

## INDICATOR OF SUCCESSFUL INCUBATOR IN INDONESIA: COMPARISON BETWEEN UNIVERSITY-BASED INCUBATOR AND PRIVATE BUSINESS INCUBATOR

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*Abstract.* Startups creation is an indication of the growing number of entrepreneurs, which ultimately burgeon the employment number. Currently, the government and private sector seek to engage in generating entrepreneurs who conceivably could improve the economic conditions of the nation. One of the ways to do this is by creating an incubator. An incubator ideally should have a performance appraisal guidance as a self-assessment. This study attempts to fill in the literature gap that was scantily exploring the performance indicators through comparison of the university-based incubators with the private incubators. This research employs a qualitative approach through an in-depth interview with the main actors that directly supervise and manage the incubator. The results show that the success indicator of incubator generally based on the purpose of the incubator. Private business incubator more likely to be more optimal in ensuring the startup becomes independent and achieving fast-growth. Meanwhile, the university-based incubator concerned on how the incubation process being carried out in order to provide entrepreneurial learning. The implications are for incubator managers and policymakers to look at the evaluation for current analysis as well as a solid basis for the incubator improvement.

*Keywords:* key performance indicator; university-based incubator; private business incubator

### INTRODUCTION

Nowadays, entrepreneurship considered as a panacea for the economic problem. The concept of the business incubator has been emerged for at least 40 years to encourage the growth of entrepreneurship. Business incubator popularized as a movement and as an industry in the late 1970s and 1980s. According to Ettl (2006), business incubator plays a crucial part as a common platform, which could provide innovation acceleration through an assortment of business support capitals and facilities. Incubator business is a useful business development tool because it acts as a strategy, demanding only modest investment and with outstanding revenues to the regional economy in diversified industry base and employment (Joseph, 2009). Furthermore, incubators support and add value to the new venture creation (McAdam & McAdam, 2008).

Based on Indonesian Business Incubator Association (2016), there are 95 incubators in operation throughout Indonesia. The vast majority of incubators—72%—are functioned by universities (Coordinating Ministry for Economic Affairs, 2015). The number was considered trifling compared with the existing incubator in the US alone, which estimated reached to 1,250 incubators in 2010, according to the National Business Incubation Association. Thus, the government around the world presently decide to nurture the business enlargement through the assistance of incubators. Following the needs, there have been Presidential Decree Indonesia Number 27 Years 2013 to address the concern of incubators development. By the regulation, the funding of startup creation also established and poured into the business incubator, primarily through the university-based incubator. The incubators have been established within various operational models to meet the objectives of the incubator. Most of the success indicator of incubators have a common ground purpose, such as creating new ventures and the growth of startups. Research that compared the performance of university-based and the private business incubators in Indonesia remain scarce (Soetanto, 2005; Gozali et al., 2015; Hutabarat, 2013). Incubator managers face similar challenges in recognizing and identifying the foundation on which the performance of an incubator determined. The problem arises on identify critical factors influence the performance of incubator and the strategies to be adopted for the growth of the incubator. Thus to address those issues, this study aims to identify the critical parameters of evaluation in the university-based incubator and private business incubators.

### LITERATURE REVIEW

Business incubators offer a newfangled to encourage the combination of entrepreneurship and innovativeness. Incubators are noticeably a monetary improvement device designed to speed up the development and achievement of entrepreneurial firms over a range of business sustenance properties and services (Levakova, 2012). Incubators are a room where current knowledge based on ideas, methods, processes or products are inspired, developed and commercialized. In ASEAN countries, the initiative has been kicked off since last year along Business Incubator Network (ABINet) first project meeting. One of the efforts to address

the issue in Indonesia, the Ministry of Research, Technology and Higher Education creates a program, namely Startup Technology-Based (*Perusahaan Pemula Berbasis Teknologi*) that facilitated incubators with funding. Grimaldia & Grandi (2005) mapped the business incubators into four categories: Business Innovation Centers (BICs), University Business Incubators (UBIs), Independent Private Incubators (IPIs), and Corporate Private Incubators (CPIs). In Indonesia, the mainstream divided into two categories, which are the UBI and IPI, since the BIC and CPI pooled into the IPI. Thus, this research tried to focus on university-based incubators and private business incubators.

Previous studies related to the incubator in Indonesia only focused on either side of incubator type, Soetanto (2005) formulated prominent factors affected the success of incubators meanwhile Gozali et al. (2015) talked about the success indicators in university-based incubators. The indicators involved the utility provided, the managerial, standard of the tenant, coaching and networking, capitalization, government advocate, supporting regulation. Further research argued regarding the benefit of incubators (Hutabarat, 2013; Aldianto et al., 2010; Mulyaningsih, 2015). Different firm or businesses usually have a different context of what is essential in the performance indicators. In determining the performance variable, Wibisono (2016) implies the significance to balance the variable, which indicates the past, present, and future performance. Al-Mubarak & Schrödl (2014) pointed out that the success of incubator is heavily indicated by the tenant business which already launched to the market, the graduated business that now succeeds, job creation by the tenant, and wages paid by incubator customers. Usually, tenant survival and growth used as indicators of incubator performance (Hackett and Dilts, 2008). It is natural because the purpose of incubation is to push the growth and accelerate economic development, thus encourage incubatee survival and growth. Shepherd & Wiklund (2009) found that the measurement of growth used interchangeably, including sales growth, profitability growth, or employees' growth (Colombo & Delmastro, 2002). Avnimelech et al. (2007) defined incubators' success as startups who made into Initial Public Offerings (IPO) or ready to be acquired.

## METHODOLOGY

The researcher chose to apply a case study to answer the research questions. According to Yin (2007), case studies are appropriate to be used when researchers are questioning "how" or "why" when the investigator has little or no control of the condition. A case study may be able to capture the real phenomenon, in order for researchers as well as readers, to understand the actual meaning (Yin & Davis, 2007). The case study also one of the methods to avoid subjectivity caused by interpretations from different researchers that relies not only on the primary data collection but also on secondary data, such as documents or even quantitative documents. In this research, the sample selected is four university-based incubators and two private business incubator. The multicase chosen so that it will generate rigorous results. The university-based incubator sample included Entrepreneurship and Innovation Development Agency of Institute Technology Bandung (LPIK ITB), Business Incubator Centre Padjadjaran University (OORANGE), Incubator Business Program Politeknik Negeri Bandung (Inbis Polban), Business Incubator Center of College of Administrative Sciences Institute of State Administration (BiCube Incubator). The sample of the private business incubator is Bandung Techno Park and Kejora Ventures. These incubators are chosen because the area of sample incubator which is Jakarta and West Java area claimed as the most prominent startup producer reached to 522 startups, half of the total startups in Indonesia (Ministry of Communication and Informatics, 2019). Thus, the incubators are in the ecosystem that supported the growth of startups. Furthermore, the sample of the incubator has established for a long time, so it supposed to understand the actual circumstance and how the evaluation of incubator being carried out.

## FINDINGS AND ARGUMENT

The analysis of the indicator performance tabulated in general aspect in Table 1 to make it easier to classify the indicators. Table 1 shows that each incubator has different goals and strategy. Therefore, the employment of indicators and its degree of importance would vary depending on its own vision and mission. The performance assessment in the incubators could be created and will provide a general notion and theoretical concept of how to evaluate the incubator performance. Another information that could obtain is the leading and lagging metrics of the performance indicator. These indicators performance that will be found can also be applied to measure other university-based incubators or even as a benchmark for developing strategy, especially at the moment where the government are willing and mandating to push on the technology-based entrepreneur or digital startup.

Implication for managerial is accordingly that the incubators are expected to generate more innovation and to contribute to the economic growth, the focused of incubators right now most importantly is to proliferate the operational aspect such as the aid for developing prototype, validation mechanism of the business idea, skill and training, networking opportunity, transfer technology, and strategy to stimulate the innovation. The improvement in this sector is what incubators in Indonesia needed at the time, the alignment of the goals and the strategy should be investigated once again. The incubators performance indicators represent the dimension that could foster innovation and lead to social impact.

Table 1. Different between university based incubator and private business incubator

Aspect	University based Incubator	Private Business Incubator
Objective (from incubator's perspective)	<ul style="list-style-type: none"> <li>• Non-profit</li> <li>• Jobs creation</li> <li>• Increase business skill, professionalism, entrepreneurial mindset of the tenant</li> <li>• Growth in business expertise (incubator staffs)</li> <li>• Recognition from the government and industry that leads to good reputation</li> <li>• Commercialisation of knowledge</li> <li>• Continued support from the stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Profit</li> <li>• Growth of asset</li> <li>• Supporting startup with high growth potential</li> <li>• Investors network (seed capital funds)</li> </ul>
Segmental Focus	Technology based startups, creative industry, social enterprise	Technology based startups
The degree of Involvement	Research and technology commercialization	Integrate clients in the largest technology development system
Incubation Strategy	commercialisation of research in the university, creation of new jobs, and forming cooperation between universities, industries, communities, and the government.	Strategy from ideation to exit
Services	Physical Space, coaching and mentoring, support services, networking, legal assistance, financial and accounting consulting, management and marketing assistance,	Laboratory, office facilities, knowledge support and financial support
Exit Strategy	<ul style="list-style-type: none"> <li>• The time limit of the incubation process</li> <li>• The startup perceived being mature by the incubators</li> <li>• Achieved business target and objectives</li> <li>• Fail to achieve business target and objectives</li> <li>• Need more support that incubator cannot offer</li> </ul>	<ul style="list-style-type: none"> <li>• Revenue</li> <li>• Firm age</li> <li>• Valuation</li> </ul>
Affiliation	Government, University, Industry, Community	Private, Community, Industry
Source of Income	Funding from the university and government	Shares of the incubatee
Success Indicators	<ul style="list-style-type: none"> <li>• Number of Incubates startups</li> <li>• Network and Engagement</li> <li>• Sustainability of the startups</li> </ul>	<ul style="list-style-type: none"> <li>• Number of graduated incubatee</li> <li>• Funding raised</li> <li>• Return multiply</li> <li>• Successful Exit</li> </ul>
Room for Improvement	<ul style="list-style-type: none"> <li>• Internal evaluation should be based on the needs of incubatee</li> <li>• Creating concise program milestones with clear policy and programs</li> <li>• Dynamic and efficient business operation</li> </ul>	<ul style="list-style-type: none"> <li>• Dynamic management for incubating efficiency</li> <li>• Concern for sustainability growth of tenant or the startups</li> </ul>

Based on the aspect of the difference between a university-based incubator and private business incubators, at the surface the incubators could be classified as success in number, such as number of incubates startups, number of network and engagement, number of graduated incubatee, amount funding raised, fail rate, return multiply. In this study, the indicators of incubators success discuss in the Broadway more than just numbers. The indicators divide into factors internal process, tangible assets, resource capability, operational, long-term goals, program offering, external relation and organizational output. Furthermore, each indicator will be defined and weighted differently in each incubator. In this study, the indicators defined by several evaluations that gathered from the sample to point out the existing condition and added with the results from an in-depth interview on how the assessment should be implemented. The indicator and how to evaluate is depicted in Table 2.

Table 2. Indicator of Successful Incubator

Factor Name	Evaluation
Internal process	Mechanism of Idea Validation
	Prototype Development
	The strategy to innovation
	Maintaining the cooperation with Industry

	Market growth of the tenant
Tangible assets	Profit of the tenant
	Occupance rate office and working space of tenant
	The total number of commercialized research or technology creation
	Revenue
	Share
Resources capability	Public Awareness
	Technology Transfer
	The total number of Invention in incubator
	Reputation
	The
Long term goals	Number of successful tenant
	Amount of invesment
	Growth of Profit and Assets
	Incubator Award
	The sustainability growth of tenant
	Job creation
	Regional economic development
Program Offering	Selection of the tenant process
	Networking opportunities
	Business skill coaching
	Access to fund and industry
External Relation	The cooperation with industry
	The cooperation with government
	The cooperation with university
Operational	Operational cost for the organization
	Mentoring and Coaching for tenant
	Employee satisfaction
	Managerial of incubation process
Organizational output	The total number of Mature Start-up
	Funding created
	Shared generated
	Exit strategy of startup

From the in-depth interview, university-based incubator emphasized on how urgent it is to provide the entrepreneurial learning and assure that the tenant absorbs all the coaching and training material given. As a non-profit institution, it underlines that the evaluation is the second most important after the process of incubation itself. It proved by the evaluation meetings that discussed more tenant issues during the incubation period and did not bother to follow up if there were indicators of a successful startup that had not achieved. Meanwhile, for the private incubator, it monitors closely how the indicators achieve such as the internal process, tangible assets, resource capability, long term goals, program offered, external relation, operational, and output of the organization. Therefore, it could be concluded that the success indicator of incubator generally based on the purpose of the incubator. The distinctive characteristics between the two are that the private business incubator more likely to be more optimal in ensuring the startup becomes independent and achieving fast-growth. Meanwhile, the university-based incubator concerned on how the incubation process being carried out in order to provide entrepreneurial learning.

## CONCLUSIONS

The qualitative analysis of the indicator performance in university-based and private business incubator identified eight factors underlying the performance indicator of the incubator are an internal process, tangible assets, resource capability, long term goals, program offering, external relation, organizational output, and operational. According to these indicators, each incubator has different goals and strategy, and unique characteristics from the universities or company value, therefore the employment of indicators and its degree of importance would vary depending on its vision and mission. Furthermore, the indicators can also be applied to measure other university-based incubators or even as a benchmark for developing strategy, especially at the moment where the government are willing and mandating to push on technopreneur or digital startups. This framework, as indicators of incubator performance, could be further elaborated. Probably there will be new indicators which here uncovered, such as the value of tenant firms. From the interview, these university-based incubator is not profit-oriented. Thus they do not try to

maximize the profit. What they concern is more about the value of the tenant product, such as innovation to the existing market and provide benefit to society. Meanwhile, the private business incubator is profit-oriented; the concern shifted towards how to incubate efficiently.

The implication for managerial is to proliferate the indicators that considered important to contributing to performance. Improvement for indicators performance should be based on what incubators in Indonesia needed at the time. Besides, the alignment of the goals and the strategy needs to be investigated once again. The incubators performance indicators represent the dimension that could foster innovation and lead to social impact. The limitation of this study relates to its exploratory nature and only focusing on university-based incubators and private business incubators with the limited sample. Therefore further research should be confirming the truth of the research or the applicability of the indicators and for the refinement of selected indicators, enabling new identification of variable or indicator that prospectively offer a new and comprehensive framework for performance assessment. Another research should also look into the relationship of each indicator, whether there is a relation within indicators.

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