



CONSTRUCTING FRAMEWORK FOR BUSINESS INCUBATOR BENCHMARKING: FOR STARTUP-TECH COMPANY

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ABSTRACT

Business incubator for startup-tech company will improve the eligibility of a company to be accepted by worldwide user. Startup-tech is the company that produce a hi-tech application that can be accessed from mobile platform such as online shop application, payment application, delivery service application, shipping tracking application and other service application that accessed from mobile device. To be accepted, a business incubator must have a framework to guard the entering the business process in the market and to maintain the standard operational procedures that in line with the company's objectives. To be eligible to enter the business, a business incubator required to has an evaluation model that consist of business incubator purpose, processing and outcome. Second, to maintain standard operating procedures, a business incubator has to have benchmarking model to monitor performance, technology used, process, required competencies and strategies. This research constructs a framework based on strongly tested model in developed countries. This research aimed to provide guidance for business incubator to trace their activity from evaluating stages to benchmarking stages easier.

Key words: Business Incubator, startup, and framework.

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1. INTRODUCTION

Business incubator is a prospective stage to improve startup company's performance. Based on world startup-tech rank, there are more than fifty thousand startup-tech company listed in 2017, with three countries that has largest number of startup-tech are United states, India and Indonesia [1]. United states famous for Silicon Valley that reputable area for the headquarter of hi-tech company such as Facebook, Google, Apple, AMD processor, Tesla, Netflix and other well-known company; India famous for the IT expert that graduated from worldwide top university; Indonesia famous for the creative human resources [2-3].

The amount of startup-tech company increasing as the support from government and private venture are available and the scope is also wider. In the early era of business incubator, mostly about how a startup-tech financed by government, but latter it has more option whether the funding sourced or the startup-tech type involved [4-6].

Incubator is a process that deals with early stages of development, with limited resources and requires funding and assistance of a company to be ready to market. Business incubator accelerates the startup-tech business development by providing a range of equipment, support environments and entrepreneurial needs [7-8]. Only a few of research in business incubator benchmarking framework that reach reputable publications makes this research has an opportunity to offer novelty and contribution to science. As well, business incubator framework that standardized the business process has a broad and diverse stages making it difficult to adopt. Although the definition of innovation, products and business objectives of incubation probably not similar, there is a standard that must be met for the purpose and outcome of an incubation business but there is matrix to measure performance, strategy, process, technology and competence required [9-10]. So, this research offer framework of business incubator benchmarking for startup-tech company.

2. THEORITICAL REVIEW

Business incubator for non-startup-tech company related to a company that provide physical product. Unlike startup-tech based company, it produces a service that can be accessed from mobile and desktop platform. Such as, online shopping application, payment service application, shipping track application. In the early stage startup-tech is in form of idea that manifested in to a system that occupying digital and computer-aided platform. Type of business incubator based on the purpose are divided in to four, profit, non-profit, hybrid and university based [11-13]. The definition is clear. Startup-tech also differentiated based on the funding. The highest rate is A series, then A/C/D series, angle and seed as the lowest funding level [14-15]. Business incubation and startup-tech companies is a whole integrated entity called as incubator and incubate.

A research that occupy benchmarking approach, will compare with other better-performing company. In this case the incubation business model in several countries that have successfully tested are compared [16]. There are two ways of benchmarking, internally and externally [17]. The whole stage from evaluating or to benchmark it called as framework of business incubator. Framework is the tool to evaluate and to measure completion of a process. Framework has two keys of component they are to profile the platform observed and to create relationship between sources and targeted platform [18]. So that, in the profiling step, there is an evaluation that consist of business incubator purpose processing and outcome. In the measurement of completion there is benchmarking on performance, technology, process, competency and strategy.

3. ANALYSIS

History notes that the business incubation started in 1950, where its founder was Joseph Mancuso, to respond to unemployment and technological sophistication by the entry of the computer era in 1990. Starting from New York, it developed throughout the United States and expanded to England and Europe [19-20].

A framework created to define the profile of the business incubation and serve as a network between the prepared resource and the intended target [21]. This framework will be an integrated part in research that begins from the evaluation phase then followed by benchmarking phase.

The framework used in the business incubator generally consists of the origin of resources, the development of business ideas, business plans, incubation and value-added creation. Incubation business enters the corporate success factor part of which is the corporate vision, incubation and reward cultures, and incubation business processes [22]. Rouach et al., In his book divides the incubation business process into five stages. First, divide between internal and external resources; second, the development of business ideas where ideas have been formulated and adapted to market conditions; third, the business development plan where the blue print reaches all aspects of stakeholder interests; fifth, the incubation stage where the technical activities run, a project into a business; fifth, the struggle to run a business complete with end-to-end processes, clear goals, know-what-to-do and know-how-to-do.

Modifications from this conventional framework can be addressed in Berge and Norman's research in 2008, in which the incubation business evaluation model consists of goals, models and outcomes [23]. Incubation model offered by Bergek and Norman is structured in three stages: election stage, support stage, and mediation.

More details on the type of funding, Pierrakis and Saridakis illustrate that funding can come from both government and private sector. Similarly, the division of internal and external relationships, where in the financing community (venture firms, private funding, donor networks and venture networks) is an internal relationship, while the knowledge creation community (universities, incubation companies, technology companies and research institutions) and support community (legal institutions, experts, consultants) are external relations [24].

The European Commission by the Centre for Strategy & Evaluation Services (CSES) maps business incubation models starting from input, process and output [25]. Input consists of input compilation from stakeholders (which provides funding), resource management and initial project creation. Process is the overall provision of incubation space and other support at the startup company. While the output is a company that has successfully graduated from the incubation process with the achievement of the mission of corporate prosperity and improvement of the economy. The key to best practice according to CSES is efficiency, effectiveness, relevance, utility and sustainability. Efficiency is the relationship between the funding input and the outcome, which is related to the value of the final product. Effectiveness is an extension of the outcome that has specific goals and has been achieved. Relevance is an outward conformity to the applicable rules. The utility explains the conformity of facility provision by the incubation company that suits the needs of the startup company. While sustainability relates to the durability and sustainability of the incubation and startup companies.

Benchmarking is a concept whereby a company needs to have a comparison tool to respond business evolutions, where the role of business model and have to be in line with market demands. Unfortunately, many companies have no knowledge to respond to the phenomenon [26]. Business is fluctuating and companies need tools to control those changes and to estimate their competence to race against change. One way is with internal and external benchmarking [27]. Benchmarking explained by Kyro in 2003 has three criteria related to the profiling stage, i.e. 'what to benchmark with', 'what are the benchmark targets' and 'what is the benchmark purpose'.

4. RESULT AND DISCUSSION

Business incubator framework for benchmarking consist of profiling and measuring stages. Profiling manifested into evaluating model, and measurement manifested into benchmarking model. Both model when combined is called as framework for business incubator benchmarking that specify for startup-tech company. Since the framework of business incubator quite diverse, this research constructs a framework to provide standard and unify business incubator practice. In bigger picture, framework describe in flowchart bellow.

Evaluation on business incubator started from the purposes in the first-time business incubation established. In the first step, which is purpose, company decide the contribution of the business incubator to economy development, plan to commercialize their tenant and expansion as the form of internationalization their startup-tech company. Second step, processing step occur to show the inputted resources to output as the graduation of the managed startup-tech company. There is selection stage, support stage and mediating stage in here. Third step, outcome, related to the congruence with the purpose of business incubator. There is regulation related, market dynamic related, macroeconomy environment related and other.

Benchmarking on business incubator consist of performance, technology, process, competency and strategy. Performance measured by value of investment, operational cost, government subsidy, physical area of incubation, number of tenants, occupancy rate, length of occupancy, number of management staff, staff ratio compared to tenant, consultation time, survival rate, growth cycle, tenant workload and cost per job. Technology measured from business incubator integrated level and technology advancement. Process measured by business incubator internal control. Competency measured by business incubator ability in maintaining relationship and networking. Strategy related to the entrepreneurship activity include innovation and creativity.

After going through the evaluation phase, benchmarking is conducted to see how far the incubation business is in accordance with the robust framework, or to generate new framework that are more suitable to the incubation business conditions in applied case.

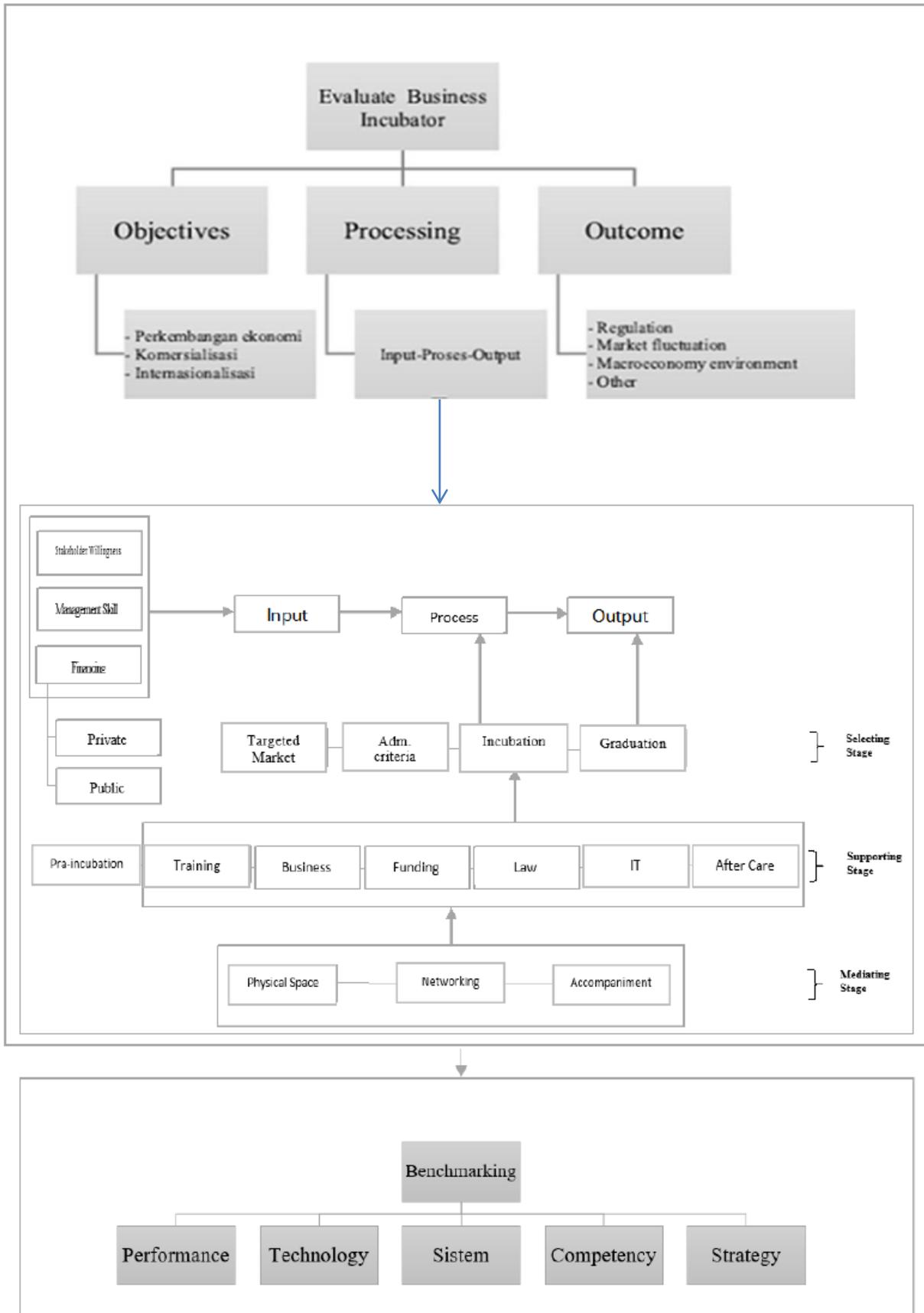


Figure 1 shows framework for business incubator benchmarking for startup-tech

From the above framework, there are compilation of guidance in conducting interview. Questions listed below also complement to data retrieval after an interview, field assessment and data retrieval from online search. The question checklist consists of twenty-seven questions that can be developed or adjusted during the in-depth interview proceeds.

1. Evaluate the incubation business

a. Business incubator purpose

- Does the company contribute to economic development?
- Does the company has commercialization plan for the startup?
- Does the company has internationalization plan for the startup?

b. Business incubator process

- Is there a business incubation model used?
 - At this stage the researcher can duplicate the model used by the company or create a flowchart with information from the respondent

c. Business incubator output

- How does the business incubation compatible with government regulations?
 - Refers to taxes, bureaucracy, government programs, infrastructure and funding
- How does the business dynamics of incubation companies and startup companies being treated?
 - Refers to market efficiency, labour, response to technology, market agglomeration, business risk
- How does the macroeconomic influence associated with the business?
 - Referring to the condition of Indonesian economy (foreign debt, purchasing power, inflation)
- Is there any other aspect influence? (apart from the above mentioned three)
 - Related to climate, gender, social norm

2. Benchmarking incubation business

a. Performance

- How much the capital investment cost?
- How much is the operating cost
- How much is the financial support from government?
- How large is the incubator space?
- How many tenants is there?
- How many is occupancy rate?
- How long is the tenant stay?
- How many management staff are there?
- Ratio of tenant and staff comparison?
- Management time in advising tenant?
- Tenant's survival rates?
- Client turnover?
- Tenant's job after graduated?

b. Technology

- What technology involved in the company operational activities?
- Is the technology involved always the best offered in the market?
- How does the integration between working units in the companies?

c. Process

- How does company operating system works?
- How does the implementation of its internal controls?

d. Competence

- How to create, maintain and develop relationships with others?
- Is there any special ability that must be owned both the company in general and the ability of person should master to keep up with the company?

e. Strategy

- How does creativity, innovation and entrepreneurship play a role in the company?

After conducting the interview, field assessment and online data gathering, required to do analysing and data summarizing. Here the outcome can be found whether in line with the purpose or not. Process will examine whether the business incubation practice follow the given process or is there any more termination in the given process due to different object examine. Business benchmarking will see whether the given framework can accomplish the business incubator best practice criteria that consist of efficiency, effectiveness, relevance, utility and sustainability.

5. CONCLUSION

Business incubator cannot be compared to one another and every business incubator has their own characteristic. Business incubator for non-startup-tech company cannot be used entirely to startup-tech company's business incubator. This is due to the technical requirement that not similar and the point of view in selecting-supporting and mediating stages has different point of view. But research also cannot deny that in general, the framework has common activity that been able to implement in any business incubator, such as, whether startup-tech or non-startup-tech based incubator has to do evaluation in their practice and to measure the compliance and the conformity with the evaluation on objectives, processing and outcome. In the end, business incubator benchmarking will answer the whole process. If the performance, technology, process, competency and strategy is beyond the given framework, business incubator is very well managed. If below the given framework, researcher can make an adjustment to the business incubator or re-examining the necessity of the framework components.

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