterprise development is difficult to achieve and there are many preliminary challenges faced by such endeavors. In order to overcome these difficulties, the Business Incubator can establish itself as the bridge to success for startups and entrepreneurs. Thus, the Incubator can serve as the vital link to sustainable success to the startup and small enterprises in the early stages.

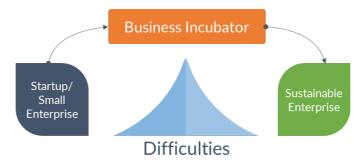


Figure 1. Business Incubator Bridge

Business Incubators are an important and vital component to the economic development of cities and nations around the world. Not only do they promote the growth of small business and enterprise, they also serve as a contributor to the overall economic health of the economy. Promotion of small enterprise through business incubators has been shown to increase the number of jobs, increase the amount of money raised by governments through taxation, occupy more real estate, add value to the economic infrastructure of the community, and help create additional employment in other sectors.



Figure 2. Business Incubator Development Cycle

Overview

Incubators need clear guidelines, roles, and expectations with regard to the structure of the business incubator. There is no clear definition for success of the incubator and many lack the experience of supporting entrepreneurs over a long period of time. It is not an easy task to identify the conditions and directives necessary to support enterprises, in a short amount of time.

Small and Medium Enterprise (SME) proportion in Korea represented 99.9% of the entire enterprise system. The percentage of the workforce employed by small businesses in 2012 was 87.7%. (2012, Small and Medium Business Administration) Small enterprises are a vital component to the economic health of South Korea. As the emphasis on innovation and adaptability characteristics grows, the importance of small and midsize venture companies increases.

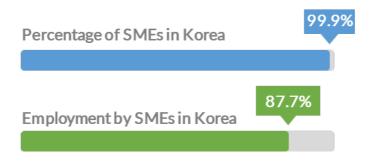


Figure 3. SME percentages—2012 Small and Medium Business Administration

The government is making many efforts for the development of SMEs in Korea and the highlighted key factor for the nation's economic growth is the activities of small business and start-ups. The activation of these activities brings employment growth and increased technology implementation. But, due to the barriers to entry, the general result is that activation did not happen in the past the way it was hoped. The government has developed policies and started to devote its resources to successful means and towards the Business Incubator.

The basis of the Business Incubator project of the government in Korea was to enhance the success rate of technology-based and related start-up firms. According to Article 2, Paragraph 6 of the Small and Medium Enterprise Establishment Act, the Business Incubator provides facilities and space, joint research and development, guidance and advice, financial support and placement, management and accounting, and tax and law services. These support functions are required for the growth and launch of small enterprises.



Figure 3. General Support Functions of the Business Incubator

According Article 2, Paragraph 7 of Small and Medium Enterprise Establishment Act, to enhance the ability of Manual of the Korean Business Incubator Model — May 2016 4

start-up founders and entrepreneurs and their management and technology, the incubator should allow the enterprise to put their primary focus on developing their product or technology. This ensures that the incubator is primarily concerned with the barriers to entry associated with success, such as financing, feasibility, and access to physical facilities necessary to business function. With the support of the incubator, the risk to the start-up and enterprise is reduced and seamless transition to growth can be accomplished. By promoting the growth of the start-up and small enterprise, the primary result of the incubator becomes to increase the success rate of the associated enterprises.

The basic function from the name of business incubators is to "hatch" in an enriched, controlled environment. The successful development of enterprises requires an incubator to build an infrastructure and maintain controlled conditions that allow businesses to "hatch". This requires proper coordination for entrepreneurs between various organizations, universities, public research, local government, and private sector institutions. These institutions must collaborate to provide the benefits and services that will better the success rate and enhance the viability of small enterprise and start-ups. The business incubator will function to harness the full function of all resources necessary for enterprise success.

The goal of the Korean government's promotion of the Business Incubator is to promote the commercialization of innovation, new business creation, increased employment, and a more highly skilled workforce.



Figure 5. Korean Government Goals in Promoting Business Incubators

The function of the Business Incubator is to develop entrepreneurs and bring together the various components of the small enterprise and start-up ecosystem into a focused center where resources can collide and the economic development of the community can take place. From the figure shown below, entrepreneurs can come from various sources such as universities, companies, and societal organizations. They bring skills and attributes from their experiences that make them able to form a competitive enterprise. Also, there should be incentives to the entrepreneurs to take risks and invest their time, energy, and wealth into the enterprise. On the other side, the Business Incubator can be operated by several different types of operators. They provide the level of support and effective services that will bring value to the entrepreneurs. As a result, the economic effects can be realized in the community and beyond.

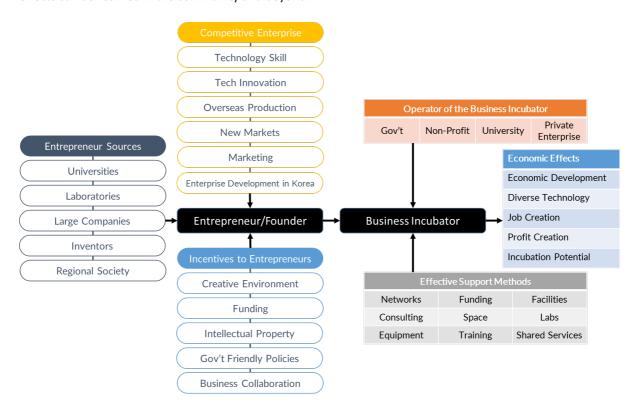


Figure 6. Business Incubator Functions

As we start to look at the current business incubator ecosystem in Korea, it is important to differentiate between the types and functions of different business incubator operators within Korea. The following chart provides a detailed description of current models and factors in the structure of incubation found in Korea. Incubators can be managed by different agencies and function with an entirely different set of values and principles. These classifications help to understand the background and motivations for business incubators as they seek to help enterprises.

Figure 7. Breakdown of the Structure and Classifications of Business Incubators in Korea

Business Incubator Classifications in Korea		
Structure Category		Characteristics and Profile
	Public	Founded by the central government / local governments and public institutions
		Focused on job creation and economic diversification of the economy
		Primary target is expanding the tax base
		Established by Universities and Research Institutions
		Focused on the transfer of technology and commercialization of research
	Universities and	Target is to strengthen and commercialize University revenues
Management		Contribute to the enhancement of the institution's image in the community
		Finding research grant opportunities in cooperation
		Providing entrepreneurship opportunities for graduates and faculty
		Operated by Individuals and Private Companies as a business investment
	Private	Seeking profit and the structuring of companies to produce profit
		Investments in technologies and to secure technology, real
		estate development purposes
	Specialized Center	More than 70% of the resident enterprises have a specific area or specific target
		Secured through Small Business Administration for a specific
		area of incubation
Specialization		The use of specialized services, depending on the growth stage of the enterprise
		Industry professionals needed to ensure proper support
	Non-Specialized	Targeting a wide range of industries and specialties
	Center	Professional managers need to have general management capacity for a wide range
	University-related	The accumulation of human capital, technology and equipment advantage of the university
	Center	Suitable for the cultivation of high-tech industry
Geographical		Earliest possible commercialization of research results
Location	Urban Center	Easy access to amenities and proper facilities
Location	Orban Center	Market proximity and marketing advantage
		Proximity to indigenous resources nearby
	Rural-area Center	Expenses are relatively inexpensive, such as space occupancy fees
	Self-Reliant Center	Faithful to the established objectives and policies of the operations center
Operational		Specialized support services, eligible to focus on specific sectors
Support	Non-Self-Reliant Center	Policies reflect the operational support agency
		Public interest can be excluded to the operating profit of the institution

Objectives

The objectives of this report are to make clear the specific operational structure of the Business Incubator in Korea and the different aspects of the Korean incubator ecosystem. The Business Incubator in Korea should have specific operational objectives to fit the circumstances of its operational objectives. It must specifically be operated in accordance with the system design and operating strategy. The involvement of multiple stakeholders and parties necessitates specific goals to pursue.

There can be various settings and categories of incubators, in terms of economic development, technology commercialization, profitability, and enhancement of entrepreneurship. First, the priority should be to create new business from the standpoint of economic development, employment, industrial advancement, revitalization of the local economy, and solving economic problems. Objectives can be set to determine successful implementation.

The second objective is to commercialize the new technology being formed in universities and research centers. Incubation of new technologies through the Business Incubator center needs targets to nurture promising technology and innovation that leads to commercialization and profitable business models. Thirdly, from the standpoint of profit generation, incubators can seek to achieve an operating profit for their activities.

Finally, the activation of entrepreneurship through association with the Business Incubation center into the community. For example, a business incubator established by a University can have an impact on the community's involvement in start-ups. The successful commercialization of ideas from professors and students may bring about an increased interest in start-up and small enterprise.



Figure 8. Operational Objectives of the Korean Business Incubator

The operating strategy of the Business Incubator is to focus on the growth of entering companies through the provision of various support services. These services include the provision of those companies that activate the local economy through the use of existing buildings and spaces. In Korea, Business Incubators started with the first strategy to stimulate the economy as an objective, but gradually moved to the second strategy focused on corporate development. This is important in securing start-up and small enterprise success rate and self-reliance for the future.

In the operation of business incubators, there will need to be a strategy for the mutual development of both enterprises and business incubators. Incubators should not generate profit only by enterprises that move into existing space. If the enterprise performs particularly well, the incubator should benefit as well.

As an example, universities that operate an incubator can get several benefits. They enhance the social contribution of the university when a subject performs well through the program. They can also enhance the

social contribution of universities by utilizing the space, technology, equipment, and university resources to support SMEs. Through this, awareness to the community outside that the research activities of the university

created the commercial technologies, which can increase the research funding from outside sources. In addition, the professors of the university or the students, or graduates also receive increased opportunities through business incubation.

History of Korean Business Incubators

Figure 9. Korean Incubator History - 1991—2014

Korean Business Incubation Development History		
Year	Relevant Historical Data	
1991	Established the first law for operating Business Incubators	
1991	Ministry of Commerce, Industry and Energy starts to develop support system	
1993	Youngdong Business Incubator established, the first private Business Incubator in Korea	
	Small and Medium Business Corporation Division of Ministry of Trade, Industry and	
1994	Energy Ministry opens government operated Ansan Business Incubator	
	Ministry of Science and Technology starts Technology Business Incubator	
	Small and Medium Business Administration government agency opened	
1996	Ministry of Information and Communication starts Software Business Incubator program	
1550	support	
	City of Seoul, South Chungcheong Province start Business Incubators	
	Ministry of Information and Communication starts University IT Business Incubator	
1997	Ministry of Commerce, Industry and Energy establishes technology park	
	Special Law passes for the promotion of venture companies	
1998	Small and Medium Business Administration expands Business Incubator program	
2000	Ministry of Culture, Sports and Tourism starts Business Incubator program	
2000	Small and Medium Business Administration develops information website for start-ups	
2001	Ministry of Environment starts Business Incubator program	

Figure 9. Korean Incubator History - 1991—2014 - Continued

Korean Business Incubation Development History

Year	Relevant Historical Data
2002	Announcement and special measures made for venture companies
2002	5 Year Plan established for how to activate start-up companies
2003	Ministry of National Defence starts Business Incubator
2005	Governmental meeting for economic policy on Business Incubators
2005	Small and Medium Business Administration merges divisions and manages together
2006	Stopped designation of new Business Incubators, Support center expansion
	Expanded 10 year old special law promoting venture companies
2007	Small and Medium Business Administration presentation: "Activation of the Business Incubator"
2008	Korea Institute of Startup & Entrepreneurship Development established
2000	New Business Incubator established for Healthcare, Green Technology
2009	All 9 ministries made strategy " how to activate tech based startup"
	Korea Business Incubator Association established
2011	Another Small and Medium Business Administration presentation: "Activation of the Business Incubator"
2014	There are 282 Business Incubators Appointed by Small and Medium Business Association
2017	209 universities, 25 labs , 5 run by SME, 18 provinces, and 25 others

From this chart, it is clear to see that the Business Incubator has developed over a the past 25 years. There are a few notes from the chart that develop. There are various governmental agencies that have tried to start and operate Business Incubators throughout the history to mixed levels of success. There were over 11 different agencies of government, including 9 national agencies, to operate business incubators in Korea, each operating with different management teams and objectives. This seems to indicate the scattered approach of the government agencies was ineffective at collaboration and sharing resources.

Also, from the current numbers in 2014, it is clear that the vast majority of Business Incubators in Korea are now run by universities and institutes. Business incubators that form out of universities tend to be geared for technology based start-ups and enterprises, This also targets the students, graduates, and alumni of the universities, a generally younger target that the overall ecosystem of the Korean enterprise system.

Incubator Structure & Operating System

In order to understand the purpose of establishment of business incubators, set the business scope, find the purpose and role for incubators, there should be an operating system for the best way operate the incubator.

The "Business Incubator" is referred to in the "Incubator Operational Regulations" policy of Small and Medium Business Corporation as the facility and organization intended for the development for start-ups and small enterprise. The Incubator provides funding support, networking, management, guidance, growth consultation, joint research and development, accounting, and legal services.

The Incubator operating system is basically the model with a focus on the components of the process and the goals and strategies. A basic model can be described in two dimensions with three basic elements: the incubator, enterprise, and the investor. The relationship between those elements is described in the chart below.

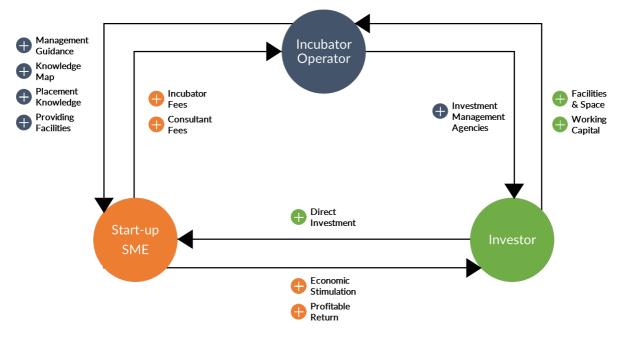


Figure 10. Basic Model of the Incubator Operating System

The operator is managing the business incubator center to perform the actual business incubator operation, providing the necessary services to start-ups and enterprises. The operators of the business incubators receive financial support from investors into the business incubators. The start-up and small enterprises are the companies that can contribute to regional or national economic development and bring innovation to the community. The investor component of the operating system is the central and local governments, colleges, Chamber of Commerce, the private enterprises, etc. that support the operation with funding and build the Incubator center. The Investor supports activities related to start-ups and small businesses and oversees the Business Incubator Center through the operation of the Supervisory Committee. And these investors are expecting macroscopic effects, such as stimulating the economy if the investor is publicly financed, or in the case of private investors by holding equity of promising companies and expecting the proceeds of future dividends or equity sale.

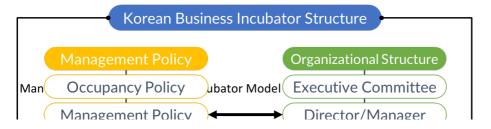
The process model of a business incubator's operating system can be different, so different characteristics exist depending on the established objective and physical location. You can see the Incubator operating system through the lens of the objectives and strategy. The Incubator operating system is intended to define the relationship between and the factors that affect the basic operational activities of the Incubator enterprises.

The main elements of the operation can be divided into five categories including management policies, organizational structure, resources, support services, and outside connections. These elements are influenced by operational objectives and strategies of business incubators (Figure 11). The main selection of the Incubator enterprises and start-ups are influenced by the factors (including whether there is sector selection or characterization of the incubator), support utilizing its resources, and guided graduation and after graduation support.

Figure 11. Incubator operating system components and characteristics

Details and Components of the Incubator Operating System		
Goals/Mission	Incubators need clarity and quantifiable goals to pursue, as well as the specification of the operational objectives, such as institutional expectations.	
Management Policy	Compliance with the mission to execute policies, specialized sector development, phase guidelines, consistent selection and exit policies.	
Organizational Structure	The practice and fulfillment of the business incubator group, the diverse participants, the number of staff, and the relationship between the agencies involved.	
Resources	Funding and Support from financial backers, staff and volunteers, Business Incubator facilities and size, budget and financial reliance.	
Outside Connections	Resident and Graduated enterprises, other Business Incubators, associated organizations, internal and external networks,	
Support Services -	Office space, providing basic services, extension support, management support, technical support, financial support, professional services, support, etc.	
	University support services - Associated professor and student involvement, facilities, labs and workshops, R & D activities, technology transfer programs.	

Figure 12. Current Business Incubator Structure Diagram



Incubator Management Overview

Tenant Occupancy Management

Tenant — The resident graduation process of management is distinguished by a series of processes leading to the graduation of the tenants from the Business Incubation Center. The processes consist of entering the center, being incubated and graduating to differentiate between the processes.

- (1) Tenant Entrance Process Management: <Recruitment Procedure> → <Selection Process and Criteria> → <Tenant Approval and Contract> → <Incubation and Business Development Fund Management Agreement>
- (2) Incubation Process Management: <Business Plan Mapping> → <Enterprise Progress Assessment> → <Enterprise Commercialization Support> → <Education Programs> → <Enterprise Performance Management>
- (3) Graduation Process Management: <Graduation Exit Classification> → <Graduation Procedure> → <"Management after Graduation>

Figure 13. Types of Management in the Business Incubator

	Management Scope	Management Type	Tenant	After Graduation
	Recruitment & Selection	Form Submission, Screening Assessment	⊘	②
		Tenant Business Plan Application	Ø	8
Contracts, Occu Manual of the Korean Business		Occupancy Contract	⊘	<u> </u>
IVI	& Company	s iness Incubator Model — May 2016 Occupancy Period	⊘	8

Incubator Management — Entrance Process

The process for companies for entering the Business Incubator and graduating has multiple levels. First, the process for the selection of tenants to enter the Business Incubator can be described.

Figure 14. Selection Process for Incoming Business Incubator Tenants

Selection System	Comments
Recruitment Plan for Tenants	Requirements and Expectations for Eligibility, Selection Methods, Terms and Conditions, Occupancy, Documents formed.
Public Announcement for Recruitment of Tenants	Media and marketing methods selected.
Tenant Applications Received	Tenant application and business plan documents, introduction to Business Incubator center and support details.
Tenant Application Screening Process	Submitted Documents are screened for eligibility and requirements.
Final Presentation Screening Schedule Announcement	Prepare presentation screening schedule and data for schedule.
Final Presentation Review	Tenant Screening Committee reviews presentation and data.
Tenant Selection	After internal selection process, participants are notified with the results.
Tenant Contract Signing	Incubation proposal agreement and development funding is confirmed.

established recruitment plan. In accordance with the occupancy levels of the center, there should be regular and special recruiting announcements planned, established, and utilized.

(1) Regular Recruitment: 1-2 times per year a recruitment plan should be established and executed. When the Business Incubator center plans the implementation of the recruitment plan, the schedule should be set as well.

(2) Special Recruitment: In accordance with the needs of occupancy of the Business Incubator center, there shall be special recruitment plans. If vacancy occurs above a specified level, there should be a recruitment drive executed. If a tenant company is recruited and accepted by the Business Incubator and no vacancy exists, the terms shall be drawn up only when a vacancy exists in the center.

<u>Public Recruiting Announcement:</u> An announcement that the Business Incubator is recruiting qualified tenants shall be made, along with details of the space, rental charges, and major support services offered by the center. The recruiting method is conducted using various sources.

- Business Incubator Center newsletter and website
- Government agency websites
- Business Incubator Association websites
- Daily newspapers and Broadcast Media
- Government Agency Centers

Tenant Applications Received:

- (1) The application is downloaded by the tenant from the Business Incubator Center website.
- (2) The application may be filed by mail or email, or by visiting the center.
- (3) If tenant applications has been received and no relevant information has been omitted or missed by the applicant, there is a review to determine whether requirements which have been described are met by the application. Additional location information and schedule is given to the applicant.
- (4) In the pre-interview screening review, a manager conducts and preliminary screening of the tenant, the business plan submitted, and the supporting documents presented with the application. The requirements of the plan and proper business information must be identified within the application before determining whether the applicant shall advance the next phase of the process. An introduction of the center and a BI center may be inspected by the applicant.
- (5) The tenant application should have these criteria:
 - The start-up or small enterprise shall have been established in the 3 years prior to the application and no longer than 3 years.
 - The targeted sector for the Business Incubator may be different depending on the targets and goals of the operation plan.
 - The Business Incubator shall determine the targeted entrepreneurs for the center for business development. For example— Senior citizens, Youth and Students, Women, University associated individuals, etc.

<u>Tenant Application Screening Process:</u> There is a document review to determine whether the contents and accompanying documents included in the application meet the requirements for entry into the Business Incubator. The occupancy requirements, the company date of foundation, the representatives and participation of employees, financial condition, financial status, etc. are checked. The tenant and submitted information should be objectively checked by the Business Incubator and information independently verified. The checklist for such information is found in Figure 15. The primary purpose of the screening process to determine whether the basic requirements are met by the applicant and the eligibility set out in the operational standards is ensured.

Figure 15. Application Documents and Data Review

Order	Review Source	Documents Reviewed
1	Tenant Application and Business Plan (Form)	Check whether there are missing items.
2	Business Registration Certificate Copy (Excluding Newly founded Start-ups)	Date of Established checked to ensure eligibility. (Founded within 3 years)
3	Resident Registration of Company Representatives	Application details and description match the representatives

<u>Final Presentation Screening Schedule Announcement:</u>

An announcement is made for applicants and they are notified via email with the determination, as well as the schedule for the final presentation. They should be given at 5 days notice before making the final presentation. In addition, presentation files should be submitted in advance to submit before the date the presentation. The Business Incubator provides the business plan in advance to the judges by email. The confidential information such as company name, name of representatives and participatory workforce, contact details, social security numbers should be carefully omitted to ensure impartiality and legal compliance. The appointed judges must sign a sworn statement that they will not leak the personal information or business items such as acquisition and corporate status in the review process and that they will not use information for other purposes or personal purposes.

<u>Final Presentation Review:</u> The Business Incubator advances to the presentation screening for the selection of tenants in the center.

- (1) The presentations for the committee can be scheduled during any time of the recruitment with presentations presented together or separately to accommodate the participation of committee members in the process.
- (2) The review process is announced to the participants. The preliminary information is released to the judges and the tenant applicants have 10-15 minutes to introduce the company and business plan. After this time is completed, there is a 5-10 minute Question and Answer session.
- (3) Screening Decision: the Business Incubator center collects the results from the presentation, organizes this information, and determines whether to move forward with the tenant.

<u>Tenant Selection and Contract Signing:</u> The Business Incubator notifies the result to the tenants after the screening process is finalized. The process moves forward and general information of the occupancy agreement is collected:

- (1) Period of Occupancy
- (2) Space entering
- (3) Tenant occupancy and deposit fees
- (4) Business Incubator development funds designated for Tenant support
- (5) Center Location Information (Ex.—Parking permits, licenses, etc.)

The Business Incubator Center and the tenant sign the contract. The contract describes the tenant occupancy period, the objects of the agreements, and the default contributions of each party. The occupancy agreement should ensure that the parties to the written contract shall each two contract copies each to manage file storage. Legal party representatives on business registration (legal entity) should be named and consulted.

The discussion concerning the implementation of the contract and matters listed in the contract must be guaranteed. The requirements of the tenant responsibilities must be described to insure the implementation by the tenant and the responsibilities of the Business Incubator, as well. The negotiations in the contract must be faithfully maintained.

Figure 16. Contract Agreement Information Description List

Listed Items	Main Contents
Occupancy Period	One year term and the possible extension 3-5 times through an annual assessment.
BI Product Description	Conventions, room occupancy, space, areas to be utilized
Payments and Dues	Establishments fees, expenses and details
BI Development Funding	Equity, Types of Funding, Cash Contributions
Revocation and Withdrawal Terms	Details of obligations and consequences for non-compliance
Etc.	Regulations to be followed during the tenant period

Once the contract is signed, the tenant applicant shall move in on the given occupancy date. After entering the Business Incubator, they should be equipped with various documents related to being a tenant, such computer data entry the ability to submit data to create, modify and move in the event of a change of details in the company maintains.

Incubator Occupant Management

The Business Incubator supports the growth of the tenant entering the Business Incubator through a variety of methods during the period of occupancy.

Figure 17. Business Incubator Process Management Details

Management Information	Main Contents
Business Plan Mapping	Business Planning Guidance for Management of the Business Operations and Strategy
Project Progress Evaluation	Check and assess the Business needs and Support needed by the operations
Commercialization Support	Technical and Administrative Management, Management Funding Program Support
Training Programs	Management, Technology, and Entrepreneurship Education Programs
Specific Performance Data Management	Build and Support Database to provide Commercialization History